

पेटेंट कार्यालय  
शासकीय जर्नल

**OFFICIAL JOURNAL  
OF  
THE PATENT OFFICE**

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निर्गमन सं. 33/2022  
ISSUE NO. 33/2022

शुक्रवार  
FRIDAY

दिनांक: 19/08/2022  
DATE: 19/08/2022

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पेटेंट कार्यालय का एक प्रकाशन  
PUBLICATION OF THE PATENT OFFICE

## **INTRODUCTION**

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01<sup>st</sup> January 2005, the Official Journal of The Patent Office is required to be published under the Statute. This Journal is being published on weekly basis on every Friday covering the various proceedings on Patents as required according to the provision of Section 145 of the Patents Act 1970. All the enquiries on this Official Journal and other information as required by the public should be addressed to the Controller General of Patents, Designs & Trade Marks. Suggestions and comments are requested from all quarters so that the content can be enriched.

**( PROF. (DR) UNNAT P. PANDIT)**  
**CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS**

**19<sup>nd</sup> AUGUST, 2022**

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**THE PATENT OFFICE  
KOLKATA, 19/08/2022**

**Address of the Patent Offices/Jurisdictions**

**The following are addresses of all the Patent Offices located at different places having their Territorial Jurisdiction on a Zonal basis as shown below:-**

<p><b>1</b> Office of the Controller General of Patents, Designs &amp; Trade Marks, Boudhik Sampada Bhavan, Near Antop Hill Post Office, S.M. Road, Antop Hill, Mumbai – 400 037</p> <p>Phone: (91)(22) 24123311, Fax : (91)(22) 24123322 E-mail: <a href="mailto:cgpatm@nic.in">cgpatm@nic.in</a></p>	<p><b>4</b> The Patent Office, Government of India, Intellectual Property Rights Building, G.S.T. Road, Guindy, Chennai – 600 032.</p> <p>Phone: (91)(44) 2250 2081-84 Fax : (91)(44) 2250 2066 E-mail: <a href="mailto:chennai-patent@nic.in">chennai-patent@nic.in</a></p> <p>❖ The States of Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu and the Union Territories of Puducherry and Lakshadweep.</p>
<p><b>2</b> The Patent Office, Government of India, Boudhik Sampada Bhavan, Near Antop Hill Post Office, S.M. Road, Antop Hill, Mumbai – 400 037</p> <p>Phone: (91)(22) 24137701 Fax: (91)(22) 24130387 E-mail: <a href="mailto:mumbai-patent@nic.in">mumbai-patent@nic.in</a></p> <p>❖ The States of Gujarat, Maharashtra, Madhya Pradesh, Goa and Chhattisgarh and the Union Territories of Daman and Diu &amp; Dadra and Nagar Haveli</p>	<p><b>5</b> The Patent Office (Head Office), Government of India, Boudhik Sampada Bhavan, CP-2, Sector -V, Salt Lake City, Kolkata- 700 091</p> <p>Phone: (91)(33) 2367 1943/44/45/46/87 Fax: (91)(33) 2367 1988 E-Mail: <a href="mailto:kolkata-patent@nic.in">kolkata-patent@nic.in</a></p>
<p><b>3</b> The Patent Office, Government of India, Boudhik Sampada Bhavan, Plot No. 32., Sector-14, Dwarka, New Delhi – 110075</p> <p>Phone: (91)(11) 25300200 &amp; 28032253 Fax: (91)(11) 28034301 &amp; 28034302 E-mail: <a href="mailto:delhi-patent@nic.in">delhi-patent@nic.in</a></p> <p>❖ The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttaranchal, Delhi and the Union Territory of Chandigarh.</p>	<p>❖ Rest of India</p>

Website: [www.ipindia.nic.in](http://www.ipindia.nic.in)

[www.patentoffice.nic.in](http://www.patentoffice.nic.in)

**All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 and The Patents (Amendment) Act, 2005 or by the Patents (Amendment) Rules, 2006 will be received only at the appropriate offices of the Patent Office.**

**Fees: The Fees may either be paid in cash or may be sent by Bank Draft or Cheques payable to the Controller of Patents drawn on a scheduled Bank at the place where the appropriate office is situated.**

**पेटेंट कार्यालय**  
**कोलकाता, दिनांक 19/08/2022**

**• कार्यालयों के क्षेत्राधिकार के पते**

विभिन्न जगहों पर स्थित पेटेंट कार्यालय के पते आंचलिक आधार पर दर्शित उनके प्रादेशिक अधिकार क्षेत्र के साथ नीचे दिए गए हैं:-

1	कार्यालय : महानियंत्रक, एकस्व, अभिकल्प तथा व्यापार चिह्न, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, भारत, फोन: (91) (22) 24123311 फ़ैक्स: (91) (22) 24123322 ई. मेल: cgpdtm@nic.in	4	पेटेंट कार्यालय, भारत सरकार इंटेलेक्चुअल प्रॉपर्टी राइट्स बिल्डिंग, इंडस्ट्रियल इस्टेट एसआईडीसीओ आरएमडी गोडाउन एरिया एडजसेन्ट टु ईगल फ्लास्क, जी. एस. टी. रोड, गायन्डी चेन्नई - 600 032. फोन: (91) (44) 2250 2081-84 फ़ैक्स: (91) (44) 2250-2066 ई. मेल: chennai-patent@nic.in ❖ आन्ध्र प्रदेश, तेलंगाना, कर्नाटक, केरल, तमिलनाडु तथा पुडुचेरी राज्य क्षेत्र एवं संघ शासित क्षेत्र, लक्षदीप
2	पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, फोन: (91) (22) 24137701 फ़ैक्स: (91) (22) 24130387 ई. मेल: Mumbai-patent@nic.in ❖ <input type="checkbox"/> गुजरात, महाराष्ट्र, मध्य प्रदेश, गोवा तथा छत्तीसगढ़ राज्य क्षेत्र एवं संघ शासित क्षेत्र, दमन तथा दीव, दादर और नगर हवेली.	5	पेटेंट कार्यालय, भारत सरकार कोलकाता, (प्रधान कार्यालय) बौद्धिक संपदा भवन, सीपी-2, सेक्टर- V, साल्ट लेक सिटी, कोलकाता-700 091, भारत. फोन: (91) (33) 2367 1943/44/45/46/87 फ़ैक्स: /Fax: (91) (33) 2367 1988 ई. मेल: kolkata-patent@nic.in  ❖ भारत का अवशेष क्षेत्र
3	पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, प्लॉट सं. 32, सेक्टर- 14, द्वारका, नई दिल्ली- 110 075. फोन: (91) (11) 25300200, 28032253 फ़ैक्स: (91) (11) 28034301, 28034302 ई. मेल: delhi-patent@nic.in हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान, उत्तर प्रदेश, दिल्ली तथा उत्तरांचल राज्य क्षेत्रों, एवं संघ शासित क्षेत्र चंडीगढ़		

वेबसाइट: <http://www.ipindia.nic.in>  
[www.patentoffice.nic.in](http://www.patentoffice.nic.in)

पेटेंट अधिनियम, 1970 तथा पेटेंट (संशोधन) अधिनियम, 2005 अथवा पेटेंट (संशोधन) नियम, 2006 द्वारा वांछित सभी आवेदन, सूचनाएं, विवरण या अन्य दस्तावेज़ या कोई शुल्क पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में स्वीकृत होंगे। शुल्क: शुल्क या तो नगद रूप में या Controller of Patents के नाम में देय बैंक ड्राफ्ट या चेक के द्वारा भेजी जा सकती है जो उसी स्थान के किसी अनुसूचित बैंक में प्रदत्त हो जहाँ उपयुक्त कार्यालय स्थित है।

## **SPECIAL NOTICE**

### **18 Months publication as required under Section 11A of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005.**

Notice is hereby given that any person at any time before the grant of Patent may give representation by way of opposition to the Controller of Patents at appropriate office on the ground and in a manner specified under section 25(1) of the Patents (Amendment) Act, 2005 read with Rule 55 of the Patents (Amendment) Rules, 2006.

Notice is also given that if any interested person requests for copies of the complete specification, drawing and abstract of any application already published, the photocopy of the same can be supplied by the Patent Office as per the jurisdiction on payment of prescribed fees of Rs.8/- per page. If any further details are required to be obtained, the same can be provided by the respective Patent Offices on request.

**( PROF. (DR) UNNAT P. PANDIT)**  
**CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS**

## **SPECIAL NOTICE**

Under the new provision of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005 and Rules there under, Publication of the matter relating to Patents in the Official Gazette of India Part III, Section 2 has been discontinued and instead The Official Journal of the Patent Office is being published containing all the activities of The Patent Office such as publication of all the patent applications after 18<sup>th</sup> months , grant of patents & all other information in respect of the proceedings as required under the provisions of the Patents (Amendment) Act, 2005 and Rules thereunder on weekly basis on every **Friday**.

The Journal is uploaded in the website every Friday. So Paper form and CD-ROM form of the Journal are discontinued from 01/01/2009.

## **SPECIAL NOTICE**

Every effort is being taken to publish all the patent applications under section 11(A) of the Patents Act. However, if duplication of publication of any application is found, then earlier date of publication will be taken for the purpose of provisional protection for applicant and Patent Office will grant Patent not before six months from the date of second publication, provided that there is there is no third party representation.

## **Early Publication:**

The following patent applications have been published under section 11A (2) of The Patents (Amendment) Act 2005 and rule 24A of The Patents (Amendment) Rules, 2006. Any person may file representation by way of opposition to the Controller of Patents at the appropriate office against the grant of the patent in the prescribed manner under section 25(1) of the Patents (Amendment) Act 2005 read with the rule 55 of The Patents (Amendment) Rules, 2006:

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111059886 A

(19) INDIA

(22) Date of filing of Application :22/12/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : NOVEL GEAR BASED ACTUATION MECHANISM FOR SPACECRAFT'S ATTITUDE CONTROL FOCUSED ON FAULT-TOLERANCE

<p>(51) International classification :B64G0001240000, B64G0001280000, B64G0001360000, B64G0001260000, B64G0001440000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)INDIAN INSTITUTE OF TECHNOLOGY KANPUR</b> Address of Applicant :DEAN, RESEARCH &amp; DEVELOPMENT, ROOM NUMBER 151, FACULTY BUILDING, POST OFFICE: IIT KANPUR, UTTAR PRADESH - 208016, INDIA -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Priyank Dubey</b> Address of Applicant :DEAN, RESEARCH &amp; DEVELOPMENT, ROOM NUMBER 151, FACULTY BUILDING, POST OFFICE: IIT KANPUR, UTTAR PRADESH - 208016, INDIA -----</p> <p><b>2)Dipak Kumar Giri</b> Address of Applicant :DEAN, RESEARCH &amp; DEVELOPMENT, ROOM NUMBER 151, FACULTY BUILDING, POST OFFICE: IIT KANPUR,UTTAR PRADESH - 208016, INDIA -----</p>
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(57) Abstract :

An attitude control system (ACS) (102) with gear-based multi-motor mono-reaction wheel system for autonomously controlling actuator failures is disclosed. The gear-based system includes a bevel gear assembly (202), at least one reaction wheel (204), and a plurality of motors (206A-N). The bevel gear assembly (202) includes a principal gear (402) and plurality of intermediate gears (302A-N). The plurality of intermediate gears (302A-N) is symmetrically connected to the principal gear (402). At least one reaction wheel (204) is mechanically connected to the principal gear (402). The plurality of motors (206A-N) is mechanically connected to the plurality of intermediate gears (302A-N). The ACS (102) sends test signal to a first motor (206A) connected to at least one reaction wheel (204) to determine whether the first motor (206A) is in healthy. The ACS (102) sends a test signal to a second motor (206B) upon determining that the first motor (206A) is not healthy.

No. of Pages : 68 No. of Claims : 11



(54) Title of the invention : PORTABLE FAN CLEANING SYSTEM

<p>(51) International classification : F04D0029700000, F04D0025080000, A47L0025000000, B81B0003000000, B60S0001520000</p> <p>(86) International Application No : NA Filing Date : NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number : NA Filing Date : NA</p> <p>(62) Divisional to Application Number : NA Filing Date : NA</p>	<p>(71)Name of Applicant : <b>1)Chandigarh University</b> Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Anu Radha</b> Address of Applicant :Assistant Professor, Department of Chemistry, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -</p> <p><b>2)Jiten</b> Address of Applicant :Department of Chemistry, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----</p> <p><b>3)Kamal Kishore Thakur</b> Address of Applicant :Assistant Professor, Department of Chemistry, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -</p> <p><b>4)Pratul</b> Address of Applicant :Department of Chemistry, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----</p>
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(57) Abstract :

The present invention relates to a portable fan cleaning system, comprising a pair of plates 1 to be positioned on a fan blade, wherein one of the plates 1 is attached to a telescopic stick 3 that deploys to extend plates 1 up to blade, an infrared sensor 4 in synchronization with an artificial intelligence enabled image capturing module 5 for detecting dirt/dust level accumulated on blade, wherein a microcontroller 6 integrated with the sensor 4 and module 5 generates a command in case the detected level is above a threshold limit, multiple wheels 7 configured for translating plates 1 on blade for aiding the sensor 4 and module 5 to detect exact portions on blade that are subjected to higher levels of dirt/dust, a motorized brush 8 embedded with bristles 9 to remove accumulated dirt/dust, wherein the bristles 9 deploy for cleaning portions that are subjected to rigid stains.

No. of Pages : 14 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :31/12/2021

(21) Application No.202111062024 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : WORKOUT TRAINING DEVICE

(51) International classification :A63B0022020000, A63B0024000000, A63B0021000000, A63B0021005000, A63B0071060000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Chandigarh University**  
Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----  
-----  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Loveneet Singh Slathia**  
Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -  
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(57) Abstract :

The present invention relates to a workout training device comprising of a treadmill 1 having a running platform 2, a first button 4 incorporated on a hand rail 3 to activate/deactivate extreme workout mode, a side arm 8 attached at each lateral end of the platform 2 that get extended in case of extreme workout mode, an artificial intelligence enabled image capturing module 6 installed on a panel 5 mounted on the rails 3 to determine the user's position on the platform 2, a motorized rack 7 incorporated with the side arms 8 to adjust position of the side arms 8 and an elastic belt 9 crafted with the side arms 8 to provide an opposing force on the user's torso during extreme workout mode, wherein a pair of motorized rollers 10 are configured to adjust the length of the belt 9.

No. of Pages : 14 No. of Claims : 8

(54) Title of the invention : AUTOMATED FOOD PREPARATION DEVICE

<p>(51) International classification :A47J0027140000, A47J0044000000, A47J0027000000, A47J0036320000, A47J0043040000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Chandigarh University</b> Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ----- -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Sukhmeet Singh</b> Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ----- -----</p> <p><b>2)Dr. Paras Chawla</b> Address of Applicant :Professor, Department of Electronics and Communication Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ----- -----</p> <p><b>3)Dr. P. K. Khosla</b> Address of Applicant :Executive Director, Centre for Development of Advance Computing (C-DAC), (under Ministry of Electronics and IT), A-34, Industrial Area, Phase VIII, Mohali (Near Chandigarh), Punjab – 160071, India. ----- -----</p>
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(57) Abstract :

The present invention relates to an automated food preparation device, comprising a portable body 1 configured with a first, second and third chamber 4, wherein the chambers implement a set of algorithms in order to conduct different food preparation steps, a communication module utilized by a user to communicate with the body 1, a high resolution imaging unit 12 for determining category of raw material, a robotic arm 5 positioned inside the first chamber 2 to pick and place specified raw material inside the second chamber 3, a motorized blade 6 translates in back and forth motion towards a platform 11 having raw material, an induction module 7 coupled with a container 8 to cook the raw material, a plurality of motorized block 10 for storing variety of spices required while cooking, and a pair of motorized stirrer 9 for mixing up the ingredients evenly in the raw material.

No. of Pages : 18 No. of Claims : 10

(54) Title of the invention : ROBOT AND METHOD FOR PIPELINE DESILTING AND CLEANING

(51) International classification :A47L0011400000, A47L0009060000, A47L0009040000, E02F0003920000, A47L0011340000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Mr. Amit Agrawal**

Address of Applicant :#06051, 5th floor ATS Advantage, Indirapuram Ghaziabad Uttar Pradesh India 201014 -----

**2)Mr. Udit Agrawal****3)Mrs. Amla Agrawal**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Mr. Udit Agrawal**

Address of Applicant :#06051, 5th floor ATS Advantage, Indirapuram Ghaziabad Uttar Pradesh India 201014 -----

**2)Mr. Amit Agrawal**

Address of Applicant :#06051, 5th floor ATS Advantage, Indirapuram Ghaziabad Uttar Pradesh India 201014 -----

## (57) Abstract :

A robot (100) and a method for desilting and cleaning a pipeline is disclosed. The robot includes a brush assembly and a base assembly. The brush assembly comprising a front brush assembly (102) and a rear brush assembly (114) mounted on the base assembly (118). The front brush assembly and the rear brush assembly have a brush roller (410) configured to optimally align in a silt and to rotate clockwise and anti-clockwise. The base assembly comprising a front base plate and a back base plate (206) configured to hold a drive assembly and configured to mount at least two pumps (104, 112) behind the front brush assembly and the rear brush assembly. The combination of the brush assembly and the at least two pumps enables the robot to desilt in both directions of travel of the robot and to clean in a desilting mode and in a sweeping mode.

No. of Pages : 28 No. of Claims : 14

(54) Title of the invention : PIPE BLOCKAGE REMOVAL DEVICE

(51) International classification :F04B0039140000, B01D0033480000, F16L0009180000, G01N0033180000, A01K0001000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Puranjay Kwatra**

Address of Applicant :Deaprtment of Computer Science Engineering, Artificial Intelligence and Machine Learning, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----

**2)Arshiya Mittal**

Address of Applicant :Deaprtment of Computer Science Engineering, IBM(BDA), Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----

**3)Vikas**

Address of Applicant :Deaprtment of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**4)Atul**

Address of Applicant :Deaprtment of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**(57) Abstract :**

The present invention relates to a pipe blockage removal device, comprising a primary 1 and secondary pipes 2 arranged in a concentric manner that are developed and fittings to a waste disposable/sewage chamber, a pair of electronically valves 3 configured with entry and exit portions of the primary pipe 1, wherein the valves 3 are directed to open/close upon pressing of a button 4, for preventing further movement of the waste water inside the primary pipe 1, a cylinder 6 enclosing a piston present in synchronization with an air compressor incorporated inside the container 5, the compressor discharges compressed air inside the cylinder 6 to linearly actuate the piston for propelling acid stored inside the container 5 towards the secondary pipe 2 and plurality of holes 8 crafted on the primary pipe 1 for allowing passage of the acid from the secondary pipe 2, in order to dissolves/melts down accumulated wastes.

No. of Pages : 13 No. of Claims : 5

(54) Title of the invention : CLEANING DEVICE FOR COMPUTING UNIT PERIPHERALS

(51) International classification :B08B0003040000, A61L0002100000, B41J0015040000, B60B0033000000, H04M0019040000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Mayank**

Address of Applicant :Artificial Intelligence and Machine Learning, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**2)Loveneet Singh Slathia**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

(57) Abstract :

A cleaning device for computing unit peripherals, comprising a power button 1 linked to a vibration module 2 arranged within the computing unit 3 for alerting a user before initiating the cleaning, a motorized roller 4 assembled over the computing unit 3 to perform cleaning of the peripheral, a first and second side 5, 6 of the roller 4 is attached with a sliding rack 7 via multiple motorized wheels 12 to provide a dedicated path to the roller 4, a set of LEDs 8 fabricated over the roller 4 for notifying the user regarding activation/deactivation of the roller 4, an alarm unit 9 installed with the rack 7 for alerting the user during operation of the roller 4 and a compartment 10 is mapped at an end of the sliding racks 7 for collecting dust cleaned by the rollers 4.

No. of Pages : 18 No. of Claims : 9

(54) Title of the invention : MULTIDIRECTIONAL ADJUSTABLE SITTING APPARATUS

(51) International classification :F16M0011320000, A47C0013000000, A47C0007020000, B30B0015320000, A61F0015000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Arshiya Mittal**

Address of Applicant :Department of Computer Science Engineering, IBM, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**2)Vandana Chauhan**

Address of Applicant :Department of Computer Science Engineering, IBM, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**3)Rishabh Raj**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**4)Deekshant Taya**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**5)Vikas Sharma**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**(57) Abstract :**

A multidirectional adjustable sitting apparatus including, a frame 1 equipped with legs 2 placing over a surface, an upper portion of the frame fitted with a flat base 4 via a torsional spring 3 and an angled backrest 5, and a telescopic rod 6 fitted beneath the base 4 for providing support to the base 4 and backrest 5 simultaneously and withdraw support upon pressing button by a user, a tray 9 fitted within the frame 1 and housing a slidable platform 10 fabricated with multiple perforations 15, wherein a horizontally stacked locking units 16 that are engaged along the perforations 15 to hinder movement of the platform 10 and are linked with a paddle 17 that once pressed by the user, retracts each unit 16 and disengaging from the perforations 15, the platform 10 allows to sit multiple users and supported by adjustable pair of overlapped hinged rods 13.

No. of Pages : 15 No. of Claims : 6

(54) Title of the invention : ASSISTIVE AND MONITORING DEVICE FOR STUDYING

<p>(51) International classification :G06F0003035400, G06F0003041000, G06F0040232000, G06F0003048800, G10L0015260000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Chandigarh University</b> Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ----- -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Ritik Athilkar</b> Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. --- -----</p> <p><b>2)Harjeet Kaur</b> Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----</p> <p><b>3)Dr. Gaurav Bathla</b> Address of Applicant :Assistant Professor , Department of Computer Science and Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----</p>
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(57) Abstract :

An assistive and monitoring device for studying includes, a body 1 integrated with a pen tip 2 characterized by a motion and touch sensor integrated within a touch pad 3 that detects touch of a user and speed, direction while writing and saves into an integrated memory 4, a microcontroller 5 determines text written over the surface, a communication module 6 establish connection between the microcontroller 5 and a computing unit 9 operated by an authenticated person to provide with a digitized format of text written by the user, a microphone gets activated upon detecting absence of text input for a threshold time period and record the user's speech to confirm studying of the user, a speaker upon detecting mispronounced and/or misspelled written word recorded by the microphone and the sensor, a processing unit sends a notification to the speaker and pronounces the word in correct pronunciation for the user.

No. of Pages : 21 No. of Claims : 9



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211000510 A

(19) INDIA

(22) Date of filing of Application :05/01/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : MULTIPURPOSE POWER TRANSMISSION DEVICE

(51) International classification :H02J0007020000, H02J0007000000, H02H0001000000, H04B0003540000, H02J0050100000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Atul Jha**

Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---

**2)Rishabh Raj**

Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---

**3)Vikas Sharma**

Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---

(57) Abstract :

The present invention relates to multipurpose power transmission device, comprising a power unit 1 connected to a main power source via first latching attachment 7 in order to draw and store electrical energy from main power source for different purposes , a socket unit 2 paired to power unit 1 via a second latching attachment 8 and fabricated with multiple ports for connecting and charging electrical appliances via electrical energy received from main power source and to provide electricity in absence of electricity , a data transfer port 3 fabricated over socket unit 2 and internally connected to a microcontroller in order to allow charging and transfer of data between connected appliances, an inductive charging slot 4 coupled with holder and integrated along with socket unit 2, upon mounting appliance within slot 4 and electrical energy stored within power unit 1 gets transfer wirelessly to appliance.

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211000511 A

(19) INDIA

(22) Date of filing of Application :05/01/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SECURED ACCESSORIES STORAGE SYSTEM FOR PUBLIC TRANSPORTS

(51) International classification :G06Q0010020000, H04M0003530000, H04R0001100000, F25D0029000000, G06F0040166000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Akash Tiwary**

Address of Applicant :Department of Mechanical Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----

(57) Abstract :

The present invention relates to a secured accessories storage system for public transports, comprising a chamber 1 placed beneath public-transport seats/berths 5 acquiring benefitting accessories for users, booking of travel ticket either in online/offline mode via an user platform in a computing device transmits an OTP on registered mobile number of user, a speaker 2 for receiving voice commands with OTP by the user and only upon successful matching of OTP(s) the chamber 1 gets unlocked, unlocking option of the chamber 1 is displayed to the user before a specific time interval that is near to the arrival time via touch interactive display panel 3 fabricated on the chamber 1, removal and deposition of accessories into chamber 1 is determined by optical scanner 4 incorporated inside chamber 1, and the optical scanner 4 is connected to control unit further sends a signal to linked server if any accessory goes missing.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :05/01/2022

(21) Application No.202211000512 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : ADAPTIVE EXERCISE DEVICE

(51) International classification :A61B0005000000, A63B0024000000, A63B0069000000, A63B0022020000, G16H0050200000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Arshiya Mittal**

Address of Applicant :Department of Computer Science Engineering, IBM, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**2)Rishabh Raj**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**3)Deekshant Taya**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

(57) Abstract :

An adaptive exercising device, comprises of a frame 1 having first and second portion 2,3, a motorized conveyor belt 4 for providing platform to user for running, a touch interactive screen 5 for regulating speed of belt 4, a wearable unit 6 worn over user's hands for determining vital parameters, a feedback unit 7 for generating performance report of user, a primary AI thermal image capturing unit 8 placed in proximity to belt 4 for determining nature of impact on belt 4, a pair of supporting rail 9 incorporated with first strap 10 having one end fixed and other end directed into a roller 11 for stretching or releasing second strap 12 worn on user's waist via hook, an infrared sensor having light emitter 13 and receiver 14 integrated at rail 9 and creating boundary line to ensure safety and terminates operation of belt 4 if crossed by user.

No. of Pages : 18 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :05/01/2022

(21) Application No.202211000513 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : CROP MANAGEMENT SYSTEM

(51) International classification :B64C0039020000, G06Q0010060000, G06Q0050020000, G06N0020000000, B64D0047080000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Pranshul Agrawal**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**2)Gurjot**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**3)Dr. Kamal Kant Sharma**

Address of Applicant :Professor, Department of Electrical Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

(57) Abstract :

The present invention relates to a crop management system which allows the farmer to maintain the ideal crop growth condition like temperature and humidity required for crop growth as well as using the artificial intelligence based module 4 to determine the quality of the crop and if found unsatisfactory, spray the fertilizers using the drone 7 based on crop growth condition and expert suggestion and when the crops are grown up, the artificial intelligence monitored robotics body 10 harvest the crop and segregate the crop and pack them inside the separate sacs with different labels and a biometric scanner is attached at the entrance of enclosure for performing the authentication of the farmer and on successful authentication, farmer enters inside the enclosure and captures the multiple images of the harvested crop and upload them on the cloud platform from where the buyer orders the crop according to requirement.

No. of Pages : 19 No. of Claims : 8

(54) Title of the invention : SOLAR LIGHT DRIVEN SELF-ASSEMBLED PHOTOCATALYST NANO-COMPOSITE AND METHOD OF SYNTHESIS THEREOF

<p>(51) International classification :B01J0035000000, B82Y0030000000, B01D0069140000, A23L0005440000, B01J0027240000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Chandigarh University</b> Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Atul P. Singh</b> Address of Applicant :Department of Chemistry, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----</p> <p><b>2)Rajesh K. Yadav</b> Address of Applicant :Department of Chemistry and Environmental Science, Madan Mohan Malaviya University of Technology, Gorakhpur-273010, U.P., India -----</p> <p><b>3)Surabhi Chaubey</b> Address of Applicant :Department of Chemistry and Environmental Science, Madan Mohan Malaviya University of Technology, Gorakhpur-273010, U.P., India -----</p> <p><b>4)Pooja Singh</b> Address of Applicant :Department of Chemistry and Environmental Science, Madan Mohan Malaviya University of Technology, Gorakhpur-273010, U.P., India -----</p> <p><b>5)Chandani Singh</b> Address of Applicant :Department of Chemistry and Environmental Science, Madan Mohan Malaviya University of Technology, Gorakhpur-273010, U.P., India -----</p> <p><b>6)Satyam Singh</b> Address of Applicant :Department of Chemistry and Environmental Science, Madan Mohan Malaviya University of Technology, Gorakhpur-273010, U.P., India -----</p>
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## (57) Abstract :

The present invention relates to a solar light driven self-assembled photocatalyst nano-composite and method for synthesis thereof for 1,4-dihydronicotinamide adenine dinucleotide cofactor regeneration and conversion of a-ketoglutarate to L-glutamate. A method for synthesis of the photocatalyst comprises the following steps: suspending the graphitic carbon nitride/sulfur nanocomposite powder in the tetrahydrofuran to obtain a solution, adding cobalt (III) tetraphenyl porphyrin in the solution followed by subjecting the solution to ultrasonication for 25 min-30 min to obtain a dispersed solution, refluxing the dispersed solution for a duration of 3-5 hours to allow appropriate mixing of the cobalt (III) tetraphenyl porphyrin with the solution and obtain a refluxed solution, subjecting the refluxed solution to rotary evaporation for removing solvent from the solution and obtain a precipitate and washing the precipitate with a mixture of water and acetone followed by drying under vacuum at ambient temperature overnight to obtain the photocatalyst nano-composite.

No. of Pages : 28 No. of Claims : 4

(54) Title of the invention : SEGREGATION SYSTEM FOR FUNCTIONAL E-WASTES

(51) International classification :H01L0027148000, G01N0033000000, H05K0003340000, G06T0007000000, B65C0009400000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Harshit chouhan**

Address of Applicant :Department of Electronics and Communication Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----

**2)Er. Krishan Kant Sharma**

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----

(57) Abstract :

The present invention relates to a segregation system for functional e-wastes a conveyer 1 to move PCB (Printed Circuit Board) 2 from one place to another place, scanning sensors 3 installed in the proximity of the conveyer 1, CCD(Charge Coupled Devices) as scanning sensor to scan the PCB (Printed Circuit Board) 2 for generating blue print, after scanning the data sends to user interface connected to computing device which generates blueprint, a microcontroller commands the primary robotic arm 4 to detect the component mounted on the PCB(Printed Circuit Board) 2 with the help of blue print, testing kit 5 and laser 6 is installed with the primary robotic arm 4 to check the functionality of the component and loosen them respectively, a secondary robotic arm 7 is connected to pick up those dismantle component and dump into basket attached within proximity to the conveyer 1.

No. of Pages : 11 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :21/02/2022

(21) Application No.202211008853 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : ADJUSTABLE SEATING DEVICE

(51) International classification :G01W0001140000, B60S0001080000, B61B0001020000, A61H0003040000, B64G0004000000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Chandigarh University**  
Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Balwant Singh**  
Address of Applicant :Department of Automobile Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----

(57) Abstract :

The present invention relates to an adjustable seating device comprising a platform 1 hinged with multiple bars 2 for providing a seating to a user, at least two foldable flaps 3 coupled to the bars 2 via a motorized hinge and a telescopic pole 4, to extend the length of the platform 1, an artificial intelligence image capturing unit 5 installed on the platform 1 for detecting extra number of users standing in vicinity across the platform 1, multiple rods 7 pivoted at base of the flaps 3 to provide support to the flaps 3, a rain sensor installed on the platform 1 for detecting rainfall and a pair of L-shaped 9 telescopic rods configured with a sheet 10 equipped at periphery of the platform 1, wherein the rods extends to cover the user sitting on the platform 1 in case of the detected rainfall.

No. of Pages : 16 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211008854 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMATIC TIRE REMOVAL AND MOUNTING DEVICE

(51) International classification :B60C0025050000, B60C0025138000, B60B0029000000, B60C0025040000, A63C0009000000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Jatinder Kaur**

Address of Applicant :Department of Electronics and Communication Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

(57) Abstract :

The present invention relates to an automatic tire removal and mounting device including a platform 1 mapped with an air hydraulic jack 2 for lifting a vehicle, a front circular plate 3 fixed on platform 1 through a rigid support 6 and a second circular plate 4 attached to the first 3 via a rotating mean for assisting in mounting and demounting of tire, an image capturing unit 7 attached to platform 1 for determining dimension of rim and distance from front plate 3, a telescopic gripper 8 connected to front plate 3 for gripping rim as per detected distance and dimension, and a telescopically operated blade and roller 9, 10 connected to rear plate 4 through a pole 11 for respectively assisting in demounting and mounting of tire by translating over rim.

No. of Pages : 14 No. of Claims : 7



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211008857 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : HAIR LOSS APPEARANCE CONCEALING DEVICE

(51) International classification :A61B0005000000, A61Q0007000000, G03H0001220000, G01J0003520000, G06F0003010000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----  
**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Bhawna Goyal**

Address of Applicant :Department of Electronics and Communication Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

(57) Abstract :

The present invention relates to a hair loss appearance concealing device that comprises of a sliding rack 1 equipped with a clamping unit 2 integrated with multiple foam pads 3 via strings 4 to position user's head at a stable orientation, a computing unit associated with a microcontroller installed on the sliding rack 1 to receive input from user regarding hair fibers color shade, an artificial intelligence based image capturing unit 6 in synchronization with a holographic image projector 12 installed on the sliding rack 1 for detecting and focusing bald areas on the user's scalp respectively, a circular rack 8 having multiple chambers 13 storing hair fibers of different color shades and a sprayer 10 for spraying hair fibers on the user's scalp.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211008858 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUXILIARY WOOD CUTTING DEVICE

(51) International classification :A61B0005000000, A63B0024000000, A61B0005110000, G09B0019000000, G08B0021020000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)**Name of Applicant :**  
**1)Chandigarh University**  
Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----  
**Name of Applicant : NA**  
**Address of Applicant : NA**  
(72)**Name of Inventor :**  
**1)Deepika**  
Address of Applicant :University Centre For Research and Development, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---  
-----

(57) Abstract :

The present invention relates to an auxiliary wood cutting device comprising a blade bit 1 adhered to telescopic handle 2 to perform crafting operation, an AI (Artificial Intelligence) based thermal imaging unit 3 mounted on handle 2 to observe user's health condition, first set of sensors 4, 11 interconnected with microcontroller installed on handle 2 measuring density of wood, display unit 7 mounted on handle 2 receiving input from user for efficient operation of cutting, second set of sensors 5, 6 embedded in handle 2 for evaluating hands speed while performing cutting, laser module 8 mounted on handle 2 for impinging light to ensure best position as well as posture of user, pneumatic pin 9 attached with blade bit 1 to prevent unregulated hitting and a vibration unit 10 installed on handle 2 to alert user when the speed of user is less than required speed.

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111036007 A

(19) INDIA

(22) Date of filing of Application :10/08/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : A NOVEL METHOD OF MAKING FLUORINATED NICOTINE TRIONE DERIVATIVE

(51) International classification :C23C0014040000, C08G0065334000, C07F0007120000, C07F0017020000, B01J0037080000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Lovely professional University**

Address of Applicant :Jalandhar Delhi GT road Phagwara, Punjab, India 144411 -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr Deepak Kumar**

Address of Applicant :Lovely Professional University Jalandhar Delhi GT road Phagwara -----

**2)Dr. Pankaj Wadhwa**

Address of Applicant :Lovely Professional University Jalandhar Delhi GT road Phagwara -----

**3)Dr Anupam Kumar**

Address of Applicant :Lovely Professional University Jalandhar Delhi GT road Phagwara -----

**4)Dr. Ashish Kumar**

Address of Applicant :Lovely Professional University Jalandhar Delhi GT road Phagwara -----

**5)Dr. Ajit Kumar Sharma**

Address of Applicant :Lovely Professional University Jalandhar Delhi GT road Phagwara -----

(57) Abstract :

The present invention is about synthesis of novel fluorinated nicotinetrione derivatives. The multistep synthesis is both economical as well as uses green solvents to make it environment friendly. The synthetic scheme is completely novel and has added advantage over other synthetic schemes as it uses green solvents and avoids excess exothermic reactions.

No. of Pages : 13 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211005352 A

(19) INDIA

(22) Date of filing of Application :01/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SECURED EXERCISING DEVICE

(51) International classification	:A63B0022020000, A63B0021000000, A63B0024000000, A63B0021065000, A63B0023040000	(71)Name of Applicant : <b>1)Desh Bhagat University</b> Address of Applicant :NH1, Mandi Gobindgarh, Punjab-147301, India. ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b>
(86) International Application No	:NA	(72)Name of Inventor : <b>1)Dr. Zora Singh</b> Address of Applicant :Chancellor, Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. -----
Filing Date	:NA	<b>2)Dr. Sandeep Singh</b> Address of Applicant :President, Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. -----
(87) International Publication No	: NA	<b>3)Dr. Birinderjit Singh</b> Address of Applicant :Director, Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. -----
(61) Patent of Addition to Application Number	:NA	<b>4)Piyusha Sharma</b> Address of Applicant :Department of Life Science, Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. -----
Filing Date	:NA	-----
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A secured exercising device comprising a treadmill 1 having a running deck 2 utilized for providing a platform to users in order to perform running/exercising, characterized in that a biometric scanner 3 for scanning fingerprints of an unregistered user, a primary artificial intelligence enabled image capturing module 5 for performing multi-level authentication, a pair of pneumatically actuated telescopic rods 6 configured with an ultrasonic sensor 8 for determining distance in between the user's leg and bars 7, a secondary artificial enabled image capturing module 9 for detecting size of ankle portions of the user legs, pair of electro-magnetized ankle weights 10 for gripping the user's ankles based on the detected size, plurality of electromagnets 11 layered on the deck 2 that is energized to produce a magnetic field to attract the electro-magnetized ankle weights 10 while running/exercising on the treadmill 1.

No. of Pages : 16 No. of Claims : 6

(54) Title of the invention : CUSTOMIZED SEATING SYSTEM

<p>(51) International classification :A47C0001030000, G06K0007000000, A47C0007720000, A47C0031120000, A47C0001024000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Desh Bhagat University</b> Address of Applicant :NH1, Mandi Gobindgarh, Punjab-147301, India. -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Zora Singh</b> Address of Applicant :Chancellor, Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. -----</p> <p><b>2)Dr. Sandeep Singh</b> Address of Applicant :President, Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. -----</p> <p><b>3)Dr. Birinderjit Singh</b> Address of Applicant :Director, Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. -----</p> <p><b>4)Piyusha Sharma</b> Address of Applicant :Department of Life Science, Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. -----</p>
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(57) Abstract :

The present invention relates to a customized seating system, comprising a chair 1 having a seat 2, backrest 3, armrest 4, legs 5, storage unit 6 having multiple slots 8 fitted at backrest 3 of the chair 1 holding stationaries, sliding lid 11 is configured on storage unit 6 providing access to unit, conveyer 7 installed at base of storage unit 6 aligning books as per timetable, touch interactive display panel 9 mounted on armrest 4 of chair 1 receiving input from user regarding timetable, fingerprint sensor 10 connected wirelessly with the microcontroller embedded on armrest 4 for authentication, radio frequency identification (RFID) reader 12 integrated on the storage unit 6 reading tags mounted on books, pressure sensor 13 along with an ultrasonic sensor 14 mounted on backrest 3 regulating seating posture of user, multiple number of vibrating units 15 integrated on backrest 3 alerting user on wrong seating posture.

No. of Pages : 13 No. of Claims : 4

(54) Title of the invention : INTERACTIVE CUBE PUZZLE SOLUTION TRAINING DEVICE

(51) International classification :A63F0009080000, A63F0009240000, A63F0009120000, G10L0015260000, A63F0009060000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Rakesh Kumar**

Address of Applicant :Department of Mechanical Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----

(57) Abstract :

An interactive cube puzzle solution training device includes, multiple telescopic suction cups 2 are arranged at walls of a portable body 3 to receive cube 1 inside a body 3, a microcontroller operates the cups 2 for random arrangement of the cubelets 9 on different faces that leads to formation of a cube puzzle, an artificial intelligence based imaging unit 4 for detecting cubelet(s) 9 arranging moves employed by the user while attempting to solve the puzzle, a voice recognition module 6 coupled with a speaker for analyzing voice commands provided by the user via the module 6 regarding selection of training level, the speaker suggesting series of moves for aligning the cubelets 9 of same color on particular face of the cube 1 in the beginner training level, and a holographic projection unit 7 for displaying visual signals regarding series of moves required to solve the puzzle.

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211008859 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SELF-SUFFICIENT GROUND LEVELLING DEVICE

(51) International classification :G01S0019130000, H04N0007180000, G01C0009000000, G01C0005000000, G01C0015000000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Harpreet Singh Lubana**

Address of Applicant :Department of Mechanical Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----

(57) Abstract :

A self-sufficient ground levelling device comprises of a first, second and third rod 1,2,3, the first 1 and second rods 2 are installed with rope 4 integrated at two points surrounding an area to be levelled, a motorized wheel 5 adjusted on rope 4 and attached with third rod 3, a pair of ultrasonic sensors 6 integrated at top and bottom portion of third rod 3 for detecting vertical distance between ground and third rod 3, a touch sensor installed at base of third rod 3 to determine location from where rod 3 loses contact with surface, a processing module integrated in microcontroller to determine coordinates and depth of pit, the rod 3 includes a conduit 7 linked with container 8 for levelling ground surface by dispensing filler material inside pit a storage container 8, an AI imaging unit 9 mounted on third rod 3 for monitoring dimensions of pit.

No. of Pages : 16 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211008860 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : ICE SKATING ASSISTIVE DEVICE

(51) International classification :A61B0005000000, G06F0003041000, G01B0011060000, A61H0015000000, B62B0005060000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Gurpreet Singh**

Address of Applicant :Department of Mechanical Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----

(57) Abstract :

An ice skating assistive device comprising a movable frame 1 employed with a pair of handles 2, characterized in that an artificial intelligence enabled image capturing module 3 for determining height of the user, a pneumatic unit 4 to position the handles 2 at required orientation enabling the user grab the handles 2 in an effective manner, a pair of elongated rods 5 for propelling the frame 1, a touch interactive display panel 7 for providing input-distance that is supposed to be covered along with a time span within which the input-distance needs to be covered, an ultrasonic sensor 8 for determining thickness of the surface, an electromagnetic lock 9 for locking the handles 2, a vital sensor 10 for measuring physiological parameters of the user while gripping, a pneumatically actuated pin 11 for pricking the user's hand to alert the user regarding abnormal health conditions.

No. of Pages : 17 No. of Claims : 7



(54) Title of the invention : AUTOMATED AGRICULTURAL FIELD MAINTENANCE DEVICE

(51) International classification :G01N0015000000, E21B0007020000, A01B0079000000, A01M0007000000, A01N0031160000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Pankaj Kumar**

Address of Applicant :Department of Mechanical Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----

(57) Abstract :

An automated agricultural field maintenance device comprising, an extendable body 1 installed with multiple telescopically activated Omni-directional caterpillar wheels 2 to manoeuvre the body 1 on an agricultural field, an artificial intelligence enabled image capturing unit 3 installed on the body 1 for capturing multiple images of said agricultural field, an excavator 4 mapped with the body 1 via a motorized slider 5, the slider 5 actuates to slide the excavator 4 that in turn dig soil for developing a bund on boundaries, the excavator 4 is constructed with a laser 6 that emits light to project a path along the boundaries, a motorized roller 7 attached to the body 1 to level the digged soil, a suction unit 8 attached to the body 1 for withdrawing water from the field, the withdrawn water is collected in a chamber 9 coupled to the suction unit 8 via a conduit 10.

No. of Pages : 16 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :21/02/2022

(21) Application No.202211008862 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : SMART CHAFING DISH DEVICE

(51) International classification :A47J0036240000, G01G0023370000, B65D0043220000, G01K0013000000, B65D0025540000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----  
**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Divya**

Address of Applicant :University Centre For Research and Development, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---  
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(57) Abstract :

The present invention relates to a smart chafing dish device including a container 1 having a lid 2 hinged at one side for storing food items, a temperature sensor 4 fitted at lid 2 interior for measuring food temperature, multiple peltier units 5 arranged at container's 1 bottom for keeping food cold/hot, a pair of imaging unit 6, 11 attached on lid 2 interior and front of container 1 for capturing images of food and person, a display panel 7 attached on container 1 for showing names of the food, a load cell 8 installed inside container 1 for food weight determination, a reset button 9 mounted on container 1 for resetting load cell, an ultrasonic sensor 12 in container's 1 front for detecting person, and a lead screw assembly 13 having a clamping unit 17 for holding and moving spatula 16.

No. of Pages : 20 No. of Claims : 10

(54) Title of the invention : PET SECURING DEVICE

(51) International classification :H04N0005225000, A01K0001010000, B65F0001140000, B60B0019000000, G03B0011000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Anuj Yadav**

Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---

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(57) Abstract :

A pet securing device comprising a housing 1 for securing a pet, multiple motorized omnidirectional wheels 4 for allowing maneuvering of the housing 1, an artificial intelligence based image capturing module 5 for capturing multiple images of the housing 1 and pet, multiple vibrating units 6 for producing vibrations for letting the pet out from the housing 1, a pair of base plates 7 attached with each other via multiple electromagnets, wherein the microcontroller upon detection of vacant housing 1, deactivates the electromagnets in order to flip the base plates 7 as means of providing an opening to form a passage for dispensing the litter in a waste storage chamber 8 attached at the first portion 2, a cleaning unit 9 installed within the housing 1 for perform cleaning of the housing 1, an audio unit 10 for producing a pacifying sound for attracting the pet inside the housing 1.

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :21/02/2022

(21) Application No.202211008847 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : SMART BOXING TRAINING DEVICE

(51) International classification :A63B0069000000, A63B0071060000, G06K0009000000, A63B0069200000, A63B0069320000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Chandigarh University**  
Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----  
**Name of Applicant : NA**  
**Address of Applicant : NA**  
(72)Name of Inventor :  
**1)Ritik**  
Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---  
-----

(57) Abstract :

The present invention relates to a smart boxing training device comprising, a telescopic pole 1 linked with a circular ball 2 fixed on a ground for punching several times by a user practicing boxing, an artificial intelligence image capturing module 3 mounted on pole 1 for capturing images of user to determine height and age of user and accordingly extends and decides level of training according to determined age, a touch interactive display panel 4 arranged to pole 1 for displaying determined level of user and also enables user manually adjust displayed level, a rotatable stick 5 fitted at center of pole 1 with a bow 6 and arranged in proximity to lower portion of face, for punching said user at speed according to detected level, a punch-O- meter 7 in connected with a radar fitted on circular ball 2 for determining intensity and speed of punches hit by user.

No. of Pages : 13 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211008848 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMATED PEDICURE DEVICE

(51) International classification :A45D0029000000, H04N0005232000, A61B0017540000, A01K0063060000, A47J0031560000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Chandigarh University**  
Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Apurva**  
Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---  
-----

(57) Abstract :

The present invention relates to an automated pedicure device including a body 1 having an infrared sensor 2 operated via microcontroller also controls multiple integrated containers 3 equipped with pipes having electrical valves to store and transport water and cleaning liquids to the body 1, imaging unit 5 combined to a display unit 6 operated via microcontroller for detecting feet's condition and providing input to the device respectively, a heating unit 7 combined with thermostat 4 modulated via microcontroller to detect and maintain the water temperature, multiple motorized brushes 8 and a sander 9 configured at the base of the body 1 activated via microcontroller for cleaning and removing callus from the feet and a nail grooming module 10 arranged within the body to clean cuticles, nail trimming and apply pigment on the user's nails.

No. of Pages : 17 No. of Claims : 10

(54) Title of the invention : MULTI-PURPOSE TOOL ACCOMMODATING DEVICE

(51) International classification :F16M0011180000, F24C0014020000, F16M0011040000, B08B0003020000, F16M0011080000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Sourabh Thakur**

Address of Applicant :Department of Mechanical Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

(57) Abstract :

A multi-purpose tool accommodating device comprising a housing 1 mapped with a biometric scanner 2 to verify fingerprints, an artificial intelligence enabled image capturing module 12 for determining height, a touch interactive display panel 3 inputs commands, a detachable handle 4 for providing grip to the user while performing the operation, a telescopic rod 5 to extend the handle 4 for providing an ease in performing the cleaning operation, plurality of telescopic bars 6 configured with motorized clamps 7 connected to an omni-rotational roller 8 adapted to hold while rotating to position the cleaning unit 9 in proximity to the telescopic rod 5 and the bars 6 extends to connect base of the cleaning unit 9 to a magnetic unit 10 fabricated on the rod 5, a UV light emitting diode 11 for radiating heat on the cleaning unit 9 to eradicate any contaminants residing over the unit 9.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211008863 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SECURED AND AUXILIARY SELF-BALANCING BICYCLE

(51) International classification :B62H0005200000, F16C0011100000, B60N0002000000, B62J0099000000, H04Q0009000000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Gagandeep Singh Mavi**

Address of Applicant :Department of Mechanical Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----

(57) Abstract :

The present invention relates to a secured and auxiliary self-balancing bicycle comprising a set of auxiliary wheels 1 arranged with the seat stays 2, an AI (Artificial Intelligence) based imaging unit 4 arranged on the frame 3 and in communication with the microcontroller, a first pair of sensor 5 arranged within the frame 3 and in association with the microcontroller, a processing unit configured with the frame 3 and in association with the microcontroller, a handle 6 configured with a rotatory motor 7 and arranged to the frame 3 and in association with the microcontroller, a set of telescopic rod 8 arranged on the wheels 1 and embedded to the seat stay 2, an alarm unit 9 embedded to the frame 3 and in communication with the second sensor 10, a communication module 11 in association with the microcontroller, a GPS (Global Positioning System) 12 in communication with the microcontroller.

No. of Pages : 15 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211008864 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMATED BRICK MANUFACTURING DEVICE

(51) International classification :G06F0021620000, A61K0008340000, B28B0007000000, A61J0007000000, A61F0007000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----  
**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Geetika Sukheja**

Address of Applicant :University Centre For Research and Development, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---  
-----

(57) Abstract :

The present invention relates to an automated brick manufacturing device, comprising multiple reservoirs 1 allied with the device kept with materials containing cement, sand, soil and water, wherein each of the reservoirs 1 is combined with sensing module 2 that evaluate level and weight of materials, a touch interactive screen 3 that permit the user to feed amount and size of brick 4 that is to be crafted, a primary container 5 combined with a motorized stirrer 6, the microcontroller triggers nozzles 7 to bestow required amount of material, a secondary container 8 for getting crushed solution from the stirrer 6 and furnished with multiple hydraulic pressure units 9, to spread or retract in order to compress the solution, multiple heating units 10, wherein upon pressing the solution up to essential dimension, the microcontroller triggers the unit 10 in order to dry the solution and craft required brick 4.

No. of Pages : 14 No. of Claims : 6



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211008866 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : MULTIPURPOSE COSMETIC APPLICATOR DEVICE

(51) International classification :A45D0040260000, A45D0044000000, A61Q0019000000, A45D0034040000, A45D0033320000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Chandigarh University**  
Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Ashish Sharma**  
Address of Applicant :Department of Electrical Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----

(57) Abstract :

A multipurpose cosmetic applicator device comprising of a chamber 1 constructed with first portion 2 installed with an image capturing module 4 that captures images of a user, a touch interactive screen 5 mapped in proximity to the module 4 for enabling user to enter desired look/style, a sensing module 6 installed on a first telescopic rod 7 to determine type, shade and moisture level of user's face, a moisturizing unit 8 mapped at second portion 3 of the chamber 1 comprising a second telescopic rod 9 coupled with a sponge 10 to apply moisturizers stored within a primary reservoir 11 over the users skin, a foundation unit 12 installed at second portion 3 comprising a third telescopic rod 13 attached with secondary reservoirs 14 and a sprayer 15 to apply required cosmetics over the user's skin.

No. of Pages : 15 No. of Claims : 6

(54) Title of the invention : AUTOMATED REFLECTIVE PAVEMENT MARKERS INSTALLATION AND MAINTENANCE DEVICE

(51) International classification :B25J0005000000, B25J0015080000, A61B0005103000, E01F0009559000, E01F0009565000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Jayaram R**

Address of Applicant :University Centre For Research and Development, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---  
-----

(57) Abstract :

An automated reflective pavement markers installation and maintenance device, comprising hollow body 1 configured with multiple omni-directional wheels 2 for maneuvering body 1, a display panel 3 mounted on body 1 for providing access to user to input commands to a motorized driller 5 connected at first side 6 of base of body 1, pair of motorized racks 7 assembled with multiple sliding bars 8 positioned on second side 9 of base and adapted to accommodate the reflective pavement markers 4 between successive bars 8, proximity sensor 10 sense proximity of the pavement markers 4 with respect to an iris lid 11, an image capturing unit 14 installed on the body 1 for detecting damages, dirt and multiple nozzles 15 mapped on chamber 16 for dispensing water on the pavement markers 4 in case of the detected dirt.

No. of Pages : 18 No. of Claims : 8

(54) Title of the invention : VARIABLE INTENSITY LIGHT ILLUMINATION DEVICE

(51) International classification :F21Y0115100000, F21V0029770000, A01G0007040000, F21V0023040000, B60Q0007000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Ashish Chaurasia**

Address of Applicant :Department of Mechanical, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

**2)Rahul Kumar**

Address of Applicant :Department of Mechanical, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

(57) Abstract :

The present invention relates to a variable intensity light illumination device, comprising a circular body 1 attached with a pair of magnetic plates 2 through a rack arrangement, wherein multiple magnetized fins 3 are sandwiched in between the plates 2 that upon manual pushing, the fins 3 sequentially deploy along periphery to form a fan-like structure, multiple LED lights 4 that are illuminated based on requirement of a user, wherein number of the LED's 4 illuminating light are controllable based on number of fins 3 that are deployed and a magnetic pin lock 5 to be inserted through a hole engraved on body 1, fins 3 and plates 2 for arranging plates 2 in association with fins 3 in a sequential manner, wherein the pin lock 5 is pulled out and distance up to which the pin lock 5 is pulled is based on number of the fins 3 deployed.

No. of Pages : 12 No. of Claims : 7

(54) Title of the invention : BLOCK CHAIN BASED VEHICLE RENTAL SYSTEM

(51) International classification :G06Q0030060000, G07C0005000000, G07B0015020000, H04L0009320000, G06Q0030000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Anirudh Walia**

Address of Applicant :Department of Computer Science Engineering, AIT, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

**2)Dr. Sandeep Singh Kang**

Address of Applicant :Head, Professor, Department of Computer Science Engineering, UIE, Chandigarh University National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----

**3)Dr. Raman Chadha**

Address of Applicant :Professor, Department of Computer Science Engineering, UIE, Chandigarh University National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -

(57) Abstract :

A block chain based vehicle rental system includes, a first computing unit operated by owner to register vehicle(s) over a user interface by smart contract upon a block chain fabric, a ledger is stored in the block chain fabric, a second computing unit adapted with the interface that provide user services to a user of fleet vehicles, a central server connected with the units to verify user/owner credentials and receive vehicle's real time data via on-board diagnostic module along with smart contract and the registration details to provide vehicle's real time data to the owner and user of vehicle, wherein multiple nodes associated with the fabric adopted to receive rental request from the user for a selected vehicle and configured to validate rental process upon completion of digital payment for a trip to achieve vehicle rental process without any third party interference.

No. of Pages : 17 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211000526 A

(19) INDIA

(22) Date of filing of Application :05/01/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : TRAFFIC MANAGEMENT AND SAFETY SYSTEM FOR VEHICLES

(51) International classification :G08G0001000000, G08G0001017000, G08G0001096700, G08G0001010000, G08G0001020000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Chandigarh University**  
Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----  
**Name of Applicant : NA**  
**Address of Applicant : NA**  
(72)Name of Inventor :  
**1)Pranav Sharma**  
Address of Applicant :University Institute Of Computing, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----

(57) Abstract :

The present invention relates to a traffic management and safety system for vehicle, comprising plurality of strips 1 embedded over road linked with traffic signals by integrated communication module 7, an LED 4 (Light emitting diode) fabricated on strips 1 that connects with signals to manage traffic, a first set of sensors integrated within each of vehicles to determine physical and health characteristics of vehicle, a second set of sensors integrated in strips 1 that detects and monitors position of vehicle passing over strips 1, a processing unit accumulates data from first and second set of sensor to project graph depicting traffic condition and position of vehicle, a QR code embedded underneath each of vehicle for identification in case traffic violation , a remote controller installed within vehicle of traffic authority to establish link with vehicle not following traffic rules for altering speed or stop vehicle to avoid any accidents.

No. of Pages : 19 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211009079 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : JET PROPULSION ENGINE SYSTEM

(51) International classification :B01D0001280000, F02C0009200000, F01C0001344000, F23L0005020000, F01C0003020000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----  
**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Aditya Singh**

Address of Applicant :Department of Aerospace, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

(57) Abstract :

A jet propulsion engine system includes a circulating compressor 1 having spiral concentrated vanes 8 installed with a jet aircraft, wherein each vanes 8 is crafted with inlet opening 9 that sucks ambient air, a motor 2 installed with circulating compressor 1 via a common shaft 3 and upon rotation of motor 2, the shaft 3 propels compressor 1 in clockwise/anti-clockwise direction in a manner that ambient air gets dispensed inside vanes 8 for compressing and gradually increasing the air's temperature, a combustion chamber 4 attached to compressor's 1 outlet via conduit 5 that receives compressed air from conduit 5 and mixes the air with fuel injected inside chamber 4 via inlet valves 6 which leads to combustion of air-fuel mixture, a convergent-divergent nozzle 7 attached to chamber's 4 one end for discharging combusted air-fuel mixture via a narrow path for producing huge amount of thrust for displacing the aircraft.

No. of Pages : 16 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :21/02/2022

(21) Application No.202211009080 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMATED PATIENT CARE SYSTEM

(51) International classification :A61B0005000000, G06F0003010000, G16H0040630000, G06F0003048800, A61J0007040000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Chandigarh University**  
Address of Applicant :National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. -----  
-----  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Deepak Pandey**  
Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. ---  
-----

(57) Abstract :

An automated patient care system includes, a bed 1 for carrying a patient comfortably, a touch interactive screen 2 that allows an authorized person to enter details of the patient including name of medicine, quantity of dose, time of dose and medical status, a microcontroller sends notifications over computing unit of an authorized person as per prescribed time for giving medicine to the patient, a sensing module determines patient's vital parameters, sends an notification over the computing unit upon detection of abnormal health condition, a gesture sensing fetches hand movement of an user and understands command pre saved with respect to the gesture, a mattress 3 layered over the bed 1 and segregated into multiple inflatable sections 4, wherein upon receiving a gesture command from the patient or authority, the microcontroller actuates the sections 4 individually to change shape of the bed 1 according to users requirement and comfortable posture.

No. of Pages : 15 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211009081 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SMART BULB HOLDING DEVICE

(51) International classification :H05B0045200000, H05B0047190000, F21V0023000000, G08C0017020000, F21V0023040000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. -----

-----  
**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Preetinder Singh**

Address of Applicant :Department of Mechatronics, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. -----

(57) Abstract :

A smart bulb holding device includes, a frame 1 having a primary conducting plug 2 installed within a fixed holder to receive electric supply via a relay module, an axillary holder 3 having two conducting pins 4 to receive a bulb whose conducting points gets connected with the pins 4 to receive electricity from the fixed holder 3, a slide switch 5 interfaced with a microcontroller allow user to select modes i.e. Bluetooth mode, auto LDR light intensity mode, and Infrared remote control mode, the user manually select modes by shifting the switch 5, the microcontroller activates a Bluetooth module in Bluetooth mode and infrared sensor 7 to receive user commands via a computing unit and remote to switch on or off the bulb, the microcontroller activates a Light Dependent Resistor sensor 6 in the mode to switch on or off the bulb in dark or bright surrounding light intensity.

No. of Pages : 17 No. of Claims : 5



(54) Title of the invention : SECURED MULTI-FREQUENCY COMMUNICATION SYSTEM

(51) International classification :H01Q0001270000, H01Q0001460000, H01Q0001440000, H01Q0021300000, A61B0017220000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Saykat Chakrapani**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. ---

**2)Karan Jindal**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India ----

**3)Karthik Raman**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India ----

**4)Dr. Meenu Gupta**

Address of Applicant :Associate Professor, Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India -----

**5)Dr. Rakesh Kumar**

Address of Applicant :Professor, Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India ----

**(57) Abstract :**

A secured multi-frequency communication system comprising, a network of aerial bodies 2 having motorized propellers for allowing aerial movement of bodies 2 from one place to another, multiple networking modules 1 to establish a secured network for transmitting/receiving signals of various frequencies for enabling communication in network prone areas, each of modules 1 comprising, a chipset 3 having multiple general purpose input-output (GPIO) pins, a wire 4 is attached with one of pins to transmit a signal of desired frequency, a high fidelity radio receiver 5 to receive signals, an input peripheral 6 unit linked with each of chipset 3 to allow a user to provide voice signal and convert into an electrical signal as means of transmitting signal of desired frequency range via chipset 3, an output peripheral 7 to convert electrical signal received via radio receiver 5 into an audio signal for broadcasting signal among networking modules 1.

No. of Pages : 13 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :21/02/2022

(21) Application No.202211009083 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : SELF-CONTAINED COOKING AID SYSTEM

<p>(51) International classification :F24C0015200000, G04G0015000000, A63B0071060000, A47J0037060000, A47J0036060000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Chandigarh University</b> Address of Applicant :National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. ----- -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Aditya Saxena</b> Address of Applicant :Department of Mechanical Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab140413, India. ----- -----</p> <p><b>2)Rahul Kumar</b> Address of Applicant :Department of Mechanical Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab 140413, India. ----- -----</p> <p><b>3)Anchit Sharma</b> Address of Applicant :Department of Mechanical Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab 140413, India. ----- -----</p>
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(57) Abstract :

A self-contained cooking aid system comprising, a body 1 having a top and bottom portion 2, 3 placed over a stove 13 and positioned beneath a chimney 4 to maintain an optimum amount of heat for cooking food, a pair of lid 5 to provide an access to a user for handling cookware placed over stove 13, multiple openings 7 carved within bottom portion 3 of body 1, chimney 4 upon activation, draws air from body 1 and allows passage of fresh air inside body 1 via openings 7 for removing cooking fumes, multiple slats 14 fabricated with a layer of silica gel to adsorb carbon particles from smoke generated while cooking food, a timer unit 11 allow user to fed time required for cooking, microcontroller activates an audio unit 12 attached over body 1 to alert user upon detection of time fed by user is over.

No. of Pages : 14 No. of Claims : 5

(54) Title of the invention : FIRE ALARM AND EVACUATION SYSTEM

(51) International classification :G08B0007060000, G08B0017100000, G01N0021530000, G08B0017113000, F24F0011330000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Itashi**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab 140413, India. ----  
-----

**2)Arshiya Mittal**

Address of Applicant :Department of Computer Science Engineering (IBM), Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab 140413, India. ---  
-----

(57) Abstract :

A fire alarm and evacuation system includes, multiple sensors integrated within an enclosure to detect temperature, presence of smoke, air quality and visibility of surrounding, an infrared module detects presence fire and human being inside the enclosure, multiple windows affixed through the enclosure, upon detecting the smoke, fire, low visibility, the microcontroller actuates motor integrated within each of the windows to roll down the windows to evacuate the smoke and improve visibility, miniature aerial units equipped within the enclosure, the microcontroller actuates the aerial units to project evacuation route maps to occupants, multiple chambers housed within the unit filled with liquid gasses and interlinked with motor pump, to dispense gas of related potential to extinguish the detected fire, multiple ducts connected to reservoirs, wherein upon detecting the fire above a first threshold level, the ducts to dispense the gasses to extinguish the fire immediately to evacuate and prevent the beings.

No. of Pages : 15 No. of Claims : 4

(54) Title of the invention : MODULAR EXERCISING DEVICE

(51) International classification :A63B0022020000, A61H0039040000, A63B0071060000, A63B0021000000, G06Q0050140000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Isha Arora**

Address of Applicant :Department of Computer Science Engineering (BDA), Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

**2)Rishabh Raj**

Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---  
-----

(57) Abstract :

The present invention relates to a modular exercising device, comprising of a treadmill 1 installed with a primary display unit 2 for enabling a user to input details regarding type of scenic view or motivation instilling techniques the user wants to explore virtually, a microcontroller for processing the user-desired scenic view and actuates a projector 3 to project the selected scenic view over a secondary display unit 4 wirelessly associated with the treadmill 1, multiple acupuncture units 8 embedded on surface of belt and handles 6, 7 of the treadmill 1 to provide acupressure therapy on the foot and palm of the user and a pair of speakers 5 arranged with the treadmill 1 to generate cohesive sound effects accompanying the scenic view or motivation instilling technique to intensify the user's experience of a virtual tour on a user-desired location.

No. of Pages : 14 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211009086 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SUSTAINABLE TEMPERATURE MAINTENANCE APPARATUS FOR EDIBLES

(51) International classification :C04B0035626000, H05K0007200000, B30B0011000000, B01L0007000000, F24F0013240000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. -----

-----  
**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Vinoth Kumar G**

Address of Applicant :Department of Aerospace, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. -----

(57) Abstract :

A sustainable temperature maintenance apparatus for edibles, includes a body configured with a first chamber 1 employed with a handle 2, a second chamber 3 layered with a silicon sponge sheet 7 disposed on inner walls of the chamber 3, the chamber 3 used for storing edibles, a pair of inlets 4 connected on outer periphery of the first chamber 1 to pour water through the inlets 4, multiple veins 5 fabricated at inner periphery of the first chamber 1 to supply the water through pores 8 fabricated on the veins 5 within space between walls of the chambers (1, 3), delivered water aids in maintaining cooling within the chambers (1, 3) via the silicon sponge sheet 7 and coconut fibers and riverbed sand disposed within the space, and a lid 6 connected with the chamber 1 for enclosing the body and maintaining desired temperature within the body.

No. of Pages : 18 No. of Claims : 6

(54) Title of the invention : SMART PARKING MANAGEMENT SYSTEM

(51) International classification :G08G0001140000, H04W0004021000, H04W0004029000, G08G0001000000, G07C0001300000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. -----  
-----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Deepak**

Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. ---  
-----

**2)Kunwar Yashaswee Chhaunker**

Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. ---  
-----

(57) Abstract :

The present invention relates to a smart parking management system comprises of a Global Positioning System (GPS) module emit continuous pulses of radio signals which are detected by satellite to fetch exact location of vehicle, a database is pre-installed with geographical coordinate locations of non-parking zones for defined location and a microcontroller integrated in between starter motor and ignition of vehicle compares current location of vehicle with coordinates of non-parking zone and if current location not overlapping with geographical coordinates, microcontroller allows user to turn off ignition by disconnecting a circuit between ignition and starter motor and upon detecting overlapped coordinates restricts breakage between circuit to restricts turning off of vehicle to prevent parking of vehicle in non-parking zones and computing unit allows users to enter personalized location coordinates to add a specific location into no parking zones.

No. of Pages : 12 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211007823 A

(19) INDIA

(22) Date of filing of Application :15/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SPATIAL DECISION SUPPORT SYSTEM FOR GROUNDWATER RECHARGE THROUGH ROOFTOP RAINWATER HARVESTING IN URBAN AREAS USING HIGH RESOLUTION SATELLITE DATA AND GIS APPROACH

(51) International classification :G06T0017050000, G06Q0010060000, G06F0016290000, G09B0029000000, G06Q0050160000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Janardan Rai Nagar Rajasthan Vidyapeeth (Deemed to be University)**

Address of Applicant :Janardan Rai Nagar Rajasthan Vidyapeeth (Deemed to be University), Pratap Nagar, Udaipur, Rajasthan-313001 -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. Yuvraj Singh Rathore**

Address of Applicant :Janardan Rai Nagar Rajasthan Vidyapeeth (Deemed to be University), Pratap Nagar, Udaipur, Rajasthan-313001 -----

(57) Abstract :

The present invention relates to a spatial decision support system for groundwater recharge through rooftop rainwater harvesting in urban areas using high resolution satellite data and gis approach. In the present invention it is developed to provide the general public with the scientific information to carry out artificial recharge in an urban area using the rooftop rainwater harvesting. Spatial Decision Support Systems (SDSS) are one of the most advanced and user friendly ways for the dissemination information to the users. Herein the said process comprises of; Land use Classification & NDVI, Pre-monsoon, post-monsoon ground water fluctuations and net ground water fluctuation, Generation of Digital Elevation Model and stratigraphic profiles for the area and slope map, Generation of weights for various parameters taken into consideration by AHP, Weighted Overlay analysis for the generation of suitability map.

No. of Pages : 11 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211023417 A

(19) INDIA

(22) Date of filing of Application :20/04/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMATIC WATER DISPENSING SYSTEM

(51) International classification :G06F0003048100, B67D0001000000, E03C0001050000, G06F0040174000, C08G0018660000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Desh Bhagat University**

Address of Applicant :NH1, Mandi Gobindgarh, Punjab-147301, India. -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Zora Singh**

Address of Applicant :Chancellor, Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-14730 1, India. -----

(57) Abstract :

An automatic water dispensing system comprising, a body 1 having a top portion 2 installed with four pipes 4 containing different type of water, each of pipe 4 splits into three tubes 5 in a way that three groups are formed, each group containing all four types of water, a touch interactive screen 6 to allow a user to select desired type and form of water, a primary set of valves to dispense particular type of water of one of group, a primary, secondary and tertiary chambers 7, 8, 9 to receive respective water from each of groups and change form of received water in hot, cold and normal as per user's requirement, a secondary set of valves 10 to dispense specific type of water in one of form as per user's requirement, a container 11 to receive desired form and type of water, a motorized tap 12 to dispense required form and type of water in a vessel.

No. of Pages : 15 No. of Claims : 8



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211042667 A

(19) INDIA

(22) Date of filing of Application :26/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : TOILET MANAGEMENT DEVICE

(51) International classification :B05C0011100000, A47K0010380000, G08B0019000000, A47K0010320000, E05F0015430000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Desh Bhagat University**  
Address of Applicant :NH1, Mandi Gobindgarh, Punjab-147301, India. Fatehgarh Sahib -----  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr Zora Singh**  
Address of Applicant :Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. Fatehgarh Sahib -----  
-----

(57) Abstract :

A toilet management device, comprises of a L-shaped platform 1 configured with chamber 2 to store toilet paper roll, an IR sensor 3 to detect presence of user, a sliding arrangement 5 to provide movement to chamber 2, a motion sensor 6 to detect user's hands motion, a sliding door 7 to open chamber 2, a sensing module 8, 9 for detecting temperature and humidity level, a Peltier unit 10 to maintain evaluated conditions, a torque sensor 11 for detecting torque, a L-shaped motorized cutter 13 to cut paper, a frame 14 for accommodating user's computing unit, a telescopic bar 15 to lift frame 14, an ultrasonic sensor 17 to detect real-time hand movements, a motorized ball and socket joint 16 coupled between bar 15 and frame 14 to provide movements, a moisture sensor 18 to detect presence of moisture, multiple electronic nozzles 19 for blowing high pressure air.

No. of Pages : 19 No. of Claims : 5

(54) Title of the invention : MAGNETORHEOLOGICAL FINISHING TOOL

(51) International classification :B24B0035000000, B23Q0003180000, H04Q0003000000, B24B0031112000, B24B0019120000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Desh Bhagat University**

Address of Applicant :NH1, Mandi Gobindgarh, Punjab-147301, India. Fatehgarh Sahib -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. Talwinder Singh Bedi**

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, (Faculty of Engineering and Applied Sciences), Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. Fatehgarh Sahib -----

**2)Dr. Birinderjit Singh**

Address of Applicant :Director ERP cum Dean Engineering, Department of Civil Engineering (Faculty of Engineering and Applied Sciences), Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. Fatehgarh Sahib -----

(57) Abstract :

A magnetorheological finishing tool comprising a frame 1 having a first and second portions 2, 3 adopted to be fixed within a workpiece, a shaft 4 to allow frame 1 to attach with a machine that provides rotational motion to frame 1 required for finishing of workpiece, plurality of slots 8 arranged with a base magnet 6 paired with a tapered vertical magnet 5 to perform magnetorheological finishing over lateral and longitudinal surface of workpiece while rotation and reciprocation provided by machine handled by a user, a base plate 7 as means of eliminating magnetization in between magnets 5, 6, an abrasive fluid applied by user over magnets 5, 6 for performing a nano level finishing, multiple grooves configured within base magnets 6, wherein plurality of pins fixed within a particular groove to lock magnets 5, 6 allows uniform finishing within workpiece as per user's requirement.

No. of Pages : 18 No. of Claims : 8

(54) Title of the invention : HANDHELD FOOTWEAR CLEANING AND DISINFECTANT DEVICE

(51) International classification :A43B0003000000, A43B0001000000, F21S0008080000, A46B0013020000, A63H0003000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----  
-----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Aman Tripathi**

Address of Applicant :Department of Mechatronics Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----  
-----

**2)Alok Barwal**

Address of Applicant :Department of Mechatronics Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab - 140413, India. -----  
-----

(57) Abstract :

The present invention relates to a handheld footwear cleaning and disinfectant device, comprising a handheld body 1 having a first 2 and second portion 3, wherein a UV lamp 4 is installed on the first portion 2 for disinfecting the inner portion of the foot wear and the second portion 3 is installed with a battery and switch 5 for regulating the disinfectant process, a detachable arm 6 connected in between the first 2 and the second portion 3 for detaching the arm 6 during insertion within the footwear, a polishing unit 7 installed on the distal end of the arm 6 for cleaning the outer surface of the foot wear, a storage compartment 11 housed within the unit 7 for storing polishing cartridge, a pair of foam brushes 9, 10 fabricated on the unit 7 for exhibiting a cleaning motion over the outer surface of the foot wear.

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :02/08/2022

(21) Application No.202211044221 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : PHARMACOLOGICAL EVALUATION OF ANALGESIC ACTIVITIES OF AMARANTHUS SPINOSUS STEM

(51) International classification :A61K0036210000, A61K0045060000, A61K0036280000, A61K0031050000, A61K0049180000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Mr. Raj Kumar Singh Bharti**

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----

---  
**2)Mr. Sateesh Kumar**

**3)Dr. Sushil Kumar**

**4)Mrs. Neha Rahi**

**5)Mr. Shivam**

**6)Mr. Amit Kumar**

**7)Mr. Munna Singh**

**8)Mr. Anesh Sagar**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Mr. Raj Kumar Singh Bharti**

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----

---  
**2)Mr. Sateesh Kumar**

Address of Applicant :Assistant Professor, Radha Govind College of Pharmacy, Near 2 km RTO office, Moradabad, Uttar Pradesh - 202411 Moradabad -----

---  
**3)Dr. Sushil Kumar**

Address of Applicant :Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----

**4)Mrs. Neha Rahi**

Address of Applicant :Assistant Professor, Rampal Singh Smarak College of Pharmacy, Ratupura, Thakurdwara, Moradabad, Uttar Pradesh -244601 Moradabad -----

---  
**5)Mr. Shivam**

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----

---  
**6)Mr. Amit Kumar**

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----

---  
**7)Mr. Munna Singh**

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----

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**8)Mr. Anesh Sagar**

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----

(57) Abstract :

The present invention relates to that there are number of synthetic (allopathic) drugs which are used in the treatment of mental disorders, they are helpful but synthetic drugs also have lots of side effects with the monetary problem. The Ayurveda has long tradition of treating mental disorders. Herbal drugs are playing significant role in the health care agendas worldwide, mostly due to the general faith that they are without any side effects, besides being contemptible and locally available. Recently there is a recovery of an interest in herbal medicines for the management of different aliment including CNS disorders. Experimental screening of ethanolic extracts of Stem of Amaranthus spinosus for analgesic activity Acetic acid induced, Eddy's Hot Plate and Tail-flic method.

No. of Pages : 15 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :02/08/2022

(21) Application No.202211044231 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : DEVELOPMENT AND EVALUATION OF FAST DISINTEGRATING TABLET OF CEFIXIME HYDROCHLORIDE

<p>(51) International classification :A61K0009000000, A61K0009200000, A61K0031546000, A61K0047320000, A61K0009160000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Mr. Shivam</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh – 244102 Moradabad ----- <b>2)Dr. Sushil Kumar</b> <b>3)Mr. Amit Kumar</b> <b>4)Mr. Raj Kumar Singh Bharti</b> <b>5)Mr. Vineet Kumar</b> <b>6)Ms. Pooja Malik</b> <b>7)Mr. Munna Singh</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Mr. Shivam</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh – 244102 Moradabad ----- <b>2)Dr. Sushil Kumar</b> Address of Applicant :Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh – 244102 Moradabad ----- <b>3)Mr. Amit Kumar</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh – 244102 Moradabad ----- <b>4)Mr. Raj Kumar Singh Bharti</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh – 244102 Moradabad ----- <b>5)Mr. Vineet Kumar</b> Address of Applicant :Assistant Professor, Shree Ji Institute of Pharmaceutical Education and Research, Bilari, Moradabad, Uttar Pradesh - 244411 Moradabad ----- <b>6)Ms. Pooja Malik</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh – 244102 Moradabad ----- <b>7)Mr. Munna Singh</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh – 244102 Moradabad -----</p>
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(57) Abstract :

Recent developments in fast disintegrating tablets have brought convenience in dosing to pediatric and elderly patients who have trouble in swallowing tablets. As precision of dosing and patient's compliance become important prerequisite for a long-term treatment, there is a need to develop a formulation for this drug which overcomes problems such as difficulty in swallowing, inconvenience in administration while travelling, and patient's acceptability. Hence, the present investigation was undertaken with a view to develop a fastdisintegrating tablet of Cefixime Hydrochloride which offers a new range of products having desired characteristics and intended benefits. Superdisintegrants such as Sodium Starch Glycolate were optimized. It was concluded that fast disintegrating tablets of Cefixime Hydrochloride were formulated successfully with desired characteristics which disintegrated rapidly, provide rapid onset of action, and enhance the patient convenience and compliance.

No. of Pages : 16 No. of Claims : 3

(54) Title of the invention : MULTILAYER COMPOSITE SEPARATOR AND METHOD THEREOF

<p>(51) International classification :H01M0002160000, H01M0002140000, C02F0003000000, H01M0008101800, H01M0004900000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to :NA Application Number :NA Filing Date :NA</p> <p>(62) Divisional to :NA Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)SHARDA UNIVERSITY</b> Address of Applicant :Plot No. 32-34, Knowledge Park III, Greater Noida, 201310,Uttar Pradesh (UP), India Greater Noida -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Kanupriya</b> Address of Applicant :Life Sciences, Sharda University, Sharda University, Plot No. 32-34, Knowledge Park III, Greater Noida, 201310,Uttar Pradesh (UP), India (IN) Greater Noida -----</p> <p><b>2)Dr. Abhilasha Singh Mathuriya</b> Address of Applicant :Vayu 241, Ministry of Environment, Forest and Climate Change, Jor Bagh, New Delhi, 110003, India (IN) Delhi -----</p> <p><b>3)Dr. Soumya Pandit</b> Address of Applicant :Life Sciences, Sharda University, Sharda University, Plot No. 32-34, Knowledge Park III, Greater Noida, 201310,Uttar Pradesh (UP), India (IN) Greater Noida -----</p>
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(57) Abstract :

The present invention provides a multilayer composite separator (100) for bio-electrochemical systems (BESs) and method thereof, the separator comprises an membrane having a plurality of layers of a functionalized hemp-stalk char reinforced cement with a predetermined weight ratio, a conductive paint (102) being coated at one or more side of the membrane, and an air cathode system (114) disposed at one side of the membrane and configured to facilitates an oxygen reduction reaction or an oxygen evaluation reaction. The multilayer composite separator increases the efficiency of bio-electrochemical systems.

No. of Pages : 22 No. of Claims : 9

(54) Title of the invention : ADAPTIVE MULTIPURPOSE LIGHTING DEVICE

(51) International classification :H02J0007350000, G01J0001420000, G01J0001040000, A47B0037040000, A61C0019000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh  
Ludhiana Highway, Mohali, Punjab-140413, India. -----  
-----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Ashish Chaurasia**

Address of Applicant :Department of Mechanical Engineering,  
Chandigarh University, National Highway 95, Chandigarh  
Ludhiana Highway, Mohali, Punjab-140413, India. -----  
-----

**2)Aditya Saxena**

Address of Applicant :Department of Mechanical Engineering,  
Chandigarh University, National Highway 95, Chandigarh  
Ludhiana Highway, Mohali, Punjab-140413, India. -----  
-----

(57) Abstract :

An adaptive multipurpose lighting device comprises of a pole 1 installed on a surface 2 and having first and second end 3, 4, on first end 3 a light sensor 5 is installed for detecting ambient light intensity, a normalized rod 6 fitted with a lighting unit 7 for illuminating light on surface 2, a sensing module 8 to detect weather, person's presence, and distance between person and pole 1, multiple plates 9 attached on pole 1 via motorized hinge joint 10 arranged on a sliding rack 11, to deploy plates 9 to provide shade and protection to person from weather, multiple solar cells 12 for generating electrical energy from solar rays, a dust sensor 13 for detecting dust on plates 9, multiple nozzles 14 integrated on rod 6 to dispense cleaning liquid filled in storage chamber 15 via pump installed in chamber 15 to clean dust from plates 9.

No. of Pages : 15 No. of Claims : 7

(54) Title of the invention : THE OBJECT LIFTING MOTORIZED SCISSOR CAR JACK

(51) International classification :B66F0003200000, B66F0003440000, B66F0003120000, B66F0005020000, B60S0011000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Lloyd Institute of Engineering and Technology**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----  
-----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Prof. Dr. Rajeev Agrawal**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----  
-----

**2)Prof. Dr. Manish Saraswat**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----  
-----

**3)Prof. Dr. N.R.Chauhan**

Address of Applicant :Indira Gandhi Delhi Technical University for Women, Delhi-110006 Delhi -----  
-----

**4)Mr. Irfan Khan**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----  
-----

**5)Mr. P K Chandra**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----  
-----

**6)Mr. Arse Alam**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----  
-----

**7)Mr. Diwakar Yadav**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----  
-----

**8)Mr. Tabrez Alam**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----  
-----

**(57) Abstract :**

The object lifting motorized scissor car jack The purpose of the present invention is to make Motorized Object Lifting jack. Tire puncture can be commonly observed now-a-days. Car jack comes with vehicles requires users to apply manual force to lift a vehicle. This invention discloses a car jack in order to make load lifting easier by utilizing Car battery (12V) which can be used in emergency situations. In this device, the cigarette lighter receptacle point is connected in car, which drives the power from the car battery (12V), this will run the DC motor and thus connected power screw is rotated. By this, the car jack will lift the vehicle. The contractions or expansion movement of car jack can be controlled by a joystick as per requirements.

No. of Pages : 21 No. of Claims : 7



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044650 A

(19) INDIA

(22) Date of filing of Application :04/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : RFID BASED AUTOMATIC SHOPPING CART

<p>(51) International classification :G06K0019077000, G06Q0030020000, G06Q0020220000, G06Q0030060000, H03G0003300000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Lloyd Institute of Engineering and Technology</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Prof. Dr. Rajeev Agrawal</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>2)Prof. Dr. Manish Saraswat</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>3)Prof. Dr. N.R.Chauhan</b> Address of Applicant :Indira Gandhi Delhi Technical University for Women, Delhi-110006 Delhi ----- <b>4)Mr. Irfan Khan</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>5)Mr. Ravi Kalra</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>6)Ms. Divya Mohan</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>7)Mr. Ritik Tyagi</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>8)Mr. Danish Gauher</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>9)Mr. Mayank Yadav</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----</p>
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(57) Abstract :

The present invention relates to RFID based automatic shopping cart model is easy to use, low-priced and does not require any special training. This model keeps an account and uses of the existing developments and various types of radio frequency identification and detection technologies which are used for it recognition, billing and inventory update. As the whole system is becoming smart, the requirement of manpower will decrease, thus benefiting the retailers. Theft in the mall will be controlled using this smart system, which further adds to the cost efficiency. The time efficiency will increase phenomenally since this system will eliminate the waiting queues. More customers can be served in same time thus benefiting the retailers and customers as well.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :04/08/2022

(21) Application No.202211044685 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : A DOUBLE ACTING GENERATOR DEVICE AND METHOD FOR USING THE SAME

<p>(51) International classification :H02K0015000000, F02B0075000000, H02K0001270000, H02K0035020000, B60L0050620000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Lloyd Institute of Engineering and Technology</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Prof. Dr. Rajeev Agrawal</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>2)Prof. Dr. Manish Saraswat</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>3)Prof. Dr. N.R.Chauhan</b> Address of Applicant :Indira Gandhi Delhi Technical University for Women, Delhi-110006 Delhi ----- <b>4)Mr. P. K. Chandra</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>5)Mr. Irfan Khan</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>6)Mr. Jaikishan Singh</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>7)Mr. Pawan</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>8)Rukshar Khatoon</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>9)Mr. Sumit Kumar</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>10)Mr. Yogendra Kumar</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----</p>
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(57) Abstract :

The present invention relates to a fabrication of double acting generator using gear and pulley arrangement. Also it is design for gaining the double output in the form of power through this double acting generator. In this invention we uses many components with different capacity for making this generator. Permanent magnet generator design optimized for higher efficiency, higher power density, more economical and compact operation. Novel multiple Rotor Induction/Permanent magnet Generator design optimized for Higher Efficiency, higher power density, more economical and compact operation.

No. of Pages : 26 No. of Claims : 7

(54) Title of the invention : ANTIMICROBIAL COMPOUND (E)-2-PHENOXY-1-PHENYL-N-(4H-1, 2, 4-TRIAZOLE-4-YL) ETHANIMINE AND SYNTHESIS THEREOF

<p>(51) International classification :C07D0249080000, C07J0009000000, C07H0001000000, A61P0031040000, A61K0036899000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Mr. Amit Kumar</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Lodhipur, Rajput Moradabad U.P. India 244102 -----</p> <p><b>2)Dr. Sushil Kumar</b> <b>3)Mr. Akash Agrawal</b> <b>4)Dr. Arvind Kumar</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor :</p> <p><b>1)Mr. Amit Kumar</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Lodhipur, Rajput Moradabad U.P. India 244102 -----</p> <p><b>2)Dr. Sushil Kumar</b> Address of Applicant :Professor and Director, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----</p> <p><b>3)Mr. Akash Agrawal</b> Address of Applicant :School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----</p> <p><b>4)Dr. Arvind Kumar</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----</p>
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## (57) Abstract :

The present invention belongs to the field of pharmaceutical science. More, particularly the invention pertains to Synthesis and antimicrobial activity of novel compound (E)-2-phenoxy-1-phenyl-N-(4H-1, 2, 4-triazole-4-yl) ethanimine. The novel process involved mixing of 2-phenoxy-1-phenylethanone (0.01 mol), 4-amino -1, 2, 4-triazole (0.01mol) and 1 ml of glacial acetic acid in 100 ml ethanol and was refluxed on water bath for 10 h. The mixture is allowed to cool, and then the separated solid is filtered and recrystallized from ethanol to afford the (E)-2-phenoxy-1-phenyl-N-(4H-1, 2, 4-triazole-4-yl) ethanimine. The (E)-2-phenoxy-1-phenyl-N-(4H-1, 2, 4-triazole-4-yl) ethanimine shows zone of inhibition 14mm, 16mm, 22mm against B. Subtilis, E. Coli, C. albicans respectively as compare with standard drugs.

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044297 A

(19) INDIA

(22) Date of filing of Application :02/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : MULTIFUNCTION FOLDABLE DRAWING BENCH

(51) International classification :A47C0011000000, A61B0050300000, B25H0001040000, B60R0007040000, A47C0013000000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Manipal University Jaipur**

Address of Applicant :Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur, Rajasthan 303007 Jaipur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Anant kumar Ozarkar**

Address of Applicant :19, GF, Urbanwoods, Kadamba Lane, Vatika Infotech City, Jaipur. Pin 302026 Jaipur -----

**2)Madhura Yadav**

Address of Applicant :19, GF, Urbanwoods, Kadamba Lane, Vatika Infotech City, Jaipur. Pin 302026 -----

(57) Abstract :

The present invention provides a multifunction foldable drawing bench with storage compartments 100 comprising a storage compartment 102 further comprising of plurality of cabinets 104 with an extendable paint pallet 106 and plurality of stoppers 116 at the top; a flat work support panel 108 fixed using hinges 110 at one end of the storage compartment 102; and a L-shaped seating surface 112 fixed using hinges 114 at another end of the storage compartment 102; wherein, the work support panel 108 is folded at an angle of 90 degree and put over the plurality of stoppers 116; and the seating surface 112 can rotate anti-clock wise at an angle of 90 degree and put below the storage compartment 102.

No. of Pages : 16 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044300 A

(19) INDIA

(22) Date of filing of Application :02/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : FARMING AND PLANTATION MONITORING SYSTEM USING DRONES

(51) International classification :B64C0039020000, G06K0009000000, G06K0009200000, G05D0001100000, H04N0007180000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Harsh khatter**

Address of Applicant :Department of Computer Science, KIET Group of Institutions, Delhi-NCR, Ghaziabad, Uttar Pradesh, India-201206 -----

**2)Abhishek Goyal**

**3)Dr. Gaurav Dubey**

**4)Shanu Sharma**

**5)Anurag Mishra**

**6)Akhilesh Kumar Srivastava**

**7)Dr. Divya Mishra**

**8)Aatif Jamshed**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Harsh Khatter**

Address of Applicant :Department of Computer Science, KIET Group of Institutions, Delhi-NCR, Ghaziabad, Uttar Pradesh, India-201206 Ghaziabad -----

**2)Abhishek Goyal**

Address of Applicant :Department of Computer Science, KIET Group of Institutions, Delhi-NCR, Ghaziabad, Uttar Pradesh, India – 201206 -----

**3)Dr. Gaurav Dubey**

Address of Applicant :Department of Computer Science, KIET Group of Institutions, Delhi-NCR, Ghaziabad, Uttar Pradesh, India – 201206 -----

**4)Shanu Sharma**

Address of Applicant :Assistant professor, CSE Department, ABES Engineering College, Ghaziabad, Uttar Pradesh, India – 201009 -----

**5)Anurag Mishra**

Address of Applicant :Department of Computer Science, KIET Group of Institutions, Delhi-NCR, Ghaziabad, Uttar Pradesh, India – 201206 -----

**6)Akhilesh Kumar Srivastava**

Address of Applicant :Assistant professor, CSE Department, ABES Engineering College, Ghaziabad, Uttar Pradesh, India – 201009 -----

**7)Dr. Divya Mishra**

Address of Applicant :Professor, CSE Department, ABES Engineering College, Ghaziabad, Uttar Pradesh, India – 201009 -----

**8)Aatif Jamshed**

Address of Applicant :Assistant Professor, IT Department, ABES Engineering College, Ghaziabad, Uttar Pradesh, India – 201009 -----

(57) Abstract :

The present invention provides a method and system for farming and plantation monitoring in bigger fields where the human based manual monitoring is not easy task. The invention is using the IOT support and the drone based cameras for image capturing and monitoring; This present invention helps in identifying the crop disease without taking much time and without sending the sample of the disease to the national crop laboratory, which is a time-consuming process. This testing is through the algorithms used to fetch the identifiable marks and the shape of the leaf, or a crop, or its stem. The image processing software is used for processing the captured images which is captured by drones with high-resolution cameras and monitor the crops and plants. The figure 1 and figure 2 describe the details of the present invention.

No. of Pages : 26 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044302 A

(19) INDIA

(22) Date of filing of Application :02/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : ANTIANXIETY COMPOUND 7-(2-(2-(3-(4-CHLOROPHENYL) ACRYLOYL) PHENOXY) ETHOXY)-4-METHYL-2H-CHROMEN-2-ONE AND SYNTHESIS THEREOF

(51) International classification :G01N0021640000, C07C0213020000, C07B0061000000, C07D0295088000, C07C0269040000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

1)Mr. Amit Kumar

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Lodhipur, Rajput Moradabad U.P. India 244102 ----

2)Dr. Sushil Kumar

3)Mr.Shivam

4)Mr. Raj Kumar Singh Bharti

5)Ms. Afreen Usmani

6)Mr. Anesh Sagar

7)Ms. Pooja Malik

8)Mr. Munna Singh

9)Mr. Shami Iqbal

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Mr. Amit Kumar

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Lodhipur, Rajput Moradabad U.P. India 244102 ----

2)Dr. Sushil Kumar

Address of Applicant :Professor and Director, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----

3)Mr.Shivam

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----

4)Mr. Raj Kumar Singh Bharti

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----

5)Ms. Afreen Usmani

Address of Applicant :Umapati Mahadev College of Pharmacy Amroha Amroha --

6)Mr. Anesh Sagar

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----

7)Ms. Pooja Malik

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----

8)Mr. Munna Singh

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----

9)Mr. Shami Iqbal

Address of Applicant :Assistant Professor, Goel Institute of Pharmacy and Sciences Lucknow -----

(57) Abstract :

The present invention belongs to the field of pharmaceutical science. More, particularly the invention pertains to synthesis and antianxiety activity of novel compound 7-(2-(2-(3-(4-chlorophenyl) acryloyl) phenoxy) ethoxy)-4-methyl-2H-chromen-2-one. The novel process involved mixing of 0.004 mole of 7-(2-bromoethoxy)-4-methyl-2H-chromen-2-one and 0.004 mole 3-(4-chlorophenyl)-1-(2-hydroxyphenyl) prop-2-en-1-one was dissolved in 100 ml of anhydrous acetonitrile in a 250 ml round bottom flask. 0.008 mole of anhydrous potassium carbonate and catalytic amount of potassium iodide were added into above solution. The above mixture was refluxed for 12 h. After completion of reaction, the reaction mixture was filtered and solvent was removed under reduced pressure to obtain the 7-(2-(2-(3-(4-chlorophenyl) acryloyl) phenoxy) ethoxy)-4-methyl-2H-chromen-2-one. The obtained compound was washed with water and recrystallized from ethanol to afford the 7-(2-(2-(3-(4-chlorophenyl) acryloyl) phenoxy) ethoxy)-4-methyl-2H-chromen-2-one.

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :04/08/2022

(21) Application No.202211044705 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMATIC SANITIZATION MACHINE

(51) International classification :A61L0002180000, A61B0005000000, A61L0002220000, A61L0002100000, C02F0001020000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Lloyd Institute of Engineering and Technology**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Prof. Dr. Rajeev Agrawal**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----

**2)Prof. Dr. Manish Saraswat**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----

**3)Prof. Dr. N.R.Chauhan**

Address of Applicant :Indira Gandhi Delhi Technical University for Women, Delhi-110006 Delhi -----

**4)Mr. Ravi Kalra**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----

**5)Mr. Mohit Rathour**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----

**6)Mr. Sarfraz Ahmad**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----

**7)Mr. Amit kumar**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----

**8)Mr. Ranjeet Kushwaha**

Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----

(57) Abstract :

The invention provides a sanitization machine in the form of a tunnel to permit a person to step into the tunnel and pass there through while being sprayed or misted with a sanitization or disinfection liquid, from above, below, and the sides by liquid sanitizer pumped through mist nozzles, thereby to sanitize the person, their clothing, as well as their footwear including the soles thereof. It helped to reduce the contact for getting sanitizer and also reduce man power employed to spray sanitizer with a spray bottle. The power consumption is very low. The control circuit is small in size and low cost as compared to available controllers. The power consumption is low and the system can help to achieve contactless sanitizer machine. It reduces the risk of community transmission of the virus

No. of Pages : 19 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044707 A

(19) INDIA

(22) Date of filing of Application :04/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : HOSPITALITY MANAGEMENT SYSTEM IN HOTEL AND TOURISM INDUSTRY

<p>(51) International classification :G06Q0050140000, G06Q0010040000, G01C0021260000, G06F0016290000, G06Q0010080000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr. Saras Verma</b> Address of Applicant :Assistant Professor, Quantum School of Hospitality &amp; Tourism, Quantum University, Roorkee (UK)-247667 Roorkee ----- <b>2)Dr. Dhananjay Kumar Srivastava</b> <b>3)Dr. Santosh Kumar Upadhyay</b> <b>4)Mr. Manish Rai</b> <b>5)Mr. Gaurav Mamgain</b> <b>6)Ms. Deepti Bhatt</b> <b>7)Mr. Mahesh Mishra</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr. Saras Verma</b> Address of Applicant :Assistant Professor, Quantum School of Hospitality &amp; Tourism, Quantum University, Roorkee (UK)-247667 Roorkee ----- <b>2)Dr. Dhananjay Kumar Srivastava</b> Address of Applicant :Assistant Professor, Bhikaji Cama Subharti College of Hotel Management, Swami Vivekanand Subharti University, Meerut (UP)-250002 Meerut ----- <b>3)Dr. Santosh Kumar Upadhyay</b> Address of Applicant :Associate Professor, Department of Hospitality and Tourism Management, Assam Down Town University, Assam- 781026 Kamrup ----- <b>4)Mr. Manish Rai</b> Address of Applicant :Assistant Professor, Department of Tourism Management, Sherwood College of Professional Management, University of Lucknow, Lucknow (UP)-226016 Lucknow ----- <b>5)Mr. Gaurav Mamgain</b> Address of Applicant :Assistant Professor, Department of Hotel Management, State Institute of Hotel Management, Catering Technology and Applied Nutrition, New Tehri (UK)-249001 New Tehri ----- <b>6)Ms. Deepti Bhatt</b> Address of Applicant :Assistant Professor, Quantum School of Hospitality &amp; Tourism, Quantum University, Roorkee, U.K.-247667 Roorkee ----- <b>7)Mr. Mahesh Mishra</b> Address of Applicant :Assistant Professor, School of Management, Quantum University, Roorkee (UK)-247667 Roorkee -----</p>
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(57) Abstract :

The present invention relates to the Hospitality Management System in Hotel and Tourism Industry in which a user-platform connected with the recommendation module that presents a list of hotel according to selected package, wherein the user books hotel from the list according to the requirements and quality controlling of various types of tours by determining and enhancing an index of geographical attraction, accessibility routes, tourism facilities and tourist index. The system comprise of an input panel that is accessed by a user for uploading data (such as location, destination, transport), a data processing unit, a recommendation module, a GPS navigator for providing digital map and dynamic path route data related to the package to the user, a communication module for notifying an administrator about arrival/departure of the user and a display unit connected with the navigator for presenting with panoramic scenic spots related to the package

No. of Pages : 21 No. of Claims : 5



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044718 A

(19) INDIA

(22) Date of filing of Application :04/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A WIDEBAND FERRITE TRANSFORMER BASED POWER DIVIDER

(51) International classification :H03H0007480000, H02M0003335000, H01R0013660000, G01R0031620000, H01F0030160000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

Address of Applicant :Roorkee Roorkee -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)GOWRISH BASAVARAJAPPA**

Address of Applicant :Department of Electronics and Communication Engineering, Indian Institute of Technology Roorkee,Roorkee-247667 Roorkee -----

(57) Abstract :

The present invention relates to wideband ferrite transformer based power divider. It utilizes only 2 transformers, one with a turns ratio of 1:1 and other with a turns ratio of 1.414:1. A lumped resistor provided between the output ports (port 2 and port 3) provides the required isolation.

No. of Pages : 23 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :05/08/2022

(21) Application No.202211044734 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SMART MASK WITH DISTANCE TRACKING SYSTEM

(51) International classification	:H04L0029080000, H04M0001725000, A61B0090000000, H04N0005232000, A62B0018020000	(71)Name of Applicant : <b>1)Graphic Era Hill University, Bhimtal Campus</b> Address of Applicant :Sattal Road, Bhimtal- 263156, Uttarakhand, India Bhimtal ----- <b>2)Graphic Era Deemed to be University, Dehradun</b> Name of Applicant : NA Address of Applicant : NA
(86) International Application No	:NA	(72)Name of Inventor : <b>1)Dr. Naveen Tewari</b> Address of Applicant :Associate Professor, SOC, GEHU Bhimtal Bhimtal -----
Filing Date	:NA	<b>2)Dr. Mukesh Joshi</b> Address of Applicant :Associate Professor, SOC, GEHU Bhimtal Bhimtal -----
(87) International Publication No	: NA	<b>3)Dr. Sandeep Kumar Budhani</b> Address of Applicant :Associate Professor, SOC, GEHU Bhimtal Bhimtal -----
(61) Patent of Addition to Application Number	:NA	<b>4)Mr. Rajendra Singh Bisht</b> Address of Applicant :Assistant Professor, CSE, GEHU Bhimtal Bhimtal -----
Filing Date	:NA	<b>5)Mr. Arun Kumar Rai</b> Address of Applicant :Assistant Professor, CSE, GEHU Bhimtal Bhimtal -----
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention discloses an IoT based distance tracking system inbuilt in mask of a person for maintain social distancing. The system includes an IoT based sensor associated in a mask for getting the distance ratio, an android app for mobile capable of getting data from sensor and analyzing it. The app processes the data at the mobile phone by performing a computing and then warn the user of the mask if the distance of another person is less than 6 feet.

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044735 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A NOVEL GREEN METHOD FOR THE SYNTHESIS OF ADIPIC ACID

(51) International classification :C07C0051310000, C07D0307460000, C07C0067080000, C07C0029152000, C12P0007400000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Dehradun Campus**

Address of Applicant :510, Society Area, Clement Town, Dehradun – 248002, Uttarakhand, India Dehradun -----  
----

**2)Graphic Era Deemed to be University, Dehradun**

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Mr. Navin Garg**

Address of Applicant :Assistant Professor, Graphic Era Hill University, Dehradun Dehradun -----

**2)Mr. Manish Sharma**

Address of Applicant :Assistant Professor, Graphic Era Deemed to be University, Dehradun Dehradun -----

(57) Abstract :

The present invention discloses a novel green method to synthesize adipic acid. The present invention involves hydrolyzing the biomass to produce 5-hydroxymethylfurfural, hydrogenating it to produce 5-tetrahydrofurandimethanol, treating the 2, 5-tetrahydrofurandimethanol with hydrogen in the presence of a catalyst to produce 1, 6-hexanediol, and oxidizing it to produce adipic acid in the presence of a microorganism. Gluconobacter oxydans subsp. suboxydans is the bacterium involved in the conversion of 1,6-hexanediol to adipic acid.

No. of Pages : 18 No. of Claims : 5

(54) Title of the invention : ARTIFICIAL INTELLIGENCE-BASED PROCESS OF STANDARD RECIPE FORMULATION IN HOTEL KITCHEN

(51) International classification :G01J0003460000, G06Q0010080000, G09B0019000000, G06Q0050120000, A47J0036320000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No :NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

1)Chef Soumik Chatterjee

Address of Applicant :Assistant Professor, Lovely Professional University, Jalandhar-Delhi GT Road, Phagwara, Punjab - 144411 -----

2)Dr. Aravind Kumar Rai

3)Dr. Mukesh Shekhar

4)Chef Ranjeeta Tripathi

5)Dr. Narender Suhag

6)Mr. Rajiv Ranjan

7)Prof. Pankaj Chatterjee

8)Atanu Bhattacharya

9)Prof. Dr. Manoj Srivastava

10)Dr. Bhupesh Kumar

11)Govind Baibhaw

12)Dr. Alok Kumar

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Chef Soumik Chatterjee

Address of Applicant :Assistant Professor, Lovely Professional University, Jalandhar-Delhi GT Road, Phagwara, Punjab - 144411 -----

2)Dr. Aravind Kumar Rai

Address of Applicant :Assistant Professor, School of Hospitality and Tourism Management, Manipal University Jaipur, DehmiKalan, Near Bagru, Jaipur, Rajasthan - 303007 -----

3)Dr. Mukesh Shekhar

Address of Applicant :Assistant Professor, School of Hospitality and Tourism Management, Manipal University Jaipur, Dehmi Kalan, Near Bagru, Jaipur, Rajasthan - 303007 -----

4)Chef Ranjeeta Tripathi

Address of Applicant :Assistant Professor, Amity School of Hospitality, V322+V2P, Malhaur Railway Station Road, Gomti Nagar, Lucknow, Uttar Pradesh - 226010 -----

5)Dr. Narender Suhag

Address of Applicant :Associate Professor, Maharishi Markandeshwar University, Mullana, Ambala, Haryana - 133203 -----

6)Mr. Rajiv Ranjan

Address of Applicant :Assistant Professor, School of Hotel Management and Tourism, Lovely Professional University, Phagwara, Punjab - 144411 -----

7)Prof. Pankaj Chatterjee

Address of Applicant :Associate Professor & Head, Department of Hotel Management, RKDF University, Argora-Kathalmore Road, Opposite Water Tank, Ranchi, Jharkhand - 834004 -----

8)Atanu Bhattacharya

Address of Applicant :Head of Department (IHM Hisar, Om Sterling Global University), IHM Hisar, Om Sterling Global University, NH-52, Hisar-Chandigarh Road, Hisar, Haryana - 125001 -----

9)Prof. Dr. Manoj Srivastava

Address of Applicant :Principal & Professor, Nims University Rajasthan, Jaipur NH-11, Jaipur - Delhi Highway, Jaipur - 303121 -----

10)Dr. Bhupesh Kumar

Address of Applicant :Principal, Institute of Hotel Management Catering Technology and Applied Nutrition, Ranchi, Jharkhand -----

11)Govind Baibhaw

Address of Applicant :Assistant Professor, Siliguri Institute of Technology, Salbari, Sukna, Siliguri, Darjeeling, West Bengal - 734009 -----

12)Dr. Alok Kumar

Address of Applicant :Director, C-21, 10th Avenue Gaur City-2, Greater Noida (West), Uttar Pradesh - 201301 -----

(57) Abstract :

The present invention relatesartificial intelligence-based process of standard recipe formulation in hotel kitchen.The present invention comprises of a recipe processor that is adapted to extract standard recipe formulation in hotel kitchen. The recipe processor may also use a user interface to receive real-time feedback from a user such as color, smell, time, etc. to determine whether the user has successfully or unsuccessfully completed various stages of the recipe and in response provide alternate instructions to prepare the recipe to correct any mistakes or errors committed while preparing the recipe.

No. of Pages : 12 No. of Claims : 4

(54) Title of the invention : HOME SCALE SEMI-AUTOMATICALLY OPERATED SYSTEM FOR SPIRULINA CULTURE MINI FARM

<p>(51) International classification :C12M0001120000, A61K0035748000, B03C0001031000, B01J0008000000, G01R0013020000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Mr. Vaibhav Kumar Rathi</b>  Address of Applicant :Assistant Professor, Department of Health Sciences, Quantum University, Roorkee Roorkee -----  <b>2)Dr. Gurvirender Singh</b>  <b>3)Dr. Praveen Kumar</b>  <b>4)Mrs. Smita Narwal</b>  <b>5)Mrs. Sarika Saini</b>  <b>6)Dr. Meenu Chaudhary</b>  <b>7)Ajay Singh Bisht</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Mr. Vaibhav Kumar Rathi</b>  Address of Applicant :Assistant Professor, Department of Health Sciences, Quantum University, Roorkee Roorkee -----  <b>2)Dr. Gurvirender Singh</b>  Address of Applicant :Assistant Professor, Institute of Pharmaceutical Sciences Kurukshetra University, Kurukshetra, Haryana Kurukshetra -----  <b>3)Dr. Praveen Kumar</b>  Address of Applicant :Director, Himalayan Institute of Pharmacy &amp; Research, Dehradun Dehradun -----  <b>4)Mrs. Smita Narwal</b>  Address of Applicant :Global research institute of pharmacy, Nachraun, Radaur, Haryana YAMUNANAGAR -----  <b>5)Mrs. Sarika Saini</b>  Address of Applicant :Assistant Professor, Department of Health Sciences, Quantum University, Roorkee Roorkee -----  <b>6)Dr. Meenu Chaudhary</b>  Address of Applicant :Associate Professor, School of Pharmaceutical Sciences, Shri Guru Ram Rai University, Patel Nagar, Dehradun-248001, Uttarakhand, India Dehradun -----  <b>7)Ajay Singh Bisht</b>  Address of Applicant :Himalayan Institute of Pharmacy &amp; Research, Affiliated to Veer Madho Singh Bhandari Uttarakhand Technical University, Dehradun, Uttarakhand, India-248001 Dehradun -----  -----</p>
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## (57) Abstract :

The present invention provides a home scale semi-automatically operated system for spirulina culture mini farm. Spirulina is a multicellular and filamentous blue-green algae that is considered a modern-day super food. The system contains three boxes that are named 1, 2 and 3 consecutively from up to down. The box 1 of 40x36x15 inches is deeper and is main unit for the culture, with pipe to allow the down flow to box 2 for further action. This box has digital pH meter and Digital thermometer installed. A propeller is installed on the box 1 which help in the maintenance of temperature and aeration. The box 2 of 30x36x6 inches with a sieve which retain spirulina and let the alkaline medium pass through into box 3. The box 3 of 30x36x6 inches and has pipe, a pump and a valve to pump up the medium into box 1 again.

No. of Pages : 19 No. of Claims : 5

(54) Title of the invention : TRUST AWARE INTRUSION DETECTION SYSTEM BASED ON CLUSTER

<p>(51) International classification :H04L0029060000, H04W0084180000, H04W0012120000, H04W0040200000, H04W0012100000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Dr.Devendra Singh</b>  Address of Applicant :Associate Professor, Department of Computer Science and Applications Engineering, SSCA, IFTM University Moradabad, UP 244001 Moradabad -----  <b>2)Dr. Anil Kumar</b>  <b>3)Mr. Ankur Chahal</b>  <b>4)Dr.Rahul Kumar Mishra</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Dr.Devendra Singh</b>  Address of Applicant :Associate Professor, Department of Computer Science and Applications Engineering, SSCA, IFTM University Moradabad, UP 244001 Moradabad -----  <b>2)Dr. Anil Kumar</b>  Address of Applicant :Professor, Department of Electrical Engineering, SET, IFTM University Moradabad, UP 244001 Moradabad -----  <b>3)Mr. Ankur Chahal</b>  Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, SET, IFTM University Moradabad, UP 244001 Moradabad -----  <b>4)Dr.Rahul Kumar Mishra</b>  Address of Applicant :Director, School of Computer Science &amp; Applications, IFTM University Moradabad, UP 244001 Moradabad -----</p>
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## (57) Abstract :

The present invention relates to the field of the energy aware security technique that can weed out misbehaving nodes from the network. The invention more particularly relates to the trust aware intrusion detection system based on cluster. Mobile Ad hoc Networks (MANET) has gained substantial research interest, owing to its easy deployment and inexpensiveness. However, the security of the network is the major concern, because of the absence of the central authority. This work addresses these issues by incorporating the trust mechanism in the cluster formation and routing. The chief node is selected on the basis of four trust parameters such as energy, packet delivery ratio, neighbour count and mobility. The chief node kicks off the misbehaving nodes during the process of routing. The proposed work is proved to be resilient against replay and sybil attacks.

No. of Pages : 29 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044330 A

(19) INDIA

(22) Date of filing of Application :03/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN INTELLIGENT SHOPPING CART FOR TRACKING PRODUCT USING IOT AND METHOD THEREOF

(51) International classification :B62B0003140000, G06Q0010080000, A47F0009040000, A47F0010040000, B62B0005000000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

1)Rajesh Sharma

Address of Applicant :Associate Professor, Computer Science and Engineering, GNA University Phagwara, FEDA-E, Kapurthala, Punjab Phagwara -----

2)Sumit Chopra

3)Mandeep Singh Heer

4)Anchal Nayyar

5)Puneet Kalsi

6)Gagandeep Singh Bains

7)Palkin Sharma

8)Simranjot Kaur

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Rajesh Sharma

Address of Applicant :Associate Professor, Computer Science and Engineering, GNA University Phagwara, FEDA-E, Kapurthala, Punjab Phagwara -----

2)Sumit Chopra

Address of Applicant :Assistant Professor, Computer Science and Engineering, GNA University Phagwara, FEDA-E, Kapurthala, Punjab Phagwara -----

3)Mandeep Singh Heer

Address of Applicant :Assistant Professor, Electronics and Communication Engineering, GNA University Phagwara, FEDA-E, Kapurthala, Punjab Phagwara -

4)Anchal Nayyar

Address of Applicant :Assistant Professor, Computer Science and Engineering, GNA University Phagwara, FEDA-E, Kapurthala, Punjab Phagwara -----

5)Puneet Kalsi

Address of Applicant :Assistant Professor, Electronics and Communication Engineering, GNA University Phagwara, FEDA-E, Kapurthala, Punjab Phagwara -

6)Gagandeep Singh Bains

Address of Applicant :Assistant Professor, Computer Science and Engineering, GNA University Phagwara, FEDA-E, Kapurthala, Punjab Phagwara -----

7)Palkin Sharma

Address of Applicant :Assistant Professor, Electronics and Communication Engineering, GNA University Phagwara, FEDA-E, Kapurthala, Punjab Phagwara -

8)Simranjot Kaur

Address of Applicant :Assistant Professor, Computer Science and Engineering, GNA University Phagwara, FEDA-E, Kapurthala, Punjab Phagwara -----

(57) Abstract :

The present invention discloses an intelligent shopping cart for tracking product using IoT and method thereof. The system includes, but not limited to, a plurality of shopping carts, each of the plurality of shopping carts including: a main frame holding a basket which holds paper bags, a digital weight scale meter disposed under to the basket that allows the basket to rest freely on the digital weight scale meter, a digital control panel with a microcontroller mounted to each of the plurality of shopping carts, a scanner module attached to the digital control panel to scan items with a QR code, a primary and a secondary battery designed to be recharged and power each of the plurality of shopping carts; a tracking device to prevent their; and a unique shopping cart identification QR code.

No. of Pages : 20 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044379 A

(19) INDIA

(22) Date of filing of Application :03/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : ELECTRIC THREE WHEELED VEHICLE WITH REFRIGERATED CARRIAGE FOR TRANSPORTING MEDICINES AND PERISHABLE GOODS

(51) International classification :B62K0005050000, B60P0003200000, A47F0003040000, G06Q0010080000, F25D0029000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)OMEGA SEIKI MOBILITY PRIVATE LIMITED**

Address of Applicant :6E, 6TH FLOOR, M6 UPPAL PLAZA  
JASOLA DISTRICT CENTRE, NEW DELHI-110025 INDIA ----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)OMEGA SEIKI MOBILITY PRIVATE LIMITED**

Address of Applicant :6E, 6TH FLOOR, M6 UPPAL PLAZA  
JASOLA DISTRICT CENTRE, NEW DELHI-110025 INDIA ----

(57) Abstract :

Advancements in technology, demand of good quality of air and challenges in transporting medicines to remote location during COVID 19 motivates the invention of fully electric three wheeled vehicles with refrigerated carriage. As the vehicle is produced in L5 segment the transportation of medical drugs and perishable goods to every part of the country is guaranteed. The vehicle offers a range of 80 km per charge with a payload of 400 kg with zero tail pipe emission. The refrigerated carriage with a storage volume of 2.78 m3 can transport sufficient goods to serve the community of reasonable size at remote location. The refrigerated carriage comprises of roof and walls having a good strength to carry the evaporator and condenser unit, respectively and also act as a thermal insulator. Further the chassis and suspension of the vehicle ensures the integrity of the stored goods at all the driving conditions.

No. of Pages : 11 No. of Claims : 3



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :03/08/2022

(21) Application No.202211044382 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUGMENTATION OF BIOACTIVE SECONDARY METABOLITE PRODUCTION IN WITHANIA SOMNIFERA

(51) International classification :A61K0036810000, A61K0031585000, A61K0036470000, C07J0071000000, A61K0036540000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

1)Ms. Rita Saini

Address of Applicant :Associate Professor, Department of Pharmacy, Shree Dev Bhoomi Institute of Education Science And Technology, Dehradun, Uttarakhand, Pin Code: 248007 Dehradun -----

2)Dr. Shivanand Patil

3)Mr. Sachin Dimri

4)Mr. Vishawadeepak Kimothi

5)Pallavi Sati

6)Dr. Dinesh Kumar Sharma

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Ms. Rita Saini

Address of Applicant :Associate Professor, Department of Pharmacy, Shree Dev Bhoomi Institute of Education Science And Technology, Dehradun, Uttarakhand, Pin Code: 248007 Dehradun -----

2)Dr. Shivanand Patil

Address of Applicant :Director, Department of Pharmacy, Shree Dev Bhoomi Institute of Education Science and Technology, Dehradun, Uttarakhand, Pin Code: 248007 248007 -----

3)Mr. Sachin Dimri

Address of Applicant :Assistant Professor, Department of Pharmacy, Shree Dev Bhoomi Institute of Education Science and Technology, Dehradun, Uttarakhand, Pin Code: 248007 Dehradun -----

4)Mr. Vishawadeepak Kimothi

Address of Applicant :Associate Professor, Department of Pharmacy, Himalayan Institute of Pharmacy and Research, Dehradun, Uttarakhand, Pin Code: 248011 Dehradun -----

5)Pallavi Sati

Address of Applicant :High Altitude Plant Physiology Research Centre, Hemwati Nandan Bahuguna Garhwal University, Srinagar Garhwal, Uttarakhand, Pin Code: 246174 Garhwal -----

6)Dr. Dinesh Kumar Sharma

Address of Applicant :Professor of Pharmaceutics, House No: 59, Ward No 1, Mandi Ateli, Mahendergargh, Haryana, Pin Code: 123021 123021 - -----

(57) Abstract :

The present invention relates to withania somnifera which is a revered herb of Indian medicinal system The roots and leaves of Ashwagandha contain various alkaloids viz. withanolides. Among withanolides, withaferin A and withanolide A has been reported to be dominant metabolite distributed among various tissues of this plant in varying , the present study focuses on the use of nanoparticles for their enhanced production. It was found that the use of different nanoparticles at very low concentrations were found to enhance the withaferin A /withanolide A content. Thus, foliar spray of nanoparticles on the promising variety of Ashwagandha i.e., Poshita enhanced the withaferin A / withanolide A production. Thus, implementation of foliar spray of nanoparticles at very low concentrations can offer promising approach for enhanced growth and sustainable production of pharmacologically bioactive ingredients in perspective of improving secondary agriculture and cultivation of Ashwagandha at large scale for commercial purposes.

No. of Pages : 16 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044394 A

(19) INDIA

(22) Date of filing of Application :03/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A NOVEL DEEP LEARNING BASED TECHNIQUE FOR IDENTIFYING COVID-19 USING IMAGES OF CHEST X-RAY

<p>(51) International classification :G16H0050200000, G06K0009520000, G06K0009620000, A61K0031440900, A61H0031000000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Motilal Nehru National Institute of Technology Allahabad   Uttar Pradesh</b> Address of Applicant :Motilal Nehru National Institute of Technology Allahabad, Prayagraj-211002, Uttar Pradesh, India. -- ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Shashwati Banerjea</b> Address of Applicant :Dr. Shashwati Banerjea Assistant Professor, Department of Computer Science and Engineering, Motilal Nehru National Institute of Technology Allahabad, Prayagraj-211002, Uttar Pradesh, India. ----- <b>2)Dr. Rajitha B</b> Address of Applicant :Dr. Rajitha B, Assistant Professor, Department of Computer Science and Engineering, Motilal Nehru National Institute of Technology Allahabad, Prayagraj-211002, Uttar Pradesh, India. ----- <b>3)G. V. Eswara Rao</b> Address of Applicant :G. V. Eswara Rao, Ph.D. Research Scholar, Department of Computer Science and Engineering, Motilal Nehru National Institute of Technology Allahabad, Prayagraj-211002, Uttar Pradesh, India. ----- <b>4)Mr. Utsav</b> Address of Applicant :Mr. Utsav, M.Tech Scholar, Department of Computer Science and Engineering, Motilal Nehru National Institute of Technology Allahabad, Prayagraj-211002, Uttar Pradesh, India. ----- <b>5)Dr. Jagadish Gurrula</b> Address of Applicant :Dr. Jagadish Gurrula, Associate Professor, Department of Computer Science and Engineering, KL Deemed to Be University, Vaddeswaram-522302, Andhra Pradesh, India. ---- -----</p>
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(57) Abstract :

COVID-19 has affected more than 520 million populations worldwide by April 2022. The virus mainly affects the lungs and throat of humans. Few medical examinations such as rapid antigen and RT-PCR are recommended for timely diagnosis of COVID-19. However, RT-PCR and other similar type of tests can show the presence of virus only within eight to thirteen days. Furthermore, many chest related complications that arises as a result of COVID-19 such as pneumonia and Acute Respiratory Distress Syndrome (ARDS) cannot be diagnosed through these tests. Chest X-Rays prove to be very beneficial for the diagnosis of chest related diseases. The proposed model consists of two modules SRC2F and SRC2C for feature extraction and classification respectively. We have compared our proposed work with the existing CNN models. Experimental results show that our technique has obtained an accuracy of 98.68% which is better than the existing methods.

No. of Pages : 17 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044736 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SYSTEM AND METHOD FOR PROVIDING A SELF-PREVENTIVE CIRCUIT

(51) International classification :H03K0019018000, H05B0045370000, H04B0010800000, H04L0012400000, G11B0007131000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Dehradun Campus**

Address of Applicant :510, Society Area, Clement Town, Dehradun – 248002, Uttarakhand, India Dehradun -----

**2)Graphic Era Deemed to be University, Dehradun**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Mr. Sushant Chamoli**

Address of Applicant :Assistant Professor, Graphic Era Hill University, Dehradun Dehradun -----

**2)Ms. Ruchira Rawat**

Address of Applicant :Assistant Professor, Graphic Era Deemed to be University, Dehradun Dehradun -----

(57) Abstract :

The present invention discloses a system and method for providing a self-preventive circuit. The subject matter disclosed herein describes a circuit for an input module having a plurality of inputs. Each circuit has a reduced number of components, providing an increased number of inputs within an input module of comparable size to prior art input modules or providing an input module having a like number of inputs with a reduced size in comparison to prior art input modules. The reduced number of components similarly reduces the power dissipated by each input circuit. The present invention has recognized that a significant reduction in dissipated heat can be obtained by providing current regulation by using a regulator system. By decreasing the rise in current with rise of input voltage, a square relationship in increase in power dissipation with voltage can be reduced to a proportional increase in power dissipation, substantially decreasing typical power dissipation.

No. of Pages : 20 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044737 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A NOVEL METHOD TO SYNTHESIZE NUCLEIC ACID NANOSTRUCTURES

(51) International classification :C07C0067080000, C10M0105380000, C10M0177000000, C08F0008140000, C10M0105340000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Dehradun Campus**

Address of Applicant :510, Society Area, Clement Town, Dehradun – 248002, Uttarakhand, India Dehradun -----  
----

**2)Graphic Era Deemed to be University, Dehradun**

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. Satvik Vats**

Address of Applicant :Assistant Professor, Graphic Era Hill University, Dehradun Dehradun -----  
-----

**2)Dr. Vijay Singh**

Address of Applicant :Assistant Professor, Graphic Era Deemed to be University, Dehradun Dehradun -----  
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(57) Abstract :

The present invention discloses a diester-based bio-lubricant formulation and method thereof. The present invention refers in converting one or more fatty acid species into one or more corresponding esterification species from the group consisting of acyl halide species, it/they selected from the group consisting of acyl chlorides, acyl bromides, acyl iodides, and combinations thereof; and acyl anhydride species is the first step in esterifying the isomeric mixture of diol species with an esterifying. Diester species can be produced when the esterification species reacts with the -OH groups of the diols. In some of the aforementioned embodiments of the technique, the step of esterifying the isomeric mixture of diol species with an esterifying species entails using a catalyst chosen from an acid catalyst and a base catalyst.

No. of Pages : 18 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044738 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A DIESTER-BASED BIO-LUBRICANT FORMULATION AND METHOD THEREOF

(51) International classification :C07C0067080000, C10M0105380000, C10M0177000000, C08F0008140000, C10M0105340000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Dehradun Campus**

Address of Applicant :510, Society Area, Clement Town, Dehradun – 248002, Uttarakhand, India Dehradun -----

**2)Graphic Era Deemed to be University, Dehradun**

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Ms. Ayushi Jain**

Address of Applicant :Assistant Professor, Graphic Era Hill University, Dehradun Dehradun -----

**2)Dr. Noor**

Address of Applicant :Assistant Professor, Graphic Era Deemed to be University, Dehradun Dehradun -----

(57) Abstract :

The present invention discloses a diester-based bio-lubricant formulation and method thereof. The present invention refers in converting one or more fatty acid species into one or more corresponding esterification species from the group consisting of acyl halide species, it/they selected from the group consisting of acyl chlorides, acyl bromides, acyl iodides, and combinations thereof; and acyl anhydride species is the first step in esterifying the isomeric mixture of diol species with an esterifying. Diester species can be produced when the esterification species reacts with the -OH groups of the diols. In some of the aforementioned embodiments of the technique, the step of esterifying the isomeric mixture of diol species with an esterifying species entails using a catalyst chosen from an acid catalyst and a base catalyst.

No. of Pages : 20 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044739 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : ANTI-HYPERLIPIDEMIC INVESTIGATIONS OF LITCHI CHINENSIS IN RATS

<p>(51) International classification :A61K0036770000, A01N0065000000, A23L0033105000, A61K0008970000, A61K0031220000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Ms. Km Monika</b> Address of Applicant :Assistant Professor, Pharmacy Academy, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad ----- ----- <b>2)Dr. Navneet Verma</b> <b>3)Mr. Vipul Kumar</b> <b>4)Ms. Neetu Singh</b> <b>5)Ms. Swati Gautam</b> <b>6)Mr. Raj Kumar Singh Bharti</b> <b>7)Mr. Vivek Kumar</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Ms. Km Monika</b> Address of Applicant :Assistant Professor, Pharmacy Academy, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad ----- ----- <b>2)Dr. Navneet Verma</b> Address of Applicant :Professor, Pharmacy Academy, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad ----- ----- <b>3)Mr. Vipul Kumar</b> Address of Applicant :Assistant Professor, GMS College of Pharmacy, Rajabpur, Sakarpur, Amroha, Uttar Pradesh - 244102 Amroha ----- ----- <b>4)Ms. Neetu Singh</b> Address of Applicant :Assistant Professor, Shree Satya college of higher education , Moradabad, Uttar Pradesh - 244102 Moradabad ----- ----- <b>5)Ms. Swati Gautam</b> Address of Applicant :Assistant Professor, Pharmacy Academy, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad ----- ----- <b>6)Mr. Raj Kumar Singh Bharti</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad ----- ----- <b>7)Mr. Vivek Kumar</b> Address of Applicant :Assistant Professor, MET Faculty of Pharmacy, Moradabad, Uttar Pradesh - 244102 Moradabad ----- -----</p>
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(57) Abstract :

The present invention relates to the preparation of extract of litchi chinensis which is a plant with a wide variety of ethnic medicinal uses, hence it is planned to screen anti-hyperlipidemic action by taking model- Triton-X-100 induced hyperlipidemia in rats. The ethanolic extract of pericarp of this plant was used to evaluate on above mentioned model. Anti-hyperlipidemic study was performed on model: Triton-X-100 method taking Atorvastatin as a standard and by using oral low dose high dose i.e., 200mg/kg and 400mg/kg of extract. The low and high doses of extract were found significant in reducing total cholesterol and triglycerides against different models of hyperlipidemia induced in rats. Both the doses of extract provide protection against atherosclerosis. The result provides strong evidence to support that the ethanolic extract of pericarp of Litchi chinensis possess Antihyperlipidemic activity as well as it is entirely safe for longer duration of treatment.

No. of Pages : 13 No. of Claims : 5

(54) Title of the invention : AN EFFICIENT MACHINE LEARNING MODEL FOR IDENTIFYING OBJECTS IN WIRELESS SENSOR NETWORK

<p>(51) International classification :H04W0084180000, G06N0020000000, G06K0009620000, G01S0005020000, H04L0012240000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Jitender kumar</b>  Address of Applicant :Chandigarh University- Mohali -----  -----  <b>2)Ritu Vashistha</b>  <b>3)Akhilesh Pandey</b>  <b>4)Dr. Rinki Mishra</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Jitender kumar</b>  Address of Applicant :Chandigarh University- Mohali ----- --  -----  <b>2)Ritu Vashistha</b>  Address of Applicant :Chandigarh University- Mohali ----- --  -----  <b>3)Akhilesh Pandey</b>  Address of Applicant :Devbhoomi uttarakhand University  Dehradun -----  <b>4)Dr. Rinki Mishra</b>  Address of Applicant :Giet University Gunupur, Odisha -----  -----</p>
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## (57) Abstract :

The present invention relates to process and system for energy efficient tracking and localization of sensor nodes in WSN based on machine learning models (artificial neural network). Wireless sensor networks are basically the cluster/group organization of sensor nodes having a large number of small, low-powered, low cost and having limited processing capabilities sensor nodes. The sensor nodes are powered through battery and the life of the sensor nodes is basically dependent on the life of the battery power. Further, the usability of the data collected through these sensor nodes is location dependent. In the proposed invention, the wireless sensor network uses hybrid technology to determine the location of the sensor nodes or objects in the network i.e., both machine learning model and parameter- based calculation method to determine the location of sensor nodes. The adopted machine learning model of the proposed invention comprises two phases i.e., training phase and location determination phase. In the training phase, the proposed model uses training dataset to determine the location of the sensor nodes or objects. The training dataset is a parameter vector consists of various parameters like signal strength, hop count, signal flight time and their corresponding location coordinates of the sensor node. The network is first trained using the training dataset. The parameter values i.e., signal strength, hop count and signal flight time is matched in the dataset and if the match is found in the parameter vector, the location of the sensor node is predicated automatically using the adopted machine learning model. Further, if the network does not find any matched parameter values in the parameter vector, then the network calculates the location values using parameters signal strength, hop count and signal flight time, in the location determination phase, using various methodologies already predetermined in the state of the art. The determined location coordinates and the parameter values are entered in the parameter vector for future use or transfer learning.

No. of Pages : 29 No. of Claims : 4

(54) Title of the invention : ROBOTICS BASED PROJECT PLANNING AND ANALYZING ENGINEERING CHANGES IN MANUFACTURING SYSTEMS

<p>(51) International classification :G06Q0010060000, G06Q0010040000, G06Q0050040000, G06Q0030020000, B33Y0050020000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Dr. SHAVEJ ALI SIDDIQUI</b>  Address of Applicant :Assistant Professor in Mathematics, Department of Applied Sciences &amp; Humanities, Faculty of Engineering and Technology, Khwaja Moinuddin Chishti Language University, Lucknow – 226013, Uttar Pradesh, INDIA -----  <b>2)Dr. SANDEEP R. SAHU</b>  <b>3)Dr. DIGPRATAP SINGH</b>  <b>4)Dr. RAKESH KUMAR</b>  <b>5)Dr. SARVESH CHANDRA YADAV</b>  <b>6)Mr. SATYAPRAKASH R. PANDEY</b>  <b>7)Dr. SHREEKUMAR MENON</b>  <b>8)Dr. MAHESH SINGH KHIRWAR</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Dr. SHAVEJ ALI SIDDIQUI</b>  Address of Applicant :Assistant Professor in Mathematics, Department of Applied Sciences &amp; Humanities, Faculty of Engineering and Technology, Khwaja Moinuddin Chishti Language University, Lucknow – 226013, Uttar Pradesh, INDIA -----  <b>2)Dr. SANDEEP R. SAHU</b>  Address of Applicant :Assistant Professor, Department of Commerce Smt. M.M.K College of Commerce and Economics, Mumbai-400050, India -----  <b>3)Dr. DIGPRATAP SINGH</b>  Address of Applicant :Associate Professor (Physics), Narain College, Shikohabad Firozabad (U.P.), India -----  <b>4)Dr. RAKESH KUMAR</b>  Address of Applicant :Assistant Professor (Physics), Narain College, Shikohabad, Firozabad (U.P.), India -----  <b>5)Dr. SARVESH CHANDRA YADAV</b>  Address of Applicant :Assistant Professor (Physics), C L Jain College Firozabad (U.P.), India -----  <b>6)Mr. SATYAPRAKASH R. PANDEY</b>  Address of Applicant :Assistant Professor, Department of Mathematics Smt. M.M.K College of Commerce and Economics, Mumbai-400050, India -----  <b>7)Dr. SHREEKUMAR MENON</b>  Address of Applicant :Associate Professor &amp; Head of Commerce Department Smt MMK College of Commerce and Economics, Bandra, Mumbai-50, India -----  <b>8)Dr. MAHESH SINGH KHIRWAR</b>  Address of Applicant :Associate Professor, Department of Chemistry, R. B. S. College Agra, U.P., India -----</p>
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## (57) Abstract :

Robotics based project Planning and Analyzing Engineering Changes in Manufacturing Systems The present disclosure relates to planning and analyzing engineering changes (EC) in manufacturing system using robotics. Manufacturing systems (MS) are experiencing an increasing number of engineering changes (ECs). EC refers to the change required in an existing process or product in accordance with the changed market patterns. The planning of ECs is a crucial process. Proper planning is essential to ensure that the implementation process goes smoothly and doesn't cause production shutdowns. Digital tools and technologies enable planners and analysts to support the planning and analysis process in a manufacturing system to adapt their systems efficiently. EC begins with a systematic description of change. It provides a systematic way to analyze the impacts of manufacturing system on people and to create plans to address them. The planning and analysis process is implemented in a computer implemented demonstration which makes it easy for the planning engineer to use. The demonstrator demonstrates how direct feedback works based on planned ECs. Its functionality is demonstrated by a real-world use case.

No. of Pages : 20 No. of Claims : 5



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044784 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : RFID TAG BASED FLUID VENDING SYSTEM

(51) International classification :G06K0017000000, A61Q0005020000, G06Q0020180000, G06Q0010060000, G09F0023000000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Pooja Bansal**

Address of Applicant :44, Sukhdham Appartments, Sector-9, Rohini, Delhi – 110085. -----

**2)Mohit Bansal**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Pooja Bansal**

Address of Applicant :44, Sukhdham Appartments, Sector-9, Rohini, Delhi – 110085. -----

**2)Mohit Bansal**

Address of Applicant :44, Sukhdham Appartments, Sector-9, Rohini, Delhi – 110085. -----

(57) Abstract :

The present invention relates automatic vending machine for refilling liquid and semi-liquid products and in particular to tackle plastic pollution through the concept of refilling by providing RFID based service. It is related to a platform and a process through which one can refill the personal and home care products like water, shampoo handwash, Bodywash, Conditioners, sanitizer etc. in existing or new packaging. The RFID tag-based fluid vending system includes one or more a RFID reader in communication with the processor; at least one processor configured to process and identify the information corresponding to the RFID tag on the refilling container, at least one communication module for the communication between processor and motor to start and stop the fluid supply and one or more display units to displayed the necessary data.

No. of Pages : 12 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044873 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SUSTAINABLE CONCRETE COMPOSITION AND METHOD FOR PREPARATION THEREOF

(51) International classification :C04B0028040000, C04B0028020000, C04B0111000000, C04B0038100000, C04B0111400000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Malaviya National Institute of Technology**

Address of Applicant :Jawahar Lal Nehru Marg, Jhalana Gram, Malviya Nagar, Jaipur, Rajasthan 302017, India. Jaipur ----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Sonal Saluja**

Address of Applicant :Research Scholar, Department of Civil Engineering, Malaviya National Institute of Technology, Jawahar Lal Nehru Marg, Jhalana Gram, Malviya Nagar, Jaipur, Rajasthan 302017, India. Jaipur -----

**2)Dr. Arun Gaur**

Address of Applicant :Associate Professor, Department of Civil Engineering, Malaviya National Institute of Technology, Jawahar Lal Nehru Marg, Jhalana Gram, Malviya Nagar, Jaipur, Rajasthan 302017, India. Jaipur -----

**3)Dr. Sanjay Mundra**

Address of Applicant :General Manager, National Council for Cement and Building Materials, Ballabgarh-121004, India. Faridabad -----

(57) Abstract :

The present invention relates to a sustainable concrete composition comprising cement in the range of 15% w/w-25%w/w, coarse aggregate in the range of 35%w/w-45%w/w, fine aggregate in the range of 20%w/w-30%w/w, stabilized municipal solid waste (SMSW) in the range of 5% w/w-15%w/w, water in the range of 5%w/w-10%w/w, and poly-Carboxylic Ether in the range of 0.10%w/w- 0.20%w/w. A method for preparation of the sustainable concrete comprises of following steps; collecting the SMSW from a landfill site followed by mixing of the SMSW with the cement, coarse aggregate, fine aggregate, water and poly-Carboxylic Ether to obtain a concrete mixture; and pouring the obtained concrete mixture in a mold to obtain concrete blocks.

No. of Pages : 24 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044877 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SYSTEM FOR TESTING THE RELIABILITY OF A NON-PARAMETRIC APPROACH FOR SURVIVAL ANALYSIS OF COMPONENT BASED SOFTWARE AND METHODS THEREOF

(51) International classification :G06F0111080000, G06F0119080000, G06F0011360000, G06F0008700000, G06N0007000000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)SANDEEP CHOPRA**

Address of Applicant :Research Scholar, UTU, Associate Professor, SGRR University, Dehradun, Uttarakhand, India Dehradun -----

**2)ARCHANA KERO**

**3)HARISH CHANDRA SHARMA**

**4)MINIT ARORA**

**5)PRAVEEN TRIPATHI**

**6)MAHESH KUMAR SHARMA**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)SANDEEP CHOPRA**

Address of Applicant :Research Scholar, UTU, Associate Professor, SGRR University, Dehradun, Uttarakhand, India Dehradun -----

**2)ARCHANA KERO**

Address of Applicant :Associate Professor, SGRR University, Dehradun, Uttarakhand, India Dehradun -----

**3)HARISH CHANDRA SHARMA**

Address of Applicant :Associate Professor, SGRR University, Dehradun, Uttarakhand, India Dehradun -----

**4)MINIT ARORA**

Address of Applicant :Associate Professor, SGRR University, Dehradun, Uttarakhand, India Dehradun -----

**5)PRAVEEN TRIPATHI**

Address of Applicant :Head, Department of CS & IT, Institute of Hospitality, Management & Sciences, Kotdwar, Uttarakhand, India Kotdwar -----

**6)MAHESH KUMAR SHARMA**

Address of Applicant :Professor, Amrapali Institute, Haldwani, Uttarakhand, India Haldwani -----

(57) Abstract :

The present invention provides reliability of a software or system is the probability of system to perform its functions adequately for the stated time period under specific environment conditions. In case of component-based software development reliability estimation is a crucial factor. Existing reliability estimation model falls into two broad categories parametric and non-parametric models. Parametric models approximate the model parameters based on the assumptions of fundamental distributions. Non-parametric models enable parameter estimation of the software reliability growth models without any assumptions. We have proposed a novel non-parametric approach for survival analysis of components. Failure data is collected based on which we have calculated failure rate and reliability of the software. Failure rate increases with the time whereas reliability decreases with the time.

No. of Pages : 19 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044973 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN EFFICIENT FRAMEWORK FOR AUTOMATED DATABASE TUNING

(51) International classification :G06F0016245700, G06F0016220000, G06F0016340000, G06T0005000000, G06F0016903000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr. Hitesh Kumar Sharma**

Address of Applicant :School of Computer Science, University of Petroleum and Energy Studies -----

**2)Mr. Prashant Ahlawat**

**3)Dr. Sandeep Singh Kang**

**4)Ms. Aparna**

**5)Mr. Gaurav Nagarkoti**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Hitesh Kumar Sharma**

Address of Applicant :School of Computer Science, University of Petroleum and Energy Studies -----

**2)Mr. Prashant Ahlawat**

Address of Applicant :Computer Science Engineering, University Institute of Engineering, Chandigarh University, Gharuan, Mohali, Punjab -----

**3)Dr. Sandeep Singh Kang**

Address of Applicant :Computer Science Engineering, University Institute of Engineering, Chandigarh University, Gharuan, Mohali, Punjab -----

**4)Ms. Aparna**

Address of Applicant :Computer Science Engineering, University Institute of Engineering, Chandigarh University, Gharuan, Mohali, Punjab -----

**5)Mr. Gaurav Nagarkoti**

Address of Applicant :G.L. Bajaj Institute of Management, Greater Noida, U.P. Noida -----

(57) Abstract :

The Era of 21st Century is called the Information Era. We are generating and storing the huge amount of data every second. The rate of generating the data is increasing exponentially day by day but the speed to process this collected data is not matching with it. The reason is that, the data is collected and maintained by the machines (especially computer) but the processing and analysis of this collected data is still having the maximum intervention of human. Since in 21st Century machines left far behind to the human in processing speed. The high speed and least mistake make a computer machine most reliable resource for taking the critical decisions. The machine has changed our expectation due to its tremendous capability and processing speed. The whole manual world can be automated and systemized by using only the capability of this machine. The twenty first century is called The Information Era due to the tremendous growth of data and dependency of humans on this large pool of data.

No. of Pages : 19 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044481 A

(19) INDIA

(22) Date of filing of Application :03/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : MINI ELECTRIC EXCAVATOR SYSTEM

(51) International classification :E02F0003320000, E02F0003960000, B60K0007000000, E02F0009080000, B62D0055065000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)INJIN-CORPE PRIVATE LIMITED**

Address of Applicant :HD-041 WEWORK DLF TWO HORIZON CENTRE, 5TH DLF PHASE 5, SECTOR 43, GOLF COURSE ROAD, GURGAON, HARYANA-122002. GURGAON -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)AASHRAY NAGPAL**

Address of Applicant :Address : H.NO. 961, SECTOR-17B, IFFCO COLONY, GURGAON-122001 Email : mkt@injincorp.com Mob. : +91 8800390720 GURGAON -----

**2)ANUJ NAGPAL**

Address of Applicant :Address : H.NO. 961, SECTOR-17B, IFFCO COLONY, GURGAON-122001 Email : engineering@injincorp.com Mob. : +91 9810093371 GURGAON -----

(57) Abstract :

The present invention relates to a mini electric excavator system (100) comprising of separate motors (50, 60) for hydraulic arm (47) and track assemblies (12), separate control mechanisms and a battery module (30)to power the motors. The present invention eliminates the need of an internal combustion engine to power the excavator system. It provides a zero emission, low cost and low maintenance alternative of the construction / heavy earth machinery which can be operated even in residential areas owing to comparatively low noise of the machine.

No. of Pages : 23 No. of Claims : 10

(54) Title of the invention : FAKE PRODUCT IDENTIFICATION USING BLOCKCHAIN SYSTEM.

(51) International classification :H04L0009320000, G06Q0030000000, H04L0029060000, G06Q0020380000, G06F0021600000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Vikas Garg (Deputy Director at STPI, MeitY, GoI**

Address of Applicant :136/35, Naya Parav, Vaish Collage Road, Rohtak – 124001, HR, India. E-mail: vikas.dcrust@gmail.com / vikas.garg@stpi.in Rohtak -----

**2)Quantum University****3)Mahatma Education Society****4)Miss. Parinidhi Singh****5)Prof. (Dr.) Reena Singh****6)Prof.(Dr.) B.K Sarkar ( Patent Expert/Guru)**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Vikas Garg (Deputy Director at STPI, MeitY, GoI**

Address of Applicant :136/35, Naya Parav, Vaish Collage Road, Rohtak – 124001, HR, India. E-mail: vikas.dcrust@gmail.com / vikas.garg@stpi.in Rohtak -----

**2)Satender Kumar**

Address of Applicant :Quantum University, Dehradun Highway, Mandawar, Roorkee, Uttarakhand 247167, India Roorkee -----

**3)Mr. Pawan Kumar Singh**

Address of Applicant :Mahatma Education Society, Chembur Naka, Mumbai - 400 071, Maharashtra, India. Mumbai -----

**4)Miss. Parinidhi Singh**

Address of Applicant :Dr. Pillai Global Academy, Sector-7, Khanda Colony, New Panvel, Navi Mumbai- 410206, India. Pune -----

**5)Prof. (Dr.) Reena Singh**

Address of Applicant :FL no -104, Pawan House, Jamuai, Jamuhar, Chunar-2313-5, Mirzapur, UP, India. Chunar -----

**6)Prof.(Dr.) B.K Sarkar ( Patent Expert/Guru)**

Address of Applicant :Mahatma Education Society, Chembur Naka, Mumbai - 400 071, Maharashtra, India. Mumbai -----

## (57) Abstract :

[500] Our Invention Fake Product Identification using Blockchain System. Is a Lately, Counterfeit items assume a significant part in item producing businesses. This influences the organizations name, deals, and benefit of the organizations. Blockchain innovation is utilized to recognizable proof of genuine items and identifies counterfeit items. Blockchain innovation is the disseminated, decentralized, and computerized record that stores value-based data as blocks in numerous data sets which is associated with the chains. Blockchain innovation is secure innovation subsequently any block can't be changed or hacked. By utilizing Blockchain innovation, clients or clients don't have to depend on outsider clients for affirmation of item wellbeing. In this task, with arising patterns in versatile and remote innovation, Quick Response (QR) codes give a hearty method to battle the act of forging the items. Fake items are identified utilizing a QR code scanner, where a QR code of the item is connected to a Blockchain. So this framework might be utilized to store item subtleties and created novel code of that item as blocks in the data set. It gathers the special code from the client and thinks about the code against passages in the Blockchain data set. Assuming the code matches, it will give a warning to the client, if not it will give the notice to the client that the item is phony.

No. of Pages : 12 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :03/08/2022

(21) Application No.202211044489 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : SPONGE COOLER FOR COOLING DOWN THE TEMPERATURE OF SPONGES.

<p>(51) International classification :A21C0015000000, A21B0003000000, A21C0015020000, F25D0003080000, C12N0001180000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Quantum University</b> Address of Applicant :Quantum University, Dehradun Highway, Mandawar, Roorkee, Uttarakhand 247167, India. Roorkee -----</p> <p><b>2)Mahatma Education Society</b> <b>3)Miss. Parinidhi Singh</b> <b>4)Prof. (Dr.) Reena Singh</b> <b>5)Prof.(Dr.) B.K Sarkar ( Patent Expert/Guru)</b> <b>6)Mr. Pawan Kumar Singh</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Aditya Lama</b> Address of Applicant :Quantum University, Dehradun Highway, Mandawar, Roorkee, Uttarakhand 247167, India Roorkee -----</p> <p><b>2)Mr. Pawan Kumar Singh</b> Address of Applicant :Dr. Pillai Global Academy, Sector-7, Khanda Colony, New Panvel, Navi Mumbai- 410206, India. Mumbai -----</p> <p><b>3)Miss. Parinidhi Singh</b> Address of Applicant :Dr. Pillai Global Academy, Sector-7, Khanda Colony, New Panvel, Navi Mumbai- 410206, India. Mumbai -----</p> <p><b>4)Prof. (Dr.) Reena Singh</b> Address of Applicant :FL no -104, Pawan House, Jamuai, Jamuhar, Chunar-2313-5, Mirzapur, UP, India. Chunar -----</p> <p><b>5)Prof.(Dr.) B.K Sarkar ( Patent Expert/Guru)</b> Address of Applicant :Mahatma Education Society, Chembur Naka, Mumbai - 400 071, Maharashtra, India. Mumbai -----</p> <p><b>6)Mr. Pawan Kumar Singh</b> Address of Applicant :Dr. Pillai Global Academy, Sector-7, Khanda Colony, New Panvel, Navi Mumbai- 410206, India. Mumbai -----</p>
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(57) Abstract :

[500] Our Invention Sponge Cooler for Cooling Down the Temperature of Sponges is a There is a lot of problem faced by home bakers / Bakers in shop, while baking the cakes (as sponges are made in oven as well as on gas) or any other stuff they burn their hands. Let us take the example of a person baking sponge of a Cake in his / her oven / tog , after baking he / she has to wait for the sponge to cool down its temperature ,and if there is an urgent order then definitely the person will burn his / her hands due to lack of time . Solution - There must a sponge cooler for cooling down the temperature of sponges, which will make the work fast. This cooler will reduce the heat temperature of sponges in 1 min, rather than waiting for 35-45 mins. It can also be used for reducing the heat temperature of sugar syrup, which is very important for cakes what is the use of this cooler? This cooler will make the work easy for bakers. And with the help of this cooler, bakers can avoid burning their hands and their business will grow. Urgent orders can be taken with the help of this cooler as it can a trustworthy partner for bakers. This will help the sponge / sugar syrup / cream (in climatic conditions) to maintain its equilibrium temperature.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :03/08/2022

(21) Application No.202211044496 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : REMOTE CONTROLLED SYSTEM TO DETACH THE PLANE FROM PASSENGERS CABIN

<p>(51) International classification :B64D0025120000, B64D0011000000, B64C0001320000, B60H0001220000, B29C0065060000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Lloyd Institute of Engineering and Technology</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Prof. Dr. Rajeev Agrawal</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>2)Prof. Dr. Manish Saraswat</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>3)Prof. Dr. N.R.Chauhan</b> Address of Applicant :Indira Gandhi Delhi Technical University for Women, Delhi-110006 Delhi ----- <b>4)Mr. Ravi Kalra</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>5)Mr. Alok Vijay Bhatnagar</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>6)Mr. Saurav</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>7)Ms. Cahnchal Bhati</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>8)Honey Bhati</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>9)Mr. Rohtash kumr kardam</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida ----- <b>10)Mr. Shashank Chauhan</b> Address of Applicant :Plot No.-03, Knowledge Park-II, Greater Noida, Uttar Pradesh, India-201306 Greater Noida -----</p>
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(57) Abstract :

The present invention pertains to the remote control system of a plane, and in particular, to a control system and method which allows for manual and autonomous of flight. The remote controlled system for detaching the passenger cabin from fuselage of plane characterized in that a breaking means to detach said passenger cabin from said fuselage, one or more parachutes joined to said passenger cabin for use during an in-flight emergency of said plane, and a means to store said parachutes upon said passenger cabin, wherein said breaking means is ABS system used in an automobile, employed to control the separation sliding speed with sufficient pushing force so that proper distances are provided between the separate sections of the passengers cabin after they left the plane body.

No. of Pages : 18 No. of Claims : 7



(54) Title of the invention : PULSE-ASSISTED HYBRID CRYO LUBRICATION SYSTEM

(51) International classification :B23Q0011100000, F02B0075020000, B24B0007220000, H05K0001020000, A61K0047100000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

Address of Applicant :ROORKEE Roorkee -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)VARUN SHARMA**

Address of Applicant :Department of Mechanical and Industrial Engineering, Indian Institute of Technology Roorkee, Roorkee-247667 Roorkee -----

**2)DUNGAVATH NARAYANA SWAMY NAIK**

Address of Applicant :Department of Mechanical and Industrial Engineering, Indian Institute of Technology Roorkee, Roorkee-247667 Roorkee -----

**3)RAMANDEEP SINGH**

Address of Applicant :Department of Mechanical and Industrial Engineering, Indian Institute of Technology Roorkee, Roorkee-247667 Roorkee -----

(57) Abstract :

The present invention relates to a pulse-assisted hybrid cryo lubrication system to improve the machinability of difficult-to-cut materials. The Pulse on and off the MQL system has been controlled through mechanical piston movement. A microcontroller-based pulsating hybrid cryogenic-MQL system has been provided, which will provide more precise control of coolant flow.

No. of Pages : 27 No. of Claims : 7

(54) Title of the invention : FORMULATION AND EVALUATION OF FLOATING TABLET OF HEENGVASTAK CHURNA EXTRACT

<p>(51) International classification :A61K0009000000, A61K0009200000, A61K0009280000, A61K0047140000, A61K0031138000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Mr. Swatantr Bahadur Singh</b>  Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----  <b>2)Ms. Km Pooja Saini</b>  <b>3)Dr. Amrita Mishra</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Mr. Swatantr Bahadur Singh</b>  Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----  <b>2)Ms. Km Pooja Saini</b>  Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----  <b>3)Dr. Amrita Mishra</b>  Address of Applicant :Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----</p>
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## (57) Abstract :

The present invention relates to the preparation of floating tablets of heengvastakvati were developed with an aim to prolong its gastric residence time and increase the bioavailability of drug. Rapid gastrointestinal transit could result in incomplete drug release from the drug delivery system above the absorption zone leading to diminished efficacy of the administered dose. Formulation was optimized on the basis of floating time and in vitro drug release. The results showed that the floating lag time for optimized formulation was found to be 30 second with about 97.32 % of total drug release within 3 hours. The vitro release profiles of drug from the formulation could be best expressed zero order with highest linearity  $r^2 = 0.9943$ . It was concluded that the gastroretentive drug delivery system can be developed for HeengvastakVati containing Piperine to increase the residence time of the drug in the stomach and thereby increasing bioavailability.

No. of Pages : 14 No. of Claims : 6

(54) Title of the invention : SYNTHESIS & BIOLOGICAL EVALUATION OF SOME 5-SUBSTITUTED PHENOTHIAZINE BASED THIAZOLIDINE-2,4-DIONE DERIVATIVES

<p>(51) International classification :C07D0279220000, A61K0031541500, C07D0417120000, A61K0031550000, C07D0279280000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Ms. Km Pooja Saini</b>  Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----  <b>2)Mr. Swatantr Bahadur Singh</b>  <b>3)Dr. Sushil Kumar</b>  <b>4)Dr. Amrita Mishra</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Ms. Km Pooja Saini</b>  Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----  <b>2)Mr. Swatantr Bahadur Singh</b>  Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----  <b>3)Dr. Sushil Kumar</b>  Address of Applicant :Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----  <b>4)Dr. Amrita Mishra</b>  Address of Applicant :Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh - 244102 Moradabad -----</p>
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## (57) Abstract :

The present invention relates to phenothiazine abbreviated PTZ is an organic compound that has the formula  $S(C_6H_4)_2NH$  and is related to the heterocyclic compounds. It contains two benzenes rings linked in a tricyclic system through nitrogen and sulfur atoms. Phenothiazine derivatives having amino alkyl side chain connected to the nitrogen atom of heterocyclic unit. Research into phenothiazine and its derivatives has remained unabated due to the wide range of application of this class of compounds as drugs, pesticides, dyes, industrial antioxidants, thermal stabilizers etc. Phenothiazine the parent compound of the large number of medicinal compounds and thiazine dyes has been the subject of intensive study in industries. The main objective of this research work was to combine two moieties phenothiazine & thiazolidine-2,4-dione to prepare more potent antidiabetic derivatives. Phenothiazine & thiazolidine-2,4-dione entity are very interesting components in terms of their biological properties, such as antifungal, antibacterial, and anticonvulsant activities.

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :04/08/2022

(21) Application No.202211044528 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : FACE RECOGNITION BASED ATTENDANCE MANAGEMENT SYSTEM

(51) International classification :G06K0009000000, G06F0021320000, G07C0001100000, H04N0005272000, G06Q0050200000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Quantum University**

Address of Applicant :Quantum University, Roorkee- 247167, Uttarakhand, India Roorkee -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. Swati Rawat**

Address of Applicant :Dept of Computer Sciences & Engineering, Quantum University, Roorkee- 247167, Uttarakhand, India Roorkee -----

**2)Dr. Satender Kumar**

Address of Applicant :Dept of Computer Sciences & Engineering, Quantum University, Roorkee- 247167, Uttarakhand, India Roorkee -----

**3)Mr. Naveen Rana**

Address of Applicant :Dept of Mechanical Engineering, Quantum University, Roorkee- 247167, Uttarakhand, India Roorkee -----

**4)Ms. Diksha Dhiman**

Address of Applicant :Dept of Computer Sciences & Engineering, Quantum University, Roorkee- 247167, Uttarakhand, India Roorkee -----

**5)Ms. Shruti Rawat**

Address of Applicant :Dept of Business Administration, Quantum University, Roorkee- 247167, Uttarakhand, India Roorkee -----

**6)Mr. Himanshu Sharma**

Address of Applicant :Dept of Computer Sciences & Engineering, Quantum University, Roorkee- 247167, Uttarakhand, India Roorkee -----

**7)Dr. Renu Chaudhary**

Address of Applicant :Dept of Mathematics (Computing), University of Engineering and Technology, Roorkee-247667, Uttarakhand, India Roorkee -----

**8)Dr. Preeti Malik**

Address of Applicant :Department of Computer Science and Engineering, Graphic Era (Deemed To Be) University, Dehradun-248001 Roorkee -----

(57) Abstract :

An attendance management system and a method for marking attendance is disclosed. The system comprises an image capturing unit configured to capture image of a user, a face recognition sensor configured to extract facial features of the user, and a processing unit. The processing unit process the captured image by comparing the captured image with pre-stored data, authenticate the user based a result of the comparison, mark attendance of the user if the user is authenticated, and generate a report for the user based on the result of the authentication, wherein the report contains attendance details of the user.

No. of Pages : 14 No. of Claims : 10

(54) Title of the invention : SENSOR BASED DETECTION SYSTEM FOR VEHICLE

(51) International classification :A61B0005080000, B60R0025102000, B60N0002260000, B60N0002000000, G08B0021220000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Quantum University**

Address of Applicant :Quantum University, Roorkee- 247167, Uttarakhand, India -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Dr. Swati Rawat**Address of Applicant :Dept of Computer Sciences & Engineering, Quantum University, Roorkee- 247167, Uttarakhand, India  
Roorkee -----**2)Dr. Satender Kumar**Address of Applicant :Dept of Computer Sciences & Engineering, Quantum University, Roorkee- 247167, Uttarakhand, India  
Roorkee -----**3)Mr. Naveen Rana**

Address of Applicant :Dept of Mechanical Engineering, Quantum University, Roorkee- 247167, Uttarakhand, India Roorkee -----

**4)Ms. Diksha Dhiman**Address of Applicant :Dept of Computer Sciences & Engineering, Quantum University, Roorkee- 247167, Uttarakhand, India  
Roorkee -----**5)Ms. Shruti Rawat**

Address of Applicant :Dept of Business Administration, Quantum University, Roorkee- 247167, Uttarakhand, India Roorkee -----

**6)Mr. Himanshu Sharma**Address of Applicant :Dept of Computer Sciences & Engineering, Quantum University, Roorkee- 247167, Uttarakhand, India  
Roorkee -----**7)Dr. Renu Chaudhary**

Address of Applicant :Dept of Mathematics (Computing), University of Engineering and Technology, Roorkee-247667, Uttarakhand, India Roorkee -----

**8)Dr. Preeti Malik**

Address of Applicant :Department of Computer Science and Engineering, Graphic Era (Deemed To Be) University, Dehradun-248001 Roorkee -----

**(57) Abstract :**

A sensor-based detection system and a method for detecting in a vehicle are disclosed. The system comprising a sensor configured to detect odour of a person sitting inside the vehicle, wherein the odour of the person is detected from breath of the person sitting inside the vehicle and indicates a level of alcohol inside the breath of the person. The system further comprises a microcontroller configured to compare the level of alcohol with a predetermined threshold, and deactivate an ignition of the vehicle if the level of the alcohol is more than the predetermined threshold, a location detection unit configured to detect location of the vehicle where the ignition of the vehicle has been deactivated and a communication unit configured to communicate with other person relating to the person sitting inside the vehicle for sending a first notification to the other person.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :04/08/2022

(21) Application No.202211044530 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMATIC INDICATION SYSTEM OF GLUCOSE LEVEL IN GLUCOSE TRIP BOTTLE

<p>(51) International classification :A61B0005145000, G08B0007060000, A61B0005145500, A61B0005050000, B60R0025102000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Quantum University</b> Address of Applicant :Quantum University, Mandawar- 22 Km milestone, Roorkee - Dehradun Highway, Roorkee-247167, Uttarakhand, India ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Praveen Kumar</b> Address of Applicant :Professor, Quantum School of Health Sciences, Quantum University, Mandawar- 22 Km milestone, Roorkee - Dehradun Highway, Roorkee-247167, Uttarakhand, India Roorkee ----- <b>2)Mr. Pankaj Nagi</b> Address of Applicant :Assistant Professor,Department of Mechanical Engineering, Graphic Era Hill University, Dehradun Roorkee ----- <b>3)Dr. Meenu Chaudhary</b> Address of Applicant :Associate Professor, School of Pharmaceutical Sciences, Shri Guru Ram Rai University, Patel Nagar, Dehradun-248001, Uttarakhand, India Roorkee ----- <b>4)Mr. Vaibhav Rathi</b> Address of Applicant :Assistant Professor, Quantum School of Health Sciences, Quantum University, Mandawar- 22 Km milestone, Roorkee - Dehradun Highway, Roorkee-247167, Uttarakhand, India Roorkee ----- <b>5)Ms. Pooja Singh</b> Address of Applicant :Assistant Professor, Quantum School of Health Sciences, Quantum University, Mandawar- 22 Km milestone, Roorkee - Dehradun Highway, Roorkee-247167, Uttarakhand, India Roorkee ----- <b>6)Mr.Tarif</b> Address of Applicant :Student , Quantum School of Health Sciences, Quantum University, Mandawar- 22 Km milestone, Roorkee - Dehradun Highway, Roorkee-247167, Uttarakhand, India Roorkee -----</p>
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(57) Abstract :

An automatic indication system installed at glucose drip bottle and a method for detecting glucose in the glucose drip bottle are disclosed. The system comprises a load sensor configured to detect current load of glucose in the glucose drip bottle, a microcontroller configured to compare the current load of the glucose with a predetermined threshold, a transceiver configured to transmit an alert notification to one or more medical staff, and a location determination unit configured to detect current location of the system.

No. of Pages : 15 No. of Claims : 10

(54) Title of the invention : LOW COST FRUIT HARVESTER

(51) International classification :A01D0046247000, A01D0046260000, B65D0085340000, A01D0046280000, A01D0046240000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)NATIONAL INSTITUTE OF TECHNOLOGY SRINAGAR**

Address of Applicant :DEAN (RESEARCH &amp; CONSULTANCY) NATIONAL INSTITUTE OF TECHNOLOGY, SRINAGAR-190006 J&amp;K==INDIA -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)DANISH AHMED**

Address of Applicant :ASSOCIATE PROFESSOR CIVIL ENGINEERING DEPTT. NATIONAL INSTITUTE OF TECHNOLOGY SRINAGAR-190006 J&amp;K--INDIA -----

(57) Abstract :

The low cost fruit harvester is a device which can be used by any person to pluck any type of fruit from a high branch of a tree without having to climb up the tree. Also while climbing the tree there is a self risk falling from the tree resulting in injury. The fruit is also safely plucked without its chances of falling to the ground and getting damaged. The harvester consists of two components. One is the access rod stick and the other is the fruit cutter and catcher. The rod is metallic with PVC coating. The rod can be detached in to two parts to facilitate easy carrying. The joint between the two rods is a metallic joint which holds the two rods firmly. At the end of the two joint rods, a fruit plucker is attached. It performs two functions. It cuts the twig holding the fruit by a wedge shaped cutter. After being detached from the tree branch, the fruit falls in to a soft cloth or net basket attached with the plucker. Two or more fruits can be obtained in a single operation, depending upon the size of the fruit.

No. of Pages : 8 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044980 A

(19) INDIA

(22) Date of filing of Application :06/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A NOVEL STABILIZER FOR CICER ARIETINUM SPECIES AGAINST OXIDATIVE STRESS AND PROCESS THEREOF

(51) International classification	:A61K0036480000, C07K0014415000, A01N0063000000, C05F0011080000, A01H0001040000	(71)Name of Applicant : <b>1)Lovely Professional University</b> Address of Applicant :Jalandhar- Delhi GT road Phagwara, Punjab, India 144411. Phagwara ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b>
(86) International Application No	:NA	(72)Name of Inventor : <b>1)Chand, Jagdish</b> Address of Applicant :Lovely Professional University, Delhi Jalandhar GT road Phagwara- 144411. Phagwara ----- ---
(87) International Publication No	: NA	<b>2)Kumar, Prasann</b> Address of Applicant :Lovely Professional University, Delhi Jalandhar GT road Phagwara- 144411. Phagwara ----- ---
(61) Patent of Addition to Application Number	:NA	<b>3)Sharma, Khushbu</b> Address of Applicant :Lovely Professional University, Delhi Jalandhar GT road Phagwara- 144411. Phagwara ----- ---
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention discloses to the novel stabilizer for Cicer arietinum species to produce the resistance in the oxidative stress. The said novel spray improves the quality of Cicer arietinum by enhancing plant population per square meter, plant height, internodal length, dry weight, growth of primary branches, stem girth, leaf area, percentage of membrane stability index, chlorophyll content, total soluble sugar, total phenolic content, and total fat content in the oxidative stress conditions as well

No. of Pages : 30 No. of Claims : 6



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044990 A

(19) INDIA

(22) Date of filing of Application :06/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : PREFORMULATION STUDY OF FLUCONAZOLE PRIOR TO FORMULATION OF ETHOSOMES

(51) International classification :A61K0036600000, A61K0036185000, A61K0031352000, A01N0065000000, A61K0036480000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Dr. Gajendra Singh Rathore**

Address of Applicant :BN IPS, Udaipur, Rajasthan - 307026

Udaipur -----

**2)Dr. Dharmesh Trivedi**

**3)Dr. Seema Joshi**

**4)Dr. Amit Jain**

**5)Mr. Gajaram Sirvi**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Gajendra Singh Rathore**

Address of Applicant :BN IPS, Udaipur, Rajasthan - 307026

Udaipur -----

(57) Abstract :

The present invention relates to the phytochemical and pharmacological investigations of leaves and bark of Ficus racemosa and Ficus carica for the antidiabetic, anti-hyperlipidemic and anti-ulcer activity. The research work encompasses an in depth and systematic phytochemical and investigation of various extracts of leaves and bark parts of the plant. The research work encompasses an in depth and systematic phytochemical and investigation of various extracts of leaves and bark parts of the plant. The experimental work performed in this dissertation consists of three parts. First part consists of physicochemical, phytochemical screening and preliminary evaluation of anti-diabetic, anti-hyperlipidemic and anti-ulcer activity of plant leaves and bark in STZ induced diabetes in rat and pylorus ligation model, ethanol induced ulcer and aspirin induced model for anti-ulcer activity.

No. of Pages : 18 No. of Claims : 4

(54) Title of the invention : TURMERIC LEAF DISEASE DETECTION USING CNN MODEL AND IOT

<p>(51) International classification :G06K0009000000, A61K0036906600, G06N0003040000, G06K0009620000, G06T0007000000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Mr. Ashish Nagila</b> Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, IFTM University, Moradabad-244102 Moradabad -----</p> <p><b>2)Dr. Rakesh Kumar Yadav</b> <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Mr. Ashish Nagila</b> Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, IFTM University, Moradabad-244102 Moradabad -----</p> <p><b>2)Dr. Rakesh Kumar Yadav</b> Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, SCS&amp;A, IFTM University, Moradabad-244102 Moradabad -----</p>
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(57) Abstract :

During its growing phase, turmeric is susceptible to a number of different ailments. If its infections are not detected in the early stages, this might lead to a decrease in output or possibly the failure of the crop. The correct diagnosis of any problems affecting the turmeric plant is the first and most crucial step. In order to simplify the process of identifying illnesses that might affect turmeric plant leaves, a single-phase detection model has been developed as an alternative to the usual method's use of numerous processes, such as image pre-processing, feature extraction, and feature classification. An improved version of the YOLOV3-tiny model, which is based on deep learning, has been offered as a method for increasing the accuracy of illness diagnosis, including turmeric. This approach makes use of a residual network structure that is built on the convolutional neural network in certain layers in order to increase detection accuracy more so than YOLOV3-tiny. When compared to the YOLOV3-Tiny model, the findings demonstrate that the suggested model's detection accuracy is superior to that of the latter. It allows diagnosis of turmeric leaf diseases to be carried out quickly and accurately by anybody. The Improved YOLOV3-Tiny algorithm is used in this invention to identify key turmeric illnesses such as leaf spot, leaf blotch, and rhizome rot. These diseases are caused by fungal infections. The training and testing photographs are taken at different times of the day and night, and they are analyzed using a number of different YOLO approaches as well as Faster R-CNN using the VGG16 model. In addition, the results of the experiments show that the Cycle-GAN augmentation process on the turmeric leaf dataset supports much for improving detection accuracy for smaller datasets, and the proposed model has an advantage over existing traditional models in that it has high detection accuracy and a fast recognition speed. Both of these advantages can be compared to one another.

No. of Pages : 21 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211042669 A

(19) INDIA

(22) Date of filing of Application :26/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : FOOD MANAGEMENT SYSTEM

(51) International classification :F25D0029000000, G06Q0050120000, G06F0003160000, A61L0002100000, A01K0005020000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Desh Bhagat University**  
Address of Applicant :NH1, Mandi Gobindgarh, Punjab-147301, India. Fatehgarh Sahib -----  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Rohit Kumar Giri**  
Address of Applicant :Department of Computer Science and Engineering, Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. Fatehgarh Sahib -----

(57) Abstract :

A food management system, comprises of a body 1 mounted over a ground surface and configured with multiple containers 2 stored with different foods, a display panel 3 mounted on body 1 to provide input regarding the food menu, a computing unit accessed by each users for selecting food items, a primary AI-based imaging unit 4 mounted on body 1 to recognize user, a pair of motorized spatula 5 assembled on body 1 on motorized slider 6 to serve food, a frame 7 positioned in proximity to body 1 and integrated with pair of robotic arms 8 to grip plate after user finishes consuming food, a secondary AI-based imaging unit 9 mounted on frame 7 and coupled with primary weight sensor 10 to determine weight and the quantity of leftover food items and an alert module installed on computing unit for notifying user.

No. of Pages : 19 No. of Claims : 10

(54) Title of the invention : EXPECTORATED SPIT COLLECTION DEVICE

(51) International classification :B41J0002170000, A61B0005000000, H04L0029060000, B62J0099000000, B65H0029510000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Desh Bhagat University**

Address of Applicant :NH1, Mandi Gobindgarh, Punjab-147301, India. Fatehgarh Sahib -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr Piyusha Sharma**

Address of Applicant :Assistant Professor, Department of Life Sciences, Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. Fatehgarh Sahib -----

**2)Dr Simranjeet Kaur (PT)**

Address of Applicant :Assistant Professor, Department of Physiotherapy, Desh Bhagat University, NH1, Mandi Gobindgarh, Punjab-147301, India. Fatehgarh Sahib -----

(57) Abstract :

An expectorated spit collection device comprises of a wearable unit 1 configured with a body 2 is worn by user around chest portion, an artificial intelligence enabled image capturing module 3 detects spitting tendency of user for positioning body 2 in close proximity of user's face, a motorized iris lid 4 open for allowing user to spit within body 2, an electronically controller valve 6 configured within body 2 and connected to a receptacle 7 stored with an adhesive solution ECV for dispensing solution on pouch 5, a pair of rollers 9 configured within body 2 for positioning roller 9 in contact with pouch 5 for sticking mouth portion of pouch 5, a speaker 11 mounted on body 2 for notifying user to discard pouch 5, and a telescopically operated gripper 12 grips a new pouch 5 for aligning pouch 5 underneath body 2 for collecting user's spit.

No. of Pages : 17 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211042748 A

(19) INDIA

(22) Date of filing of Application :26/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SMOKELESS CHEWING TOBACCO SUBSTITUTE COMPOSITION

(51) International classification :A24B0015160000, A24B0013000000, A23L0015000000, F23G0007080000, A24F0047000000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Shanti Fragrances Pvt. Ltd.**  
Address of Applicant :A-198 Gujarawala Town, Part-1, Delhi  
Pin Code-110009, India Gujarawala Town -----  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Krishna Chaurasia**  
Address of Applicant :H-2/4, Model Town, Part-2, Delhi Pin  
Code-110009, India Model Town -----

(57) Abstract :

The present invention relates to a smokeless chewing tobacco substitute composition comprising 90 wt% of Component A comprising nutmeg, mace, cardamom, black pepper, white pepper, fennel, basil leaf, licorice, Indian ginseng, isabgol, akarkara, bayleaf, ginger, 1H-Indole, methyl anthranilate or combination thereof; and 10 wt% of Component B comprising propylene glycol, hydroxy citronellol, rose oil, jasmin absolute, nutmeg oil, pandanus oil, myrtle oil, marigold oil, mace oil, clove oil, eucalyptus oil, patchouli oil or combination thereof.

No. of Pages : 26 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045003 A

(19) INDIA

(22) Date of filing of Application :06/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : COACTIVE METAL NANO-STRUCTURE ASSEMBLY USING PHASE CHANGE MATERIAL (PCM) FOR USE AS THERMAL INTERFACE MATERIAL, TO BE KNOWN AS CHAKARVARTI NANO ASSEMBLY

(51) International classification	:F28D0020020000, C10K0003040000, F01K0013000000, F21V0017000000, F28D0001040000	(71)Name of Applicant : <b>1)MEERKATS INNOVATIVE TECHNOOLS PVT LTD</b> Address of Applicant :UGF-4, BUILDING-48, HASANPUR, I.P EXTENSION, NEW DELHI-110092 DELHI ----- --
(86) International Application No	:NA	<b>Name of Applicant : NA</b>
Filing Date	:NA	<b>Address of Applicant : NA</b>
(87) International Publication No	: NA	(72)Name of Inventor :
(61) Patent of Addition to Application Number	:NA	<b>1)DR. SHIV KUMAR CHAKARVARTI</b>
Filing Date	:NA	Address of Applicant :UGF-4, BUILDING-48, HASANPUR, I.P EXTENSION, NEW DELHI-110092 DELHI -----
(62) Divisional to Application Number	:NA	<b>2)AASHISH MANOCHA</b>
Filing Date	:NA	Address of Applicant :UGF-4, BUILDING-48, HASANPUR, I.P EXTENSION, NEW DELHI-110092 DELHI -----
		<b>3)SUDHANSHU KUMAR SINGH</b>
		Address of Applicant :UGF-4, BUILDING-48, HASANPUR, I.P EXTENSION, NEW DELHI-110092 DELHI -----

(57) Abstract :

The principal object of the present invention is to increase the transmission of heat from Integrated Heat Spreader to Heat Sink by interposing a metal substrate having synthesized metal nanostructures in a cylindrical form on interfacing sides and encapsulated/treated with phase change material, providing wider use and applicability making it ready to use in types of equipment at large scale. It provides easy installation, and can be sized to integrated heat spreader single unit installation.

No. of Pages : 22 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045004 A

(19) INDIA

(22) Date of filing of Application :06/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : IOT BASED AIR QUALITY MONITORING DEVICE

(51) International classification :G01N0015060000, G01D0021020000, G01N0015000000, G06Q0050100000, G01N0015020000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr Shilpi Bansal**

Address of Applicant :Dewan VS Institute of Engineering & Technology, Meerut Uttar Pradesh India Meerut -----

--

**2)Dr Seema Sharma**

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr Shilpi Bansal**

Address of Applicant :Dewan VS Institute of Engineering & Technology, Meerut Uttar Pradesh India Meerut -----

--

**2)Dr Seema Sharma**

Address of Applicant :Department of Zoology, Meerut college Meerut Uttar Pradesh India Meerut -----

(57) Abstract :

The present invention relates to an air quality monitoring system and in particular to a IOT based air monitoring system capable to measures certain air quality parameters and may provide an analysis of the data collected and may make recommendations for improving the air quality parameters. The IOT based air quality monitoring device includes one or more system of single or multiple sensors to transmits data in real time to the controller through the communication module, one or more controller configured to process and category the information corresponding to the measured pollution level, one or more communication module for the communication between air quality monitoring device and connected device, one or more display units to displayed the necessary time data. The IOT based air quality monitoring device analyze data from the one or more sensors based at least in part on the acquired air quality parameter data to provide a recommendation for improving the air quality parameter data.

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045021 A

(19) INDIA

(22) Date of filing of Application :06/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : FORMULATION AND EVALUATION OF ANTI-INFLAMMATORY GEL OF ALHAGI CAMELORUM

(51) International classification :A61K0036480000, A61P0029000000, G01N0033150000, C07J0063000000, C07H0001080000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr. Sushil Kumar**

Address of Applicant :Professor, School of Pharmaceutical Sciences, IFTM University, NH-24, Moradabad, Uttar Pradesh - 244102 Moradabad -----

**2)Dr. Amit Singh**

**3)Ms. Garima Verma**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Sushil Kumar**

Address of Applicant :Professor, School of Pharmaceutical Sciences, IFTM University, NH-24, Moradabad, Uttar Pradesh - 244102 Moradabad -----

**2)Dr. Amit Singh**

Address of Applicant :Professor, Department of Pharmacy, SMAS, Galgotias University, Plot No. 2, Yamuna Expy, Sector 17A, Greater Noida, Uttar Pradesh - 203201 Greater Noida -----

**3)Ms. Garima Verma**

Address of Applicant :Associate Professor, PhD Scholar, Faculty of Pharmacy, IFTM University, NH-24, Moradabad, Uttar Pradesh - 244102 and Faculty of Pharmacy, Ram-Eesh Institute of Vocational and Technical education, Knowledge park 1, Greater Noida, Uttar Pradesh - 201310 Moradabad -----

(57) Abstract :

The present invention relates to the anti-inflammatory effects of Alhagi camelorum. Most of the diseases are caused by a continuous swelling, including cancer. There is hence a need to neutralise inflammation. Alhagi camelorum, a medicinal plant, has been historically utilised as a remedy in Ayurveda and other systems of folk medicine. Thus, several techniques were utilised by Wister rats to examine Alhagi camelorum anti-inflammatory properties. The plant material was crushed into a coarse powder in a grinder after drying and stored at a room temperature for further investigation. The powdered plant material of Alhagi camelorum was subjected to successive solvent extraction (hexane, petroleum ether, chloroform, and methanol) in soxlet extraction method. Different extracts were analysed using a traditional procedure to evaluate the various physicochemical properties.

No. of Pages : 22 No. of Claims : 3



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045042 A

(19) INDIA

(22) Date of filing of Application :06/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : DIGITAL AURA SCANNER

<p>(51) International classification :G06Q0020340000, G06K0019073000, H02P0027040000, H03F0003189000, G01R0001070000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)YOGESH KESHWANI</b> Address of Applicant :308 GOVINDPURI NEAR LIONS PHYSIOTHERAPY HOSPITAL HARIDWAR UTTARAKHAND PIN 249401, INDIA Haridwar ----- ----</p> <p><b>2)JAI KESHWANI</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)YOGESH KESHWANI</b> Address of Applicant :308 GOVINDPURI NEAR LIONS PHYSIOTHERAPY HOSPITAL HARIDWAR UTTARAKHAND PIN 249401, INDIA Haridwar ----- ----</p> <p><b>2)JAI KESHWANI</b> Address of Applicant :308 GOVINDPURI NEAR LIONS PHYSIOTHERAPY HOSPITAL HARIDWAR UTTARAKHAND PIN 249401, INDIA Haridwar ----- ----</p>
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(57) Abstract :

In accordance with the present invention, a digital aura scanner device to locate, measure and quantify the aura energy, comprises of a battery to power up the said digital aura scanner device; a printed circuit board which consists of a boost converter module to step up voltage from input supply to output load, a microcontroller with Wi-Fi and a Bluetooth module, a voltage regulator circuit to provide DC voltage with a fixed magnitude, an amplifier integrated circuit, a card housing, a plurality of diodes, a plurality of transistors, a plurality of capacitors, a plurality of resistors.

No. of Pages : 17 No. of Claims : 11

(54) Title of the invention : SEISMIC ANALYSIS OF MULTI STORIED REINFORCED CONCRETE RC FRAMED STRUCTURE WITH AND WITHOUT DIAPHRAGM DISCONTINUITY

<p>(51) International classification :E04H0009020000, G01V0001300000, E02D0027340000, E04B0001980000, E04H0001040000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Ms. Deepali Vasudev</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----</p> <p><b>2)Mr. Gaurav Hawadiya</b> <b>3)Ms. Nisha Kashyap</b> <b>4)Mr. Pramod Kumar Yadav</b> <b>5)Ms. Sheetal Sagar</b> <b>6)Mr. Karan Tiwari</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Ms. Deepali Vasudev</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----</p> <p><b>2)Mr. Gaurav Hawadiya</b> Address of Applicant :Assistant Professor &amp; Head, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----</p> <p><b>3)Ms. Nisha Kashyap</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----</p> <p><b>4)Mr. Pramod Kumar Yadav</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----</p> <p><b>5)Ms. Sheetal Sagar</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----</p> <p><b>6)Mr. Karan Tiwari</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----</p>
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## (57) Abstract :

The present invention relates to the field of the Reinforced Concrete (RC) Framed Structure. The invention more particularly relates to the Seismic Analysis of Multi Storied Reinforced (RC) Concrete Framed Structure with and without Diaphragm Discontinuity. These days high rise multi storied structures are quiet prominent. These types of structures, should not only be designed for aesthetic point of view but also must be designed to resist earthquake forces which are subjected on these structures. These earthquake forces acting on the structures are also known as seismic forces. Due to architectural purposes, some buildings, have openings, provided in them, this creates structural discontinuities in the building. These openings or discontinuities can change the load transfer path of the structures which may cause significant change in the building behavior, under the application of the seismic forces. In present invention pushover analysis is carried out to study the behavior of the building in case of architectural opening for staircase or cut outs etc which results in discontinuity in the structure.

No. of Pages : 25 No. of Claims : 8

(54) Title of the invention : DEVELOPMENT AND CHARACTERIZE THE ROLE OF SMALL-MOLECULE ACCUMULATION IN DRUG EXPOSURE OF ANTISEIZURE MEDICATIONS

(51) International classification :A61K0031155000, A61K0031600000, A61K0031420000, A61P0029000000, A61K0031418400  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

## 1)Ms. Shabnam Thakur

Address of Applicant :Research Scholar, Amity Institute of Pharmacy, Amity university, Amity Education Valley Gurugram (Manesar), Haryana 122 413, Haryana, India -----

## 2)Dr. Sweety Lanjhiyana

## 3)Dr. S.K. Lanjhiyana

## 4)Dr.Mohd.Washid Khan

## 5)Dr. Aishwarya Dinakaran

## 6)Ms. Khushnuma Khan

## 7)Dr. Jyoti Choubey

## 8)Mr.Chandan Singh Ahirwar

## 9)Mr. Vijay singh kachawa

## 10)Dr. Abhishek Pandey

## 11)Mr. Shailendra Singh Narwariya

## 12)Dr. Mohathasim Billah A

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

## 1)Ms. Shabnam Thakur

Address of Applicant :Research Scholar, Amity Institute of Pharmacy, Amity university, Amity Education Valley Gurugram (Manesar), Haryana 122 413, Haryana, India -----

## 2)Dr. Sweety Lanjhiyana

Address of Applicant :Professor, School of Pharmacy, Chouksey Engineering College, Bilaspur 495001, Chattisgarh, India -----

## 3)Dr. S.K. Lanjhiyana

Address of Applicant :Asst. Professor, SLT Institute of Pharmaceutical Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur, 495009, Chhattisgarh, India -----

## 4)Dr.Mohd.Washid Khan

Address of Applicant :Principal, Department of P.G.Studies and Research in Chemistry and Pharmacy, Rani Durgavati Vishwavidyalaya Jabalpur – 482002, Madhya Pradesh, India -----

## 5)Dr. Aishwarya Dinakaran

Address of Applicant :Associate Professor, Department of Pharmacy practice, MRM College of pharmacy (Affiliated to JNTUH), Ibrahimpatnam, Hyderabad, Telangana 501510 -----

## 6)Ms. Khushnuma Khan

Address of Applicant :HOD, Silicobite Katni Degree College Gyanteerth, Katni, Madhya Pradesh, India -----

## 7)Dr. Jyoti Choubey

Address of Applicant :Asst.Professor Department of P.G.Studies and Research in Chemistry and Pharmacy, Rani Durgavati Vishwavidyalaya Jabalpur – 482002, Madhya Pradesh, India ---

## 8)Mr.Chandan Singh Ahirwar

Address of Applicant :Asst.Professor Department of P.G.Studies and Research in Chemistry and Pharmacy, Rani Durgavati Vishwavidyalaya Jabalpur – 482002, Madhya Pradesh, India ---

## 9)Mr. Vijay singh kachawa

Address of Applicant :Assistant professor, Pacific college of pharmacy, PAHER University, Udaipur 313001 -----

## 10)Dr. Abhishek Pandey

Address of Applicant :Assistant professor Department of P.G.Studies and Research in Chemistry and Pharmacy, Rani Durgavati Vishwavidyalaya Jabalpur – 482002, Madhya Pradesh, India -----

## 11)Mr. Shailendra Singh Narwariya

Address of Applicant :Principal of ITM, SOP (ITM University) Gwalior-474001, Madhya Pradesh, India -----

## 12)Dr. Mohathasim Billah A

Address of Applicant :Professor, Department of Pharmacy Practice, Thanthai Roever College of Pharmacy, (Affiliated to Dr. MGR Medical University), Perambalur, Tamil Nadu Pin-621212 -----

## (57) Abstract :

A method for developing and characterize the role of small-molecule accumulation in drug exposure of antiseizure medications. The method includes (i) representing a medicinal plant as a primitive form of anti-inflammatory drugs, (ii) identifying salicylates as active components of Willow spp. responsible for the anti-inflammatory activity, which laid the foundation for the mass synthesis of acetylsalicylic acid, (iii) synthesizing an alicyclic acid by the Gerland for the first time, and acetylsalicylic acid, wherein salicylic acid was firstly used in clinic for the treatment of rheumatic disorders, (iv) reducing this harmful side effect, the selective COX-2 inhibitors were developed, wherein the selective COX-2 inhibitors can be further divided into two categories: selective COX-2 inhibitors and highly selective COX-2 inhibitors.

No. of Pages : 16 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :07/08/2022

(21) Application No.202211045063 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SYSTEM & MODEL FOR INFORMATION MANAGEMENT IN COMPUTERISED INJECTORS

(51) International classification :A61M0005200000, G09B0019000000, G09B0005060000, G11B0020100000, G09B0019240000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Deemed to be University, Dehradun**

Address of Applicant :Dehradun, Uttarakhand, India 248002 Dehradun -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. Devesh Pratap Singh**

Address of Applicant :Professor, Department of Computer Science & Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

**2)Mr. Dibyahash Bordoloi**

Address of Applicant :Head of the Department, Department of Computer Science & Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----

--

**3)Dr. Vikas Tripathi**

Address of Applicant :Associate Professor, Department of Computer Science & Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

-----

**4)Mr. Navin Garg**

Address of Applicant :Associate Professor, Department of Computer Science & Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----

--

**5)Dr. Pravin P Patil**

Address of Applicant :Professor, Department of Mechanical Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

(57) Abstract :

The inventors devised a two-step method to determine the amount of fuel injected into an internal combustion engine. First, the injectors are equalised, and then an absolute correction is made to each of them in the second step. The invention provides a handheld device for teaching users how to use an auto-injector. The device has a screen and a sensor that can measure the amount of physical activity the device engages in. The handheld device is shown on the screen as if it were an auto-injector, and the user's instructions offer visual instructions on how to use the device. The user's performance and compliance with the instructions are evaluated using sensor data from the device. Thus, the invention enhances the safety of driving the car—figure 1 of the story outlines the entire process.

No. of Pages : 14 No. of Claims : 6

(54) Title of the invention : A METHOD & SYSTEM FOR GUEST MESSENGER BASED ON IOT THRU GSM & RASPBERRY PI

<p>(51) International classification :H04L0029120000, G07C0009250000, H04N0007160000, H04M0011040000, H04L0029080000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Graphic Era Deemed to be University, Dehradun</b> Address of Applicant :Dehradun, Uttarakhand, India 248002 Dehradun -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Surendra Kumar Shukla</b> Address of Applicant :Associate Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>2)Dr Devesh Pratap Singh</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>3)Dr. Bhasker Pant</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>4)Dr. Durgaprasad Gangodkar</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>5)Dr. Pravin P Patil</b> Address of Applicant :Professor, Department of Mechanical Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>6)Mr. Amit Gupta</b> Address of Applicant :Assistant Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p>--</p> <p><b>7)Mr. Rahul Chauhan</b> Address of Applicant :Assistant Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p>--</p>
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(57) Abstract :

The primary objective of the Wireless Remotely Controlled door answering system is to display the pertinent message to the visitor who rings the doorbell or approaches close to the door. This can be accomplished in a couple of different ways. One way to achieve this is to position the receiver near the entrance. The Global System for Mobile Communications (GSM), Raspberry Pi 2, and a wide variety of other devices and components make this possible. The system is controlled, and the visitor's identity is communicated to the owner of the business via text messages sent from the owner's mobile device. The proprietor is responsible for exercising control over the system. The appropriate response that the homeowner sent via message can be displayed on the screen outside the house. Python version 2.0, the AT Command Set, and the Linux Operating System-Raspbian were some of the technologies utilised in this Implementation.

No. of Pages : 12 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045065 A

(19) INDIA

(22) Date of filing of Application :07/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A BLOCKCHAIN-BASED INTERNET OF THINGS (IOT) NETWORK SYSTEM'S RESOURCE ADMINISTRATION METHOD

(51) International classification :H04L0029080000, G06F0009455000, G06F0009500000, G06F0017180000, G06N0003000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Deemed to be University, Dehradun**

Address of Applicant :Dehradun, Uttarakhand, India 248002

Dehradun -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Mr. Dibyahash Bordoloi**

Address of Applicant :Head of the Department, Department of Computer Science & Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----

--

**2)Dr. Bhasker Pant**

Address of Applicant :Professor, Department of Computer Science & Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

**3)Dr. Vikas Tripathi**

Address of Applicant :Associate Professor, Department of Computer Science & Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

-----

**4)Dr. Durgaprasad Gangodkar**

Address of Applicant :Professor, Department of Computer Science & Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

**5)Dr. Kamlesh Singh**

Address of Applicant :Professor, Department of Computer Science & Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----

**6)Dr. Pravin P Patil**

Address of Applicant :Professor, Department of Mechanical Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

(57) Abstract :

Thanks to the invention, the blockchain-based internet of things platform have a resource management method. Using a virtual machine and a virtual machine system, the system manages the apparatus for improving Internet of Things (IoT) platform service quality. An embodiment of the invention's method for automatically consolidating groups of host computers in a distributed computer system includes receiving digital representations of all client clusters and digitally representing them as nodes. The invention's method of automatically reducing host computer clusters consists of this step. In the future, resource utilisation and management will be straightforward to calculate. System resources and infrastructure play a significant role in the invention. Detailed information about the story and the figure discussed here can be found.

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :07/08/2022

(21) Application No.202211045066 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SYSTEM OF ADVANCED COMPUTER SYSTEMS FOR ELEVATED VALUE STREAM MAPPING AND TRACKING

<p>(51) International classification :H04L0029080000, G06F0016220000, G06F0016245300, G06F0016245500, G06F0009500000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Graphic Era Deemed to be University, Dehradun</b> Address of Applicant :Dehradun, Uttarakhand, India 248002 Dehradun -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Durgaprasad Gangodkar</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>2)Dr. Mahesh Manchanda</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>3)Mr. Navin Garg</b> Address of Applicant :Associate Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p>--</p> <p><b>4)Dr. Pravin P Patil</b> Address of Applicant :Professor, Department of Mechanical Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p>
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(57) Abstract :

Query processing and resource management are the subjects of this invention's analysis, processing, and monitoring. The invention provides a server-based internet of things platform resource management method. Monitoring and analysis of a data stream's processing method and the system is carried out. When a cut condition is met, the process performs a map function from a set of query processing steps to generate map results for the first portion of the data stream. It then conducts a reduced function from the collection of query processing steps to create history-sensitive data from the map results. During the second map function execution, the history-sensitive data is kept, and a reduced function is applied to a second portion of the data stream.

No. of Pages : 11 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :07/08/2022

(21) Application No.202211045067 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : DEVELOPMENT OF AN AI-BASED METHODOLOGY FOR INSURANCE AND RISK MANAGEMENT SYSTEM

<p>(51) International classification :G06F0009455000, H04L0029080000, G06F0009500000, G06F0030200000, H04B0017309000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Graphic Era Deemed to be University, Dehradun</b> Address of Applicant :Dehradun, Uttarakhand, India 248002 Dehradun -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Vikas Tripathi</b> Address of Applicant :Associate Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun ----- -----</p> <p><b>2)Ms. Ayushi Jain</b> Address of Applicant :Assistant Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun ----- -----</p> <p><b>3)Mr. Prabhdeep Singh</b> Address of Applicant :Assistant Proferssor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun ----- -----</p> <p><b>4)Dr Devesh Pratap Singh</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun ----- -----</p> <p><b>5)Dr. Pravin P Patil</b> Address of Applicant :Professor, Department of Mechanical Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun ----- -----</p>
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(57) Abstract :

The present invention provides a method for the blockchain-based internet of things platform to manage its resources. The system works the apparatus for a virtual machine system and a virtual machine system to address a problem with the service quality of an IoT platform. By one embodiment of the invention, a method for automatically consolidating clusters of host computers in a distributed computer system comprises receiving digital representations of all client clusters and digitally representing the nodes. Calculating resource utilisation and resource management will be simple. The invention focuses on the computing nodes, the processing time, the merged cluster of simulated host computers, and the system's resources and infrastructure. The section's discussion of the invention and the figure provides a complete description.

No. of Pages : 14 No. of Claims : 6



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :07/08/2022

(21) Application No.202211045069 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : IOT BASED SOLAR POWERED CANAL CLEANING SYSTEM

<p>(51) International classification :G16H0050300000, A61B0005021000, A23L0033105000, H02J0007350000, G01D0021020000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Graphic Era Hill University, Bhimtal Campus</b> Address of Applicant :Sattal Road, Bhimtal- 263156, Uttarakhand, India Bhimtal ----- <b>2)Graphic Era Deemed To be University, Dehradun</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Devesh Bora</b> Address of Applicant :Department of Mechanical Engineering, Graphic Era Hill University, Bhimtal Bhimtal ----- <b>2)Neha Joshi</b> Address of Applicant :College of Pharmacy, Graphic Era Hill University, Bhimtal Bhimtal ----- <b>3)Devendra Singh</b> Address of Applicant :School of Computing, Graphic Era Hill University, Bhimtal Bhimtal ----- <b>4)Dikendra Verma</b> Address of Applicant :Department of Electronics and Communication Engineering, Graphic Era Hill University, Bhimtal Bhimtal ----- <b>5)Dr. Narendra Singh Bhandari</b> Address of Applicant :School of Agriculture, Graphic Era Hill University, Bhimtal Bhimtal ----- <b>6)Dr. Dinesh C. Dobhal</b> Address of Applicant :Department of Computer Science, Graphic Era (Deemed to be University), Dehradun Dehradun ----- -----</p>
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(57) Abstract :

As we all know environmental factors are one of major causes of the health issues these days. Root canals contains bulk of the pulp tissue, necrotic debris, bacterial bio-films etc. so time to time cleaning becomes a crucial factor for the health as well for the conservation of environment. The invention discloses an automatic method of cleaning which is attained by means of mechanical and electronic instrumentation. It comprises of a Cuboids Shaped Steel Frame Chamber, Rectangular Shaped Sieve of different Grade, Helical Coil Spring, Solar Cell, Solar Powered Electric Motor and Disc cam mechanism.

No. of Pages : 9 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045070 A

(19) INDIA

(22) Date of filing of Application :07/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN EFFICIENT STRATEGY TO MITIGATE GLOBAL WARMING

(51) International classification	:B01D0053620000, A01G0015000000, G06Q0010100000, B01D0053140000, C08J0009140000	(71)Name of Applicant : <b>1)Graphic Era Hill University, Bhimtal Campus</b> Address of Applicant :Sattal Road, Bhimtal- 263156, Uttarakhand, India Bhimtal ----- <b>2)Graphic Era Deemed To be University</b> Name of Applicant : NA Address of Applicant : NA
(86) International Application No	:NA	(72)Name of Inventor : <b>1)Dr. Sandeep Kumar Sunori</b> Address of Applicant :Associate Professor & Head, ECE Department, Graphic Era Hill University, Bhimtal Bhimtal -----
(87) International Publication No	: NA	----- <b>2)Dr. Amit Mittal</b> Address of Applicant :Assistant Professor, Allied Science Department, Graphic Era Hill University, Bhimtal Bhimtal -----
(61) Patent of Addition to Application Number	:NA	----- <b>3)Mr. Mayank Joshi</b> Address of Applicant :B.Tech CSE, Graphic Era Hill University, Bhimtal Bhimtal -----
(62) Divisional to Application Number	:NA	<b>4)Dr. Pradeep Kumar Juneja</b> Address of Applicant :Professor, ECE Department,Graphic Era deemed to be University, Dehradun Dehradun -----
Filing Date	:NA	

(57) Abstract :

The global warming is a gradual rise in the overall temperature of earth's atmosphere which is generally originated by the growth in the level of carbon dioxide (CO<sub>2</sub>), chlorofluorocarbons (CFCs) and other pollutants. The best way to reduce global warming is, without any doubt, cutting down our anthropogenic emissions of greenhouse gases. But the world economy is addict to energy, which is mainly produced by fossil carbon fuels. As economic growth and increasing world population require more and more energy, we cannot stop using fossil fuels quickly, nor in a short term. On the one hand, replacing this addiction with carbon dioxide-free renewable energies, and energy efficiency will be long, expensive and difficult. On the other hand, meanwhile effective solutions are developed (i.e. fusion energy), global warming can be alleviated by other methods. Hence, this invention provides a way to confront the problem of global warming.

No. of Pages : 9 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :07/08/2022

(21) Application No.202211045071 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : CROWD COUNT BASED SMART MOB MONITORING SURVEILLANCE SYSTEM

(51) International classification :H04N0005232000, G06Q0010040000, G06K0009000000, H04W0012080000, H04H0060450000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Bhimtal Campus**

Address of Applicant :Sattal Road, Bhimtal- 263156, Uttarakhand, India Bhimtal -----

**2)Graphic Era Deemed To be University**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Mr. Devendra Singh**

Address of Applicant :Assistant Professor, SOC, Graphic Era Hill University, Bhimtal Bhimtal -----

**2)Mr. Himanshu Pant**

Address of Applicant :Assistant Professor, SOC, Graphic Era Hill University, Bhimtal Bhimtal -----

**3)Mr. Janmejay Pant**

Address of Applicant :Assistant Professor, SOC, Graphic Era Hill University, Bhimtal Bhimtal -----

**4)Dr. Bhupesh Rawat**

Address of Applicant :Associate Professor, SOC, Graphic Era Hill University, Bhimtal Bhimtal -----

**5)Mr. Devesh Bora**

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Graphic Era Hill University, Bhimtal Bhimtal -----

**6)Dr. Manoj Chandra Lohani**

Address of Applicant :Professor, SOC, Graphic Era Hill University, Bhimtal Bhimtal -----

(57) Abstract :

The proposed system will count the number of people present in the restricted area and send notification to the nearest police station to take necessary action. For the proposed system we will install 360 degree AI camera in the restricted area which will regularly monitor the mob. Our proposed AI based model will count the number of people round the clock.

No. of Pages : 9 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045072 A

(19) INDIA

(22) Date of filing of Application :07/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMOBILE CABIN TEMPERATURE CONTROLLING SYSTEM DURING PARKING

(51) International classification :B60H0001000000, B09B0003000000, B60H0001240000, H02S0010300000, B01D0053340000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Bhimtal Campus**

Address of Applicant :Sattal Road, Bhimtal- 263156, Uttarakhand, India Bhimtal -----

**2)Graphic Era Deemed To be University, Dehradun**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Neha Joshi**

Address of Applicant :College of Pharmacy, Graphic Era Hill University, Bhimtal Bhimtal -----

**2)Devesh Bora**

Address of Applicant :Department of Mechanical Engineering, Graphic Era Hill University, Bhimtal Bhimtal -----

(57) Abstract :

As we know in summer the outside temperature arises too much. During the daytime, many Automobiles are parked outside and due to the greenhouse effect, the inside temperature of the parked Automobile goes much higher compared to the outside temperature. At high temperatures and in a closed chamber, the plastic materials used within the Automobile produce some extremely hazardous gases for human health. The only choices available to the passengers are to wait until the inside cabin temperature drops down before riding or to acclimatize for a while to high temperatures. The invention discloses the issue by arranging a mechanism for pulling out the heated air within the automobile cabin. It comprises of a temperature sensor, a heat sink exhaust fan, a solar system for power, a supply vents, return vents, and a sliding case. This will result in making the Automobile cooler and will also be helpful in removing hazardous gases from the Automobile.

No. of Pages : 9 No. of Claims : 8

(54) Title of the invention : OPTIMIZED CONICAL BEES WAX HONEY EXTRACTOR

(51) International classification :A61K0035644000, A01K0059000000, A01K0059040000, A01K0059020000, A01K0047040000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Bhimtal Campus**

Address of Applicant :Sattal Road, Bhimtal- 263156, Uttarakhand, India Bhimtal -----

**2)Graphic Era Deemed To be University, Dehradun****Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Devesh Bora**

Address of Applicant :Department of Mechanical Engineering, Graphic Era Hill University, Bhimtal Bhimtal -----

**2)Neha Joshi**

Address of Applicant :College of Pharmacy, Graphic Era Hill University, Bhimtal Bhimtal -----

(57) Abstract :

Honey extractor is a device used in the extraction of honey with the help of centrifugal force. For generating the centrifugal force Bevel gear system is used in design. Honeybees maintain the quality of honey in their honeycombs by limiting the moisture content by up to 17%. To restrict the moisture content inside the honeycomb/bee hive, honeybees make a protective layer of Bees wax on the honeycomb which needs to be removed for extraction of honey. In the traditional method of honey extraction after manual removal of the Bees wax protective layer, the apiculturist loads the honeycombs in extractor frames to extract the honey. The protective layer of Bees wax also contains several droplets of honey for which gravitational force of attraction is used for extraction. This traditional extraction process usually takes more than 24 hrs. The major drawbacks of this approach are its time consumption and quality degradation by increasing the moisture content. To overcome these issues our design has optimized the honey extraction from Bees wax with the help of some mechanical modifications. This design involves study and field survey of apiculture, identification of problem, study of conventional honey extractor and then finally design optimization for honey extractor.

No. of Pages : 9 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :07/08/2022

(21) Application No.202211045074 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN APPLICATION TO SUPPORT LOCAL BUSINESSES AND DEALERS

(51) International classification :G06Q0030060000, G06Q0010100000, G06Q0030020000, G06Q0030000000, G06Q0010000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :**

**1)Graphic Era Hill University, Haldwani Campus**

Address of Applicant :Tularampur, Near Mahalaxmi Temple,opp. Middas Squar, Haldwani, Uttarakhand 263139  
Haldwani -----

**2)Graphic Era Hill University, Bhimtal Campus**

**3)Graphic Era Hill University, Dehradun Campus**

**4)Graphic Era Deemed To be University**

**Name of Applicant : NA**

**Address of Applicant : NA**

**(72)Name of Inventor :**

**1)Dr. Manish Kumar**

Address of Applicant :Director,Graphic Era Hill University, Haldwani Haldwani -----

**2)Ms. Sujata Negi Thakur**

Address of Applicant :Assistant Professor, Computer Science and Engineering, Graphic Era Hill University, Haldwani Haldwani ----  
-----

**3)Mr. Manoj Kumar Singh**

Address of Applicant :Assistant Professor, School of Computing, Graphic Era Hill University, Bhimtal Bhimtal -----

**4)Dr. Sumit Pundir**

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Graphic Era Deemed to be University, Dehradun Dehradun -----

**5)Ms. Gurpreet Kaur Jassal**

Address of Applicant :Student, School of Computing, Graphic Era Hill University, Dehradun Haldwani -----

**6)Mr. Deepankar Sharma**

Address of Applicant :Student, Department of Computer Science and Engineering, Graphic Era Hill University, Haldwani Dehradun -----

**(57) Abstract :**

Earlier businesses used to go in blended modes where customer could go physically to the seller, enquire , negotiate and purchase the item. But recently, almost everyone has switched to the online mode of shopping over various e-commerce sites. As a result, small town dealers have been facing a situation of dooming business. Similarly, on the other hand, some businesses are unable to reach the customers directly, and brokers in the middle are taking their advantage. The Covid-19 outbreak made us realize that having an online presence is very important for any business. Most of the businesses in our country went crashing down since pandemic and, although many businesses have switched to the online mode of business but still most of local businesses, dealers and small startups aren't that much active in the terms of online business presence.

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :07/08/2022

(21) Application No.202211045075 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : ELECTRICITY GENERATION BY UTILIZING TRANSPORT HANDRAIL HANGING HANDLE

(51) International classification	:B60N0003020000, A45C0013260000, H02K0035020000, A47K0017020000, B01D0071020000	(71)Name of Applicant : <b>1)Graphic Era Hill University, Bhimtal Campus</b> Address of Applicant :Sattal Road, Bhimtal- 263156, Uttarakhand, India Bhimtal ----- <b>2)Graphic Era Deemed To be University, Dehradun</b> Name of Applicant : NA Address of Applicant : NA
(86) International Application No	:NA	(72)Name of Inventor : <b>1)Devesh Bora</b> Address of Applicant :Department of Mechanical Engineering, Graphic Era Hill University, Bhimtal Bhimtal -----
Filing Date	:NA	<b>2)Neha Joshi</b> Address of Applicant :College of Pharmacy, Graphic Era Hill University, Bhimtal Bhimtal -----
(87) International Publication No	: NA	<b>3)Dr. Narendra Singh Bhandari</b> Address of Applicant :School of Agriculture, Graphic Era Hill University, Bhimtal Bhimtal -----
(61) Patent of Addition to Application Number	:NA	<b>4)Jagdish Singh Mehta</b> Address of Applicant :Department of Mechanical Engineering, Graphic Era Hill University, Bhimtal Bhimtal -----
Filing Date	:NA	<b>5)Dr. Desh Bandhu Singh</b> Address of Applicant :Department of Mechanical Engineering, Graphic Era (Deemed to be University), Dehradun Dehradun -----
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

he invention discloses an auxiliary system which can be utilized for emergency purpose which uses Transport Handrail Hanging Handle with Helical Coil Spring operated Push-Button Switch. While travelling in metro train the traveller holding the support system in standing position will use this Transport Handrail Hanging Handle. This system will convert potential energy generated when the traveller holds the spring in the metro train into the kinetic energy which in turn will help in generating electrical energy.

No. of Pages : 9 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :07/08/2022

(21) Application No.202211045076 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : LPG CYLINDER LEAKAGE COVER

(51) International classification :B65D0001020000, C10L0003120000, C12N0009640000, F02M0021020000, A61K0036899000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Bhimtal Campus**

Address of Applicant :Sattal Road, Bhimtal- 263156, Uttarakhand, India Bhimtal -----

**2)Graphic Era Deemed To be University**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Somesh Sharma**

Address of Applicant :Associate Professor, SOM, Graphic Era Hill University, Bhimtal Campus Bhimtal -----

**2)Dr. Manmohan Bansal**

Address of Applicant :Assistant Professor, Department of Management, Invertis University, Bareilly Bareilly -----

**3)Dr. Ashish Saxena**

Address of Applicant :Assistant Professor, SOM, IFTM University, Moradabad Moradabad -----

**4)Dr. Kiran**

Address of Applicant :Associate Professor, Department of Physics, Graphic Era Deemed To Be University, Dehradun, India. Dehradun Dehradun -----

(57) Abstract :

Cooking gas connections in India have increased 76 per cent from 140 million in 2014 to 247 million now. The Pradhan Mantri Ujjwala Yojana (PMUY) is a major factor behind this change. However, this has also triggered a rise in the number of accidents with liquefied petroleum gas (LPG, the chemical name for cooking gas) in these years. Parliament's panel on petroleum and natural gas has registered its concern on this. In 2017-18, LPG blasts claimed at least 260 lives. In the first six months of the current financial year, 2018-19, a little over 100 deaths were reported. A major reason for the accidents was lack of awareness on safe usage among new consumers. For solving the problem of LPG leakage, an airtight tarpaulin cover can be used.

No. of Pages : 7 No. of Claims : 5



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :07/08/2022

(21) Application No.202211045077 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : CASH WITHDRAWAL FROM ATM USING QR CODE WITHOUT USE OF DEBIT CARD

<p>(51) International classification :G06Q0020100000, G07F0019000000, G06Q0020180000, H04L0012700000, G06Q0020200000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Graphic Era Hill University, Haldwani Campus</b> Address of Applicant :Tularampur, Near Mahalaxmi Temple,opp. Middas Squar, Haldwani, Uttarakhand 263139 Haldwani ----- <b>2)Graphic Era Hill University, Bhimtal Campus</b> <b>3)Graphic Era Deemed To be University, Dehradun</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr. Manish Kumar</b> Address of Applicant :Director, Graphic Era Hill University, Dehradun Dehradun ----- <b>2)Ms. Sujata Negi Thakur</b> Address of Applicant :Assistant Professor, Computer Science and Engineering, Graphic Era Hill University, Haldwani Haldwani ---- ----- <b>3)Mr. Manoj Kumar Singh</b> Address of Applicant :Assistant Professor, School of Computing, Graphic Era Hill University, Bhimtal Bhimtal ----- <b>4)Mr. Charanjeet Singh Sidhu</b> Address of Applicant :Student, Department of Computer Science and Engineering, Graphic Era Hill University, Haldwani Haldwani ----- ----- <b>5)Dr. Devesh Pratap Singh</b> Address of Applicant :Professor, Department of Computer Science and Engineering, Graphic Era Deemed to be University, Dehradun Dehradun -----</p>
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(57) Abstract :

ATM is introduced long back and is upgrading day by day as well and we have various other digital payment methods in this digital world but if a user wants cash, the customer has to visit ATM or Banks carrying their Cheque books, pay slips to Bank, and Debit Card to ATM. So, if the customers forget to carry Debit Card in the ATM, he/she will not be able to withdraw cash. In this scenario the user has to visit again to his home and carry again the Debit to withdraw the money. To overcome this difficulty, we provide an option for the user to scan a QR CODE in the ATM machines and provide cash to the user to resolve their problems instantly.

No. of Pages : 8 No. of Claims : 6

(54) Title of the invention : TIME SERIES FORECASTING SYSTEM BASED ON REMOTE SENSING AND MACHINE LEARNING FOR CROP DAMAGE ASSESSMENT

<p>(51) International classification :G06N0020000000, G06Q0030020000, G06K0009000000, G06N0005040000, G01N0033000000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Graphic Era Hill University, Bhimtal Campus</b>  Address of Applicant :Sattal Road, Bhimtal- 263156, Uttarakhand, India Bhimtal -----  <b>2)Graphic Era Deemed To be University</b>  Name of Applicant : NA  Address of Applicant : NA</p> <p>(72)Name of Inventor :  <b>1)Mr. Janmejay Pant</b>  Address of Applicant :Assistant Professor, SOC, Graphic Era Hill University, Bhimtal Bhimtal -----  <b>2)Mr. Devendra Singh</b>  Address of Applicant :Assistant Professor, SOC, Graphic Era Hill University, Bhimtal Bhimtal -----  <b>3)Mr. Himanshu Pant</b>  Address of Applicant :Assistant Professor, SOC, Graphic Era Hill University, Bhimtal Bhimtal -----  <b>4)Dr. Bhupesh Rawat</b>  Address of Applicant :Associate Professor, SOC, Graphic Era Hill University, Bhimtal Bhimtal -----  <b>5)Mr. Devesh Bora</b>  Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Graphic Era Hill University, Bhimtal Bhimtal -----  <b>6)Dr. Manoj Chandra Lohani</b>  Address of Applicant :Professor, SOC, Graphic Era Hill University, Bhimtal Bhimtal -----</p>
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## (57) Abstract :

Systems and methods for monitoring and assessing crop health and performance can provide rapid screening of individual plants. The systems and methods have an automated component, and rely primarily on the detection and interpretation of plant-based signals to provide information about crop health. In some cases knowledge from human experts is captured and integrated into the automated crop monitoring systems and methods. Predictive models can also be developed and used to predict future health of plants in a crop. In this proposed system, crop damage will be assessed using remote sensing, machine learning, and time series forecasting. The raw remote sensing data will be pre-processed and then sent to our time series-based machine learning model that will predict crop damage estimates. The proposed system can be used by a wide range of government agencies to estimate crop damage claims made by farmers.

No. of Pages : 9 No. of Claims : 6

(54) Title of the invention : PORTABLE MULTILAYER WASTE SEGREGATION AND RECYCLING MACHINE FOR RESIDENTIAL AND COMMERCIAL USE PROVIDING BIOGAS, FERTILIZER, AND PLASTIC MOULDS AS CONSUMABLE BY-PRODUCTS.

(51) International classification :B65F0001000000, B65F0001140000, C12M0001107000, B09B0003000000, B03B0009060000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Ankit Gupta**

Address of Applicant :D-1/35, Om Vihar, Phase-5, Uttam Nagar, New Delhi - 110059 Delhi -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Ankit Gupta**

Address of Applicant :D-1/35, Om Vihar, Phase-5, Uttam Nagar, New Delhi - 110059 Delhi -----

**2)Ashutosh Gupta**

Address of Applicant :1546/1, Civil lines 2, Badiyaber, Sultanpur, Pin: 228001 Civil lines -----

(57) Abstract :

Solid rubbish is being produced at an unprecedented rate today as a result of growing urbanization and industrialization. In underdeveloped nations, inadequate door-to-door collection and poor rubbish sorting significantly limit the recycling of valuable materials from solid waste such as organic waste, plastic, glass, metal, etc. Indeed, physical sorting is still used to recover usable materials, which is extremely dangerous and harmful to one's health. The design and installation of an automated solid waste sorting system with an organic waste composter is described in this study. The developed system includes a programmable logic controller, an inductive closeness sensor and a pair of capacitive nearness sensors. To ensure that each material delivers a unique set of sensor outputs, multi-sensor data fusion is performed. When a material is identified, the controller instructs a stepper motor to spin at a specified angle in order to collect it in the appropriate bin. According to the test findings, the system is successful in sorting the four main waste types of different materials. Once the sorting is done, the system is capable of recycling a number of waste types and performing segregation accordingly. It will ensure to decrease the total waste and will convert the green waste directly into biogas and fertilizers. Further segregation includes the separation of different metals, plastic and non-recyclable waste. The handling/recycling of the glass is considered one of the most difficult tasks, which is performed by the system by converting the glass directly into fine particles which can be further used as sand for building material and decorative purposes. The overall system is capable of reducing household waste by up to 80-85% and can segregate or convert this waste directly to recyclable products as well as produce 2-3 litres of biogas for cooking at home per month.

No. of Pages : 28 No. of Claims : 10

(54) Title of the invention : REDUCTION OF OZONE LAYER DEPLETION USING CFCS AND HCFCs FILTERS

(51) International classification :C02F0001780000, C11D0007500000, A01G0015000000, C08G0101000000, C23G0005028000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Graphic Era Hill University, Bhimtal Campus**

Address of Applicant :Sattal Road, Bhimtal- 263156, Uttarakhand, India Bhimtal -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Dr. Sandeep Kumar Sunori**

Address of Applicant :Associate Professor & Head, ECE Department, Graphic Era Hill University, Bhimtal Bhimtal -----

**2)Dr. Amit Mittal**

Address of Applicant :Assistant Professor, Allied Science Department, Graphic Era Hill University, Bhimtal Bhimtal -----

**3)Mr. Mayank Joshi**

Address of Applicant :B.Tech CSE, Graphic Era Hill University, Bhimtal Bhimtal -----

**(57) Abstract :**

There are many situations where human activities have significant effects on the environment. Ozone layer depletion is one of them. The aim of this invention is to reduce the effects of ozone layer depletion as well as the protective measures of this vanishing layer. The chlorofluorocarbon and the halons are potent ozone depletors. One of the main reasons for the widespread concern about depletion of the ozone layer is the anticipated increase in the amounts of ultraviolet radiation received at the surface of the earth and the effect of this on human health and on the environment. The prospects of ozone recovery remain uncertain. In the absence of other changes, stratospheric ozone abundances should rise in the future as the halogen loading falls in response to regulation. However, the future behaviour of ozone will also be affected by the changing atmospheric abundances of methane, nitrous oxide, water vapour, sulphate aerosol, and changing climate. Therefore, this invention aims to save the ozone layer from getting depleted due to CFC gases.

No. of Pages : 8 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/08/2022

(21) Application No.202211045125 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : PROJECT OPTICAL EYE POWER TESTER: AN INNOVATION TO EYE TESTING

(51) International classification	:A61B0003000000, F02M0035100000, A61B0003028000, A61B0003180000, G01N0021640000	(71)Name of Applicant : <b>1)Graphic Era Hill University, Dehradun Campus</b> Address of Applicant :510, Society Area, Clement Town, Dehradun – 248002, Uttarakhand, India Dehradun ----- ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b>
(86) International Application No	:NA	(72)Name of Inventor : <b>1)Dr. Mahesh Manchanda</b> Address of Applicant :Department of Computer Science and Engineering, GEHU, Dehradun Dehradun -----
Filing Date	:NA	<b>2)Dishant Khati</b> Address of Applicant :Student, B.tech CSTML&AI, GEHU, Dehradun Dehradun -----
(87) International Publication No	: NA	<b>3)Gondesi Sampath Kumar Reddy</b> Address of Applicant :Student, B.tech CSTML&AI, GEHU, Dehradun Dehradun -----
(61) Patent of Addition to Application Number	:NA	<b>4)Shubham Khantwal</b> Address of Applicant :Student, B.tech CSTML&AI, GEHU, Dehradun Dehradun -----
Filing Date	:NA	<b>5)Riya Gahtori</b> Address of Applicant :Student, B.tech CSTML&AI, GEHU, Dehradun Dehradun -----
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Nowadays as we see all the people of any age in maximum wear spectacles so, for that they need to go to an optician to get a check-up for our eyes. Which costs us a variable charge also time Consuming as we have to wait for the optician for our turn also, there can be some errors while getting a check-up of our eyes, as if it is done physically. But if the check-up is done by a device which is portable and easy to handle then there will be more accurate results in the eye testing as the program is connected to the cloud database, it will be easy to store the information of all previous test results conducted on that device. Basically, the motto of this project is revolutionize the primal testing methods of the eye.

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045126 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : VIRTUAL PAYMENT SYSTEM AND METHOD THEREOF

(51) International classification :G06Q0020320000, G06Q0020380000, G06Q0020400000, G06Q0010080000, G06F0001160000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Graphic Era Hill University, Dehradun**  
Address of Applicant :Society Area, Clement Town, Dehradun, Uttarakhand, 248002, India. Dehradun -----  
---  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr. Vrince Vimal**  
Address of Applicant :Professor, CSE, Graphic Era Hill University, Society Area, Clement Town, Dehradun Dehradun ----  
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(57) Abstract :

The present disclosure provides a virtual payment system (100) to be used to make online payments without using a card or mobile computing device. The system (100) includes a sender computing device (102) to generate a one time flexible token by a sender, where the sender determines a threshold value for the generated token and the token is valid until first usage. In addition, the system has a receiver computing device (106) to receive the generated one time flexible token by the sender, and a server (112). Furthermore, using a communication channel (114), the server (112) may be configured to receive the token from the receiver computer device (106), and authenticate the received token to make corresponding transaction, upon successful authentication of the token.

No. of Pages : 32 No. of Claims : 13

(54) Title of the invention : WEARABLE GLASSES TO PREVENT PANIC ATTACKS DUE TO STROBE LIGHTING

(51) International classification :E05B0065100000, A01K0027000000, G06Q0050220000, H05B0047105000, G16H0010650000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Graphic Era Hill University**

Address of Applicant :Sattal Road, Bhimtal, Uttarakhand, India Bhimtal -----

**2)Graphic Era Hill University****3)Graphic Era Deemed To be University**

**Name of Applicant : NA**

**Address of Applicant : NA**

**(72)Name of Inventor :****1)Mr. Sashi Kr.Sharma**

Address of Applicant :Assistant Professor, CSE, Graphic Era Hill University, Sattal Road, Bhimtal Bhimtal -----

**2)Mr. Neeraj Panwar**

Address of Applicant :Assistant Professor, SOC , Graphic Era Hill University, Dehradun Dehradun -----

**3)Dr. Upendra Mohan Bhatt**

Address of Applicant :Associate Professor, Graphic Era Deemed To Be University, Bell Road, Clement Town, Dehradun, Dehradun -----

**(57) Abstract :**

Disclosed is a method (100) for protect from strobe lighting while watching Protect from strobe lighting on a live concert viewing platform, the method (100) comprising: recording (102) one or more panic attack/medical historys from a Protect from strobe lighting on a live concert by an panic attack/medical history unit (120) such that the one or more panic attack/medical historys are entered by the Protect from strobe lighting on a live concert in the panic attack/medical history unit (120); while watching the one or more panic attack/medical historys entered by the Protect from strobe lighting on a live concert, identify a panic attack/medical history of user from one or more panic attack/medical history of users.

No. of Pages : 20 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/08/2022

(21) Application No.202211045128 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : WEARABLE EARBUDS TO PREVENT EAR DAMAGE DUE TO LOUD AMBIENCE

<p>(51) International classification :A61F0011060000, H04B0001440000, F16H0057040000, H04R0001100000, A62B0009000000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Graphic Era Hill University</b> Address of Applicant :Sattal Road, Bhimtal, Uttarakhand, India Bhimtal ----- <b>2)Graphic Era Hill University</b> <b>3)Graphic Era Hill University</b> <b>4)Graphic Era Deemed To be University</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Mr. Sashi Kr.Sharma</b> Address of Applicant :Assistant Professor, CSE, Graphic Era Hill University, Sattal Road, Bhimtal Bhimtal ----- <b>2)Mr. Indrajeet Kumar</b> Address of Applicant :Assistant Professor, CSE , Graphic Era Hill University, Dehradun Dehradun ----- <b>3)Dr. Upendra Mohan Bhatt</b> Address of Applicant :Associate Professor, Graphic Era Deemed To Be University, Bell Road, Clement Town, Dehradun Dehradun ----- <b>4)Mr. Udit Kr. Pandey</b> Address of Applicant :Assistant Professor SOM, Graphic Era Hill University, Haldwani, Haldwani -----</p>
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(57) Abstract :

processing (204) the one or more ears of users entered by the For protection on a high noise ambience in the ears of users unit (120) by a processing unit (122) that is coupled to the ears of users unit (120) such that the processing unit (122) is configured to, based on the one or more ears of users entered by the For protection on a high noise ambience, identify a ears of users of user from one or more ears of users; and retrieving one or more attributes of products of the identified ears of users of user of the one or more ears of users by the processing unit (204).

No. of Pages : 19 No. of Claims : 5



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045129 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : WARNING SYSTEM FOR VEHICLES WHILE OPENING DOORS

(51) International classification :G06Q0010060000, B60Q0009000000, G01C0021360000, G08G0001000000, G08G0001123000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Bhimtal Campus**

Address of Applicant :Sattal Road, Bhimtal- 263156,

Uttarakhand, India Bhimtal -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Ravindra Singh Koranga**

Address of Applicant :Assistant Professor, CSE department,

Graphic Era Hill University, Bhimtal Bhimtal -----

**2)Lalit Mohan**

Address of Applicant :UI Designer at Akal Information Systems Ltd. -----

(57) Abstract :

Automobiles have made our life much easier today. We can easily commute from one place to another comfortably using cars, bus and other vehicles. However, over time one of the main issues regarding vehicles is related to safety. With advancement in engineering and technology, vehicles like cars and buses have become much powerful and fast. As a result, there are many incidents of accidents due to over speeding. Sometimes, the carelessness of passengers and driver can also cause mishaps to happen. One such example is while opening the doors of a parked vehicle which results into accidents. Therefore, a system is proposed to avoid such accidents by preventing the unlocking of doors of the vehicle when the vehicle is approaching from the behind.

No. of Pages : 9 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045130 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : DROWSINESS DETECTION IN A DRIVER

(51) International classification :G08B0021060000, B60K0028060000, A61B0005180000, B60R0021000000, B60R0021020000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Bhimtal Campus**

Address of Applicant :Sattal Road, Bhimtal- 263156, Uttarakhand, India Bhimtal -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Ravindra Singh Koranga**

Address of Applicant :Assistant Professor, CSE department, Graphic Era Hill University, Bhimtal Bhimtal -----

**2)Lalit Mohan**

Address of Applicant :UI Designer at Akal Information Systems Ltd. -----

**3)Shashi Kumar Sharma**

Address of Applicant :Assistant Professor, CSE department, Graphic Era Hill University, Bhimtal Bhimtal -----

(57) Abstract :

Today the top most priority for vehicle manufacturers is safety of its passengers and drivers. A lot of research is being done towards how to make vehicles safe and secure. Safety features like air bags, seat belts, ABS etc. has definitely brought the number of accidents casualties down. However still many accidents happen because some things may not be in our control. One such factor that can lead to accidents is sleepiness and tiredness in the driver. Sometimes a driver may have to travel for long distances and as a result he may have to drive for long hours. In such cases, the driver may become drowsy and even fall asleep. Thus accidents can happen. To prevent such accidents, we propose a system to detect the drowsiness in the driver. Thus, through this system safety of the persons inside car can be ensured using this system.

No. of Pages : 8 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/08/2022

(21) Application No.202211045131 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : PROJECT E-BRUSH: A CHANGE IN EVERYDAY CLOTH CLEANING

(51) International classification :C11D0003220000, C11D0003382000, D06F0035000000, C11D0001290000, C11D0001140000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Dehradun Campus**

Address of Applicant :510, Society Area, Clement Town, Dehradun – 248002, Uttarakhand, India Dehradun -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Mahesh Manchanda**

Address of Applicant :Department of Computer Science and Engineering, GEHU, Dehradun Dehradun -----

**2)Gondesi Sampath Kumar Reddy**

Address of Applicant :Student, B.tech CSTML&AI, GEHU, Dehradun Dehradun -----

**3)Dishant Khati**

Address of Applicant :Student, B.tech CSTML&AI, GEHU, Dehradun Dehradun -----

**4)Divyanshu Chaurasiya**

Address of Applicant :Student, B.tech CSTML&AI, GEHU, Dehradun Dehradun -----

**5)Riya Gahtori**

Address of Applicant :Student, B.tech CSTML&AI, GEHU, Dehradun Dehradun -----

(57) Abstract :

Nowadays as we see all that clothes with rigid dirt are cleaned with a primitive hand brush, which causes strain in hands and consumes more time, which leads to improper cleaning, which means most of the dirt is left behind on the cloth. But if the check-up is done by a device which is portable and easy to handle then there will be Basically, the motto of this project is to revolutionize the primal clothes cleaning methods.

No. of Pages : 9 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045132 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : HEAT DISSIPATION SYSTEM FOR WIRELESSLY CHARGING AN ELECTRONIC DEVICE IN A VEHICLE

(51) International classification :H02J0007020000, H02J0007000000, H02J0050100000, B60L0053120000, H02J0050600000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Dehradun**

Address of Applicant :Society Area, Clement Town, Dehradun, Uttarakhand, 248002, India. Dehradun -----  
---

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. Vrince Vimal**

Address of Applicant :Professor, CSE, Graphic Era Hill University, Society Area, Clement Town, Dehradun. Dehradun ---  
-----

(57) Abstract :

The present invention relates to a heat dissipation system (100) for wirelessly charging an electronic device in a vehicle. The system (100) includes a compartment (102) being provided in a dashboard of the vehicle to accommodate and wirelessly charge an electronic device. In addition, a base (104) of the compartment has one or more apertures (106) to receive air inside the compartment from an air conditioning unit of the vehicle, and a wireless charging transmitter pad (108) provided in the compartment, where at least one heat absorbing sheet is (110) placed between the base (104) of the compartment and the wireless charging transmitter pad (108), in order to evenly absorb heat generated while wirelessly charging the electronic device and consequently maintain consistent temperature throughout the wireless charging transmitter pad (108) and the compartment (102).

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045133 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : HANDMADE PAPER SOLAR DRYER

(51) International classification :B32B0021040000, D21H0027200000, B27D0001060000, A01G0017000000, B02C0018060000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Hill University, Dehradun Campus**

Address of Applicant :510, Society Area, Clement Town, Dehradun – 248002, Uttarakhand, India Dehradun -----  
----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. Vijay Kumar**

Address of Applicant :Professor in Physics, Graphic Era Hill University, Dehradun Dehradun -----

**2)Dr. Shipra Gupta**

Address of Applicant :Associate Professor, School of Management, Graphic Era Hill University, Dehradun Dehradun ---  
-----

(57) Abstract :

In modern life, the use of papers is increasing continuously by human beings. The life of people become high-tech and luxurious that's why they use of papers are increasing day by day, it becomes the cause of the destruction of forest. To manufacture new papers, wood pulp is used. The wooden pulp is prepared by the wood of trees. In ancient times, the wood pulp was prepared by dry and dead trees. But right now, due to increasing the demand for papers in whole world's market, the green trees are also cut for the fulfilment of papers. The paper mills are the world's largest industries that are responsible for air pollution, water pollution but also for land pollution etc. If we encourage the people for recycling, we can save the trees and also environment. One tone recycling of waste paper can save 30 eucalyptus trees, 7000 gallons of water, 380 gallons of oil, 3.3 cubic yards of landfill space and 4000 kW energy. The recycling of waste or used papers can save the life of green trees and forests. When handmade papers are manufactured, it will take about 48 hours in the natural drying process. With the help of this solar dryer, the timing can save the duration of making handmade papers. The solar dryer can dry the handmade papers only in one hour. The solar dryer can dry the handmade papers with the smoothness of the paper.

No. of Pages : 9 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/08/2022

(21) Application No.202211045168 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : BLOCK CHAIN-BASED METHODS AND SYSTEMS FOR THE DEVELOPMENT OF EDUCATIONAL SYSTEMS

<p>(51) International classification :G06Q0050200000, G06F0016220000, H04L0009060000, G09B0005020000, G07C0009380000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Graphic Era Deemed to be University, Dehradun</b> Address of Applicant :Dehradun, Uttarakhand, India 248002 Dehradun ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Kamlesh Singh</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun ----- <b>2)Dr. Devesh Pratap Singh</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun ----- <b>3)Dr. Mahesh Manchanda</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun ----- <b>4)Dr. Pravin P Patil</b> Address of Applicant :Professor, Department of Mechanical Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun ----- <b>5)Dr. Bhasker Pant</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p>
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(57) Abstract :

Blockchain and cloud technologies are used to create the current invention, a model based on blockchain technology. Using this invention, the inventor was compelled to propose a robust and integrated system that would positively influence the development of educational systems. Blockchain technology is used in this study to effectively and efficiently track student records. Since the database is being stored in the Cloud, it can be accessed from any location with internet access. The system returns the desired results when a user enters data into the system. A present invention is a powerful tool for improving educational institutions' use of student databases more efficiently and intelligently.

No. of Pages : 10 No. of Claims : 5

(54) Title of the invention : DEVELOPMENT AND IMPROVEMENT OF AN EDUCATIONAL ADMINISTRATION SYSTEM USING DATA MINING

<p>(51) International classification :G06Q0050200000, G06Q0090000000, H04L0029080000, G06F0016245800, G16H0050700000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Graphic Era Deemed to be University, Dehradun</b> Address of Applicant :Dehradun, Uttarakhand, India 248002 Dehradun -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Mr. Dibyahash Bordoloi</b> Address of Applicant :Head of the Department, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun ----- --</p> <p><b>2)Dr. Vikas Tripathi</b> Address of Applicant :Associate Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun ----- -----</p> <p><b>3)Mr. Prabhdeep Singh</b> Address of Applicant :Assistant Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun ----- -----</p> <p><b>4)Mr. Navin Garg</b> Address of Applicant :Associate Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun ----- --</p>
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## (57) Abstract :

The importance of education for humans is comparable to that of the need for food and oxygen. They are shaped into well-mannered and social people as a result of it. Learners, instructors, and those in positions of authority to make decisions are all components that can be found in every educational institution. The procedure of keeping a database updated is one that all types of educational institutions are obligated to carry out identically. We are proposing a methodology that will extract the necessary information from a database or cloud storage to obtain results successfully with the assistance of data mining tools, principles, and processes. In other words, this methodology will allow us to get accurate results successfully. The data mined is converted into knowledge, which is significantly more significant and valuable, and the individual responsible for making decisions uses this knowledge.

No. of Pages : 11 No. of Claims : 7

(54) Title of the invention : TACTILE WATCH FOR VISUALLY IMPAIRED

(51) International classification :G09B0021000000, A61H0003060000, A61F0009080000, G06F0003160000, G06F0003010000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Indian Institute of Technology Kanpur**

Address of Applicant :DEAN, RESEARCH & DEVELOPMENT, ROOM NUMBER 151, FACULTY BUILDING, POST OFFICE: IIT KANPUR, KANPUR- 208016, UTTAR PRADESH, INDIA -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Vishwaraj Srivastava**

Address of Applicant :Samtel Centre for Display Technologies and National Centre for Flexible Electronics, Indian Institute of Technology Kanpur, Kanpur, Uttar Pradesh, India – 208016 -----

**2)Prof. Siddhartha Panda**

Address of Applicant :Department of Chemical Engineering, Indian Institute of Technology Kanpur, Kanpur, Uttar Pradesh, India – 208016 -----

**(57) Abstract :**

A wearable device for visually impaired is disclosed. The wearable device comprises a tactile dial . The tactile dial has a quadrant, a second quadrant, a third quadrant, and a fourth quadrant. Each quadrant has three different shaped markers. The three different shaped markers comprise at least one of a marker A in form of a rectangular plane block, a second marker B in form of a step architecture having a step block facing center of the tactile dial , and a third marker C in form of a step architecture having a step block facing opposite to center of the tactile dial . At least three quadrants out of the quadrant, the second quadrant, the third quadrant and the fourth quadrant have a combination of the marker A, the second marker B, and the third marker C.

No. of Pages : 32 No. of Claims : 8



(54) Title of the invention : ELECTROMAGNETIC BASED SPACE LAUNCH SYSTEM

(51) International classification :B64G0001620000, B64G0001400000, B64G0001140000, H01R0004680000, B64G0005000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. -----

-----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Aditya Singh**

Address of Applicant :Department of Aerospace Engineering, Chandigarh University, National Highway 95, Chandigarh Ludhiana Highway, Mohali, Punjab-140413, India. -----

-----

(57) Abstract :

The present invention relates to an electromagnetic based space launch system consisting, a rocket capsule 1 that is installed with a cryogenic engine comprising, a vacuum tunnel having a first and second end configured in a parabolic shaped, a pair of superconducting rings 9 configured at a first and second portion 2, 3 of the capsule 1 that generate intense electromagnetic flux when induced with electrical current resulting in accelerating the capsule 1 within the tunnel, a cooling unit associated with liquid helium that cools down the working temperature of the superconducting ring 9 when induced under electrical energy to maintain efficiency, pair of leading and trailing wings 7, 8 installed at the first and second portion 2, 3 of the capsule 1 to provide aerodynamic stability and pair of heat shield layers configured over the capsule 1 to dissipate heat while moving of the capsule 1 against earth's atmosphere.

No. of Pages : 20 No. of Claims : 6

(54) Title of the invention : MOMENTUM TRANSFER DRIVEN PROPULSION SYSTEM

(51) International classification :C02F0001480000, H01H0036000000, F16F0015027000, A43B0003000000, F16F0013000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh  
Ludhiana Highway, Mohali, Punjab-140413, India. -----  
-----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Aditya Singh**

Address of Applicant :Department of Aerospace Engineering,  
Chandigarh University, National Highway 95, Chandigarh  
Ludhiana Highway, Mohali, Punjab-140413, India. -----  
-----

(57) Abstract :

The momentum transfer driven propulsion system includes cylindrical body 1 having first 2 and second portion 3, electromagnet 4 linked with power supply 9 is installed at first portion 2 in order to generate magnetic field within first portion 2, permanent magnet 5 positioned within cylindrical body 1, gas chamber 6 filled with noble gas attached to second portion 3 of body 1, chamber 6 is fabricated with an elastic membrane 7 is pushed by permanent magnet 5 which results in transferring of gas in multiple gas bags 8 attached within chamber 6, switch 10 linked with supply 9 activated by processing unit to change polarity of electromagnet 4 by reversing direction of supply 9 by means attaching permanent magnet 5 from second portion 3 towards first portion 2 to allow movement of body 1 up to primary direction to propagate from default location.

No. of Pages : 16 No. of Claims : 4

(54) Title of the invention : ARTIFICIAL INTELLIGENCE AND IOT BASED AUTOMATIC SMART HEALTHCARE SYSTEM TO PREVENTION AND DETECTION OF DENGUE, MALARIA AND OTHER TYPES OF VIRAL FEVERS USING DATA MINING AND DEEP LEARNING ALGORITHMS

(51) International classification :G06N0020000000, G16H0050200000, G06N0005020000, G16H0050800000, G16H0050700000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

## 1)Lekhranj

Address of Applicant :Assistant Professor Department of Computer Engineering and Applications GLA University Mathura 17km stone, NH-2 Mathura delhi road chaumahan UP 281406, India. -----

## 2)Yousef Methkal Abd Algani

## 3)Dr. Tanuja Lella

## 4)Kalpana C

## 5)Dr : Sudharani B Banappagoudar

## 6)G.S.Uthayakumar

## 7)Archana tomar

## 8)Sayan Majumder

## 9)P. S. Priya 1000-P

## 10)Dr. Brijesh Sathian

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

## 1)Lekhranj

Address of Applicant :Assistant Professor Department of Computer Engineering and Applications GLA University Mathura 17km stone, NH-2 Mathura delhi road chaumahan UP 281406, India. -----

## 2)Yousef Methkal Abd Algani

Address of Applicant :Research Scholor Department of MathematicsThe Arab Academic College for Education in Israel-Haifa. Israel.Sakhnin College, Israel.Alain, P.O.Box: 3983. Postal Code 2013700, Nahef village. -----

## 3)Dr. Tanuja Lella

Address of Applicant :MBBS, MD(PHARMACOLOGY) Department of Pharmacology Sree balaji medical college and hospital ,Address: 7, Works road, Chromepet. -----

## 4)Kalpana C

Address of Applicant :Assistant Professor Department of CSE NPR College of Engineering and Technology , NATHAM -----

## 5)Dr : Sudharani B Banappagoudar

Address of Applicant :Professor Obstetrics and Gynaecological Nursing School of Nursing Science, ITM University, Gwalior, Madhya Pradesh, 475001, India. -----

## 6)G.S.Uthayakumar

Address of Applicant :Associate Professor, Department of ECE, St.Joseph's Institute of Technology, OMR, Chennai, -----

## 7)Archana tomar

Address of Applicant :Assistant professor Department of computer science ,Institute of Technology and Management NH75 sitholi, ITM Gwalior -----

## 8)Sayan Majumder

Address of Applicant :Assistant professor, Gargi Memorial Institute of Technology, Baruipur, Mouza Beralia, Balarampur , Kolkata , West Bengal 700144 -----

## 9)P. S. Priya 1000-P

Address of Applicant :PgGScholar Department of Ophthalmology Tirunelveli Medical College -----

## 10)Dr. Brijesh Sathian

Address of Applicant :Scientist, Geriatrics and Long Term Care Department, Rumailah Hospital, Hamad Medical Corporation, Doha, Qatar, P. O BOX 3050, Doha, and Qatar. -----

## (57) Abstract :

Microorganisms that are classified as bacteria, viruses, fungus, or parasites can be the agents that lead to the development of infectious diseases. These infectious agents can spread disease either directly or indirectly, and their spread has the potential to cause epidemics or even pandemics. The infection that is caused by this can cause mild to severe symptoms, including potentially life-threatening fever or diarrhoea. Some people may not have any symptoms from infectious diseases, while others may suffer severe consequences as a result of the illness. In spite of breakthroughs in medical technology, infectious diseases continue to be one of the major causes of death around the globe, particularly in nations with low incomes. As a result of the development of mathematical tools, researchers are now in a position to improve their ability to forecast epidemics, comprehend the unique characteristics of each pathogen, and recognise possible drug development targets. The ability of artificial intelligence and its component parts to more accurately identify some types of cancer using imaging data has received a lot of media attention in recent years. Within the realm of infectious diseases, the purpose of this chapter is to investigate the various possible uses of machine learning. We are concentrating our efforts on the most important facets of the infection, including its diagnosis, transmission, response to therapy, and resistance. We are putting out the idea that extreme values could be used as a potential source of inspiration for future advancements in the study of infectious diseases. This chapter covers a series of applications that were carefully selected to demonstrate how artificial intelligence is advancing the study of infectious diseases and how it is assisting organisations in better combating these diseases, particularly in low-income countries. These applications are discussed to demonstrate how artificial intelligence is moving the field of infectious diseases further.

No. of Pages : 11 No. of Claims : 9

(54) Title of the invention : CYCLOIDAL-ROTOR PROPULSION SYSTEM

(51) International classification :F01D0005220000, B29C0070340000, H01R0013652000, A01D0041127000, G10K0011350000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)BKSAY Works Pvt Ltd**

Address of Applicant :B-18/6, Himalaya Pride, Techzone-IV, Gr. Noida West, Gautam Buddha Nagar, Uttar Pradesh, India Gr. Noida West -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Kalyan Potukuchi**

Address of Applicant :B-18/6, Himalaya Pride, Techzone-IV, Gr. Noida West, Gautam Buddha Nagar, Uttar Pradesh, India 201308 Gr. Noida West -----

**2)J H S D Anoohya**

Address of Applicant :Flat no - 318, Hi-Rise Paradise, Mallampet road, Bachupally, Hyderabad, Telangana, India 500090 Bachupally -----

(57) Abstract :

A cycloidal-rotor propulsion system is disclosed herein. The cycloidal-rotor propulsion system comprises a rotor body which is formed by at least one rotor and a plurality of aerofoil blades. Each aerofoil blade is pivotably coupled to the rotor and wherein the aerofoil blades are oriented perpendicularly with respect to the plane of rotation of the rotor. Further, the system has a pivot mechanism which is configured to pivot the plurality of aerofoil blades with respect to the rotor body. Additionally, the system comprises a drive means which is configured to rotate the rotor body, wherein the drive means is disposed within the rotor body. This drive means further comprises a casing which defines an exterior profile of the drive means, wherein the casing can have a plurality of vents, fins, surface augmentations and/or any combination thereof.

No. of Pages : 44 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/08/2022

(21) Application No.202211045314 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : AI AND IOT BASED REAL TIME TRACKING SYSTEM FOR OBJECT TRACKING

(51) International classification :G06Q0010060000, B60R0025330000, G01S0019140000, C02F0011040000, G01B0011240000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr. Hitesh Kumar Sharma**

Address of Applicant :School of Computer Science, University of Petroleum and Energy Studies -----

**2)Dr. Amit Agarwal**

**3)Mr. Prashant Ahlawat**

**4)Dr. Manoj Kumar Sharma**

**5)Ms. Aparna**

**6)Ms.Pooja**

**7)Mr. Gaurav Nagarkoti**

**8)Mr. Vikas Kumar**

**9)Ms. Preeti**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Hitesh Kumar Sharma**

Address of Applicant :School of Computer Science, University of Petroleum and Energy Studies -----

**2)Dr. Amit Agarwal**

Address of Applicant :Director, APJ Abdul Kalam Institute of Technology Tanakpur, Uttarakhand Dehradun -----

**3)Mr. Prashant Ahlawat**

Address of Applicant :Computer Science Engineering, University Institute of Engineering, Chandigarh University, Gharuan, Mohali, Punjab -----

**4)Dr. Manoj Kumar Sharma**

Address of Applicant :School of Computing & Information Technology, Manipal University Jaipur, Jaipur, India -----

**5)Ms. Aparna**

Address of Applicant :Computer Science Engineering, University Institute of Engineering, Chandigarh University, Gharuan, Mohali, Punjab -----

**6)Ms.Pooja**

Address of Applicant :Computer Science Engineering, University Institute of Engineering, Chandigarh University, Gharuan, Mohali, Punjab -----

**7)Mr. Gaurav Nagarkoti**

Address of Applicant :G.L. Bajaj Institute of Management, Greater Noida, U.P. Greater Noida -----

**8)Mr. Vikas Kumar**

Address of Applicant :Computer Science Engineering, University Institute of Engineering, Chandigarh University, Gharuan, Mohali, Punjab -----

**9)Ms. Preeti**

Address of Applicant :University of Petroleum & Energy Studies, Bidholi Campus, Via-Prem Nagar, Dehradun Dehradun -----

(57) Abstract :

Tracking of our goods and belonging is an open challenge in real-time situation. Technologies are matured enough to make this possible in real-time. In this work, we have developed an Internet of Things based application, which will be used to track your belonging object in real time using IoT sensors and GPS system. A low energy consumption device has been developed in this work which makes it more durable and environment friendly. The user can see his/her object on Google map in real time which minimize the probability of miss or stolen his/her Item or object. Advanced technologies with open source tools has been integrated in this system to make it high performing system. We also have developed an Android Based App, which will show the same real-time position of bag or vehicle on their smartphone, ease to use.

No. of Pages : 15 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/08/2022

(21) Application No.202211045324 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : VANCOMYCIN-LOADED SILK FIBROIN ANTISEPTIC HYDROGEL FOR DIABETIC WOUND HEALING

(51) International classification :A61K0009060000, A61L0027220000, A61L0015440000, A61K0008040000, C07K0014435000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr. Venkatesh Kumar R.**

Address of Applicant :Department of Zoology, Babasaheb Bhimrao Ambedkar University (A Central University), VidyaVihar, Raebareli Road, Lucknow, Uttar Pradesh , India  
Lucknow -----

**2)Vandana Singh**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Venkatesh Kumar R.**

Address of Applicant :Department of Zoology, Babasaheb Bhimrao Ambedkar University (A Central University), VidyaVihar, Raebareli Road, Lucknow, Uttar Pradesh , India  
Lucknow -----

**2)Vandana Singh**

Address of Applicant :Department of Zoology, Babasaheb Bhimrao Ambedkar University (A Central University), VidyaVihar, Raebareli Road, Lucknow, U.P. 226025, India  
Lucknow -----

**3)Brahma Nand Singh**

Address of Applicant :Pharmacology Division CSIR-National Botanical Research Institute Lucknow U.P. -221005, India  
Lucknow -----

**4)Vivek Kumar Sharma**

Address of Applicant :Pharmacology Division CSIR-National Botanical Research Institute Lucknow U.P. -221005 India  
Contact: 6393581625 Lucknow -----

(57) Abstract :

The present invention provides a silk fibroin antiseptic hydrogel for diabetic wound healing. Particularly, the present invention relates to a vancomycin-loaded silk fibroin antiseptic gel hydrogel for diabetic wound healing and a process for the preparation thereof.

No. of Pages : 23 No. of Claims : 10

(54) Title of the invention : HPLC METHOD DEVELOPMENT AND VALIDATION OF EMPAGLIFLOZIN IN BULK DRUG AND PHARMACEUTICAL PREPARATION

<p>(51) International classification :G01N0030020000, G01N0030060000, A61K0031704800, B01D0015360000, G01N0030740000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Neha Jain</b> Address of Applicant :Assistant Professor, Pharmacy, Dr. K.N. Modi Institute of Pharmaceutical Education and Research, Modinagar, Uttar Pradesh -----</p> <p><b>2)Charu Saxena</b></p> <p><b>3)Shikha Kaushik</b></p> <p><b>4)Mr. Uddhav Patangia</b></p> <p><b>5)Dr. Md Salahuddin</b></p> <p><b>6)Bramhajit Chatterjee</b></p> <p><b>7)Dr. Swarupananda Mukherjee</b></p> <p>Name of Applicant : NA</p> <p>Address of Applicant : NA</p> <p>(72)Name of Inventor :</p> <p><b>1)Neha Jain</b> Address of Applicant :Assistant Professor, Pharmacy, Dr. K.N. Modi Institute of Pharmaceutical Education and Research, Modinagar, Uttar Pradesh -----</p> <p><b>2)Charu Saxena</b> Address of Applicant :Assistant Professor, Pharmaceutics, Swami Vivekanand Subharti University, Meerut, Uttar Pradesh -----</p> <p><b>3)Shikha Kaushik</b> Address of Applicant :Pharmaceutical Chemistry, Assistant professor, KIET Group of institutions, Ghaziabad, UP -----</p> <p><b>4)Mr. Uddhav Patangia</b> Address of Applicant :Asst. Professor, Department of Pharmaceutical Chemistry Girijananda Chowdhury Institute of Pharmaceutical Science, Tezpur, Assam -----</p> <p><b>5)Dr. Md Salahuddin</b> Address of Applicant :Principal, Al-Ameen College of Pharmacy, Bangalore -----</p> <p><b>6)Bramhajit Chatterjee</b> Address of Applicant :Assistant Professor, Department of Pharmaceutical Technology, Brainware University, Kolkata, West Bengal -----</p> <p><b>7)Dr. Swarupananda Mukherjee</b> Address of Applicant :Assistant Professor, Pharmaceutical Technology, NSHM Knowledge Campus, Kolkata - Group of Institutions, West Bengal -----</p>
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## (57) Abstract :

The present invention relates HPLC method development and validation of empagliflozin in bulk drug and pharmaceutical preparation. The mobile phase used for the chromatographic runs consisted of Water:ACN (60:40 v/v). The separation was achieved on a Symmetry, Waters C-18, 100 x 4.6 mm, 2.7  $\mu$ m, Poroshell 120 EC-C18, using isocratic mode. Drug peaks were well separated and were detected by a UV detector at 225 nm. The method was linear at the concentration range of 2–10  $\mu$ g/ml for both the formulations. The method has been validated according to ICH guidelines concerning precision, accuracy, and forced degradation. The results showed that the calculated LOD and LOQ were 0.002578ng and 0.008091ng for Empagliflozin.

No. of Pages : 17 No. of Claims : 7

(54) Title of the invention : IOT BASED INTELLIGENT BUILDING MANAGEMENT SYSTEM FOR AMBIENT ASSISTED LIVING

<p>(51) International classification :G05B0015020000, G01R0021133000, G06Q0050060000, H02J0013000000, G06Q0050160000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Kamal Batta</b> Address of Applicant :Assistant professor, Chandigarh University Mohali Punjab India Mohali -----</p> <p><b>2)Shaina Arora</b> <b>3)Anand Pandey</b> <b>4)Mayur Thakur</b> <b>5)Jyoti</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor :</p> <p><b>1)Kamal Batta</b> Address of Applicant :Assistant professor, Chandigarh University Mohali Punjab India Mohali -----</p> <p><b>2)Shaina Arora</b> Address of Applicant :Assistant professor, Chandigarh University Mohali Punjab India Mohali -----</p> <p><b>3)Anand Pandey</b> Address of Applicant :Assistant professor, Chandigarh University Mohali Punjab India Mohali -----</p> <p><b>4)Mayur Thakur</b> Address of Applicant :Assistant professor, Chandigarh University Mohali Punjab India Mohali -----</p> <p><b>5)Jyoti</b> Address of Applicant :Assistant professor, Chandigarh University Mohali Punjab India Mohali -----</p>
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## (57) Abstract :

The present invention relates generally to the field of building management systems. The present invention more particularly relates to systems and methods for integrating a building management system with smart grid components and data. The IOT based intelligent building management system for ambient assisted living includes a set of sensors & devices for sensing environment to gather real-time data, a communications interface configured to receive information from the set of sensors & devices, a processing circuit for implementing abstraction and continuous processing of the aggregated data using a model driven architecture, storage unit to store non-transient computer-readable media in communication with the processing circuit, an integrated control layer configured to receive inputs from and to provide outputs to a plurality of building subsystems, the integrated control layer including a plurality of control algorithm modules configured to process the inputs and to determine the outputs, a fault detection and diagnostics layer configured to use the inputs received from the integrated control layer to detect and diagnose faults, and a demand response layer configured to process the information received from the set of sensors & devices to determine adjustments to the plurality of control algorithms of the integrated control layer.

No. of Pages : 14 No. of Claims : 5



(54) Title of the invention : ANTI-OXIDANT HERBAL FORMULATION

(51) International classification :A61K0036730000, A61K0036185000, A23L0033105000, G01N0021310000, A61K0036480000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Meerut Institute of Engineering and Technology**Address of Applicant :NH-58, Baghpat Road Crossing  
Byepass Road Meerut Uttar Pradesh India Meerut -----**2)DV Surya Prakash****3)Sandeep Sirohi****4)Nitika Vats****5)Avinash Singh****6)Ashima Kathuria****7)Shailendra Kumar****Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)DV Surya Prakash**Address of Applicant :Assistant Professor, Department of  
Biotechnology, Meerut Institute of Engineering and Technology  
Meerut Uttar Pradesh India 250005 Meerut -----**2)Sandeep Sirohi**Address of Applicant :Assistant Professor, Department of  
Biotechnology, Meerut Institute of Engineering and Technology  
Meerut Uttar Pradesh India 250005 Meerut -----**3)Nitika Vats**Address of Applicant :Assistant Professor, Department of  
Biotechnology, Meerut Institute of Engineering and Technology  
Meerut Uttar Pradesh India 250005 Meerut -----**4)Avinash Singh**Address of Applicant :Associate Professor, Department of  
Biotechnology, Meerut Institute of Engineering and Technology  
Meerut Uttar Pradesh India 250005 Meerut -----**5)Ashima Kathuria**Address of Applicant :Professor, Department of Biotechnology,  
Meerut Institute of Engineering and Technology Meerut Uttar  
Pradesh India 250005 Meerut -----**6)Shailendra Kumar**Address of Applicant :Professor, Department of Mechanical  
Engineering, Meerut Institute of Engineering and Technology  
Meerut Uttar Pradesh India 250005 Meerut -----**(57) Abstract :**

The present invention relates to a anti-oxidant herbal formulation comprising methanolic extract of combination of Seed, Leaf and Bark of Cydonia oblonga, wherein said formulation comprises Seed, Leaf and Bark of Cydonia oblonga in the ratio of 1:1:1 to 3:2:3 in grams respectively. The anti-oxidant herbal formulation exhibits strong Reducing power ability (85.47%), DPPH radical scavenging activity (87.56%) and Nitric oxide radical scavenging activity (89.00%) at 2000µg/ml maximum concentration and the IC50 were concentration dependant with its values as 98.14µg/ml (DPPH activity), 264.42 µg/ml (Reducing power ability) and 108.30 µg/ml (Nitric oxide radical scavenging activity) respectively.

No. of Pages : 26 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :09/08/2022

(21) Application No.202211045345 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : Herbal composition for inflammatory disorders

<p>(51) International classification :C07C0209840000, C07D0417140000, B08B0003020000, C07C0045780000, A61P0031180000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr. Arvind Kumar</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Lodhipur, Rajput, U.P, India. 244102 -----</p> <p><b>2)Dr. Sushil Kumar</b> <b>3)Dr. Arun Kumar Mishra</b> <b>4)Dr. Amrita Mishra</b> <b>5)Dr. Harpreet Singh</b> <b>6)Dr. Alka Lohani</b> <b>7)Mr. Amit Kumar</b> <b>8)Mr. Dinesh Kumar</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr. Arvind Kumar</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Lodhipur, Rajput, U.P, India. 244102 -----</p> <p><b>2)Dr. Sushil Kumar</b> Address of Applicant :Professor and Director, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----</p> <p><b>3)Dr. Arun Kumar Mishra</b> Address of Applicant :Professor, Pharmacy Academy, IFTM University, Moradabad Moradabad -----</p> <p><b>4)Dr. Amrita Mishra</b> Address of Applicant :Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----</p> <p><b>5)Dr. Harpreet Singh</b> Address of Applicant :Associate Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----</p> <p><b>6)Dr. Alka Lohani</b> Address of Applicant :Associate Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----</p> <p><b>7)Mr. Amit Kumar</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----</p> <p><b>8)Mr. Dinesh Kumar</b> Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad Moradabad -----</p>
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(57) Abstract :

The present invention belongs to the field of pharmaceutical science. More, particularly the invention pertains to synthesis and analgesic activity of novel compound N-(4-(diphenylamino) thiazol-2-yl)-2-(4-ethylphenoxy) acetamide. The novel process involved refluxing 2-chloro-N-(4-(diphenylamino) thiazol-2-yl) acetamide and 4-ethyl phenol for 23 min dry acetone in attendance of anhydrous K<sub>2</sub>CO<sub>3</sub> and KI. The unreacted phenol is removed from the final product by treating the substance with 10% aqueous solution of sodium carbonate. The compounds is then filtered and washed thoroughly with water, dried and recrystallized from ethanol.

No. of Pages : 12 No. of Claims : 5

(54) Title of the invention : IOT-ENABLED WEARABLE HEALTH MONITORING SYSTEM AND METHOD

(51) International classification :A61B0005000000, A61B0005020500, G06N0020000000, A61B0005024000, H04L0029080000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Graphic Era Deemed to be University, Dehradun**

Address of Applicant :Graphic Era Deemed to be University, Dehradun Dehradun -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Dr. Devvret Verma**

Address of Applicant :Assistant Professor, Department of Biotechnology, Graphic Era Deemed to be University, Dehradun, Dehradun, Uttarakhand India, 248002 Dehradun -----

--

**2)Dr. Surendra Kumar Shukla**

Address of Applicant :Associate Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

-----

**3)Dr. Bhasker Pant**

Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

**4)Dr. Ashok Kumar Sahoo**

Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----

**5)Dr. Mahesh Manchanda**

Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----

**(57) Abstract :**

Wearable health monitoring systems and methods are the subjects of the current invention. The primary purpose of this invention is to alert the user in the event of a medical emergency. Doctors often advise patients to keep track of their pulse and heartbeat, which can be difficult for them to do. The present invention can alleviate such a situation. Since no one was with the patient during the mishaps, many people have experienced sudden changes in their bodies or uncomfortable conditions. Such situations necessitate the use of the new invention. All human body functions can be tracked with a few sensors. The user and their family members can be alerted in the event of any unusual activity or unusual situation. Wearables, machine learning algorithms, and Internet of Things (IoT) support make up the system's foundation.

No. of Pages : 11 No. of Claims : 5

(54) Title of the invention : E-COMMERCE WEBSITE RECOMMENDER SYSTEM BASED ON DEEP LEARNING

(51) International classification :G06Q0030060000, G06Q0030020000, G06N0005020000, G06F0021350000, D04H0013000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Graphic Era Deemed to be University, Dehradun**

Address of Applicant :Dehradun, Uttarakhand, India 248002 Dehradun -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Dr. Bhasker Pant**

Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

**2)Dr. Devesh Pratap Singh**

Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

**3)Dr. Durgaprasad Gangodkar**

Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

**4)Mr. Dibyhash Bordoloi**

Address of Applicant :Head of the Department, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----

--

**5)Mr. Navin Garg**

Address of Applicant :Associate Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----

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**(57) Abstract :**

Online shopping has made shopping easy for any service or product without physical visits. E-websites enable shoppers to find specific services or products provided by different dealers and choose the best option. In Every e-commerce website, some users visit sites to satisfy their needs. These e-commerce websites maintain a database in a continuous process. With the help of deep learning techniques, principles, and procedures, we propose a methodology to extract the required information from the stored database to pre-identify the user's needs, preferences, and tastes and effectively recommend results. The information becomes knowledge, which is much more valuable and significant, used by the consumers and dealers.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :09/08/2022

(21) Application No.202211045362 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : PREDICTION MODEL FOR HEART ABNORMALITIES BASED ON MACHINE LEARNING

(51) International classification :A61B0005000000, G06N0020000000, A61B0005020500, G06N0003040000, G06T0007000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Graphic Era Deemed to be University, Dehradun**

Address of Applicant :Dehradun, Uttarakhand, India 248002 Dehradun -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Vikas Tripathi**

Address of Applicant :Associate Professor, Department of Computer Science & Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

**2)Mr. Navin Garg**

Address of Applicant :Associate Professor, Department of Computer Science & Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----

--

**3)Dr. Kamlesh Singh**

Address of Applicant :Professor, Department of Computer Science & Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----

**4)Dr. Devesh Pratap Singh**

Address of Applicant :Professor, Department of Computer Science & Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----

(57) Abstract :

The efficiency of traditionally used health monitoring systems and those for transportation, education, and banking has been significantly improved due to information technology. The application of machine learning is widespread across the globe due to its expansive scope. The healthcare sector is not an exception to this rule. The ability to accurately predict heart abnormalities is one of the most critical applications for machine learning. If both patients and doctors use this information effectively, there will be a decreased likelihood of heart disease and heart attacks.

No. of Pages : 10 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211045363 A

(19) INDIA

(22) Date of filing of Application :09/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : RICE PRODUCTION RECOMMENDATION SYSTEM BASED ON ARTIFICIAL INTELLIGENCE

<p>(51) International classification :G06N0020000000, A01G0025160000, G06N0003080000, G06N0005000000, A01B0079000000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Graphic Era Deemed to be University, Dehradun</b> Address of Applicant :Dehradun, Uttarakhand, India 248002 Dehradun -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Devesh Pratap Singh</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>2)Dr. Mahesh Manchanda</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>3)Mr. Prabhdeep Singh</b> Address of Applicant :Assistant Proferssor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p>-----</p> <p><b>4)Dr. Kamlesh Singh</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p>
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(57) Abstract :

Precision farming using machine learning and IoT equipment is the subject of the current invention. A sensor for measuring soil humidity, a sensor for measuring atmospheric pressure, and a sensor for evaluating the quality and composition of soil make up the present invention. The output values are displayed on a microprocessor-equipped display in the system component. Farmers can use a new design to learn more about the quality and type of seed they'll be used for ploughing and planting. The system uses sensor data and machine learning algorithms to determine the best crop to plant based on the time of year, the soil's composition, and how much it will cost. Using machine learning algorithms and IoT-enabled equipment, the system is built.

No. of Pages : 10 No. of Claims : 5

(54) Title of the invention : EXPANSIVE SOIL MODIFICATION BY THE APPLICATION OF WASTE MATERIALS

(51) International classification :E02D0001020000, E01C0003000000, C05D0003020000, C04B0018040000, D01H0011000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Ms. Nisha Kashyap**

Address of Applicant :Assistant Professor, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----

**2)Mr. Gaurav Hawadiya****3)Mr. Pramod Kumar Yadav****4)Ms. Deepali Vasudev****5)Ms. Sheetal Sagar****6)Mr. Karan Tiwari**

Name of Applicant : NA

Address of Applicant : NA

**(72)Name of Inventor :****1)Ms. Nisha Kashyap**

Address of Applicant :Assistant Professor, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----

**2)Mr. Gaurav Hawadiya**

Address of Applicant :Assistant Professor &amp; Head, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----

**3)Mr. Pramod Kumar Yadav**

Address of Applicant :Assistant Professor, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----

**4)Ms. Deepali Vasudev**

Address of Applicant :Assistant Professor, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----

**5)Ms. Sheetal Sagar**

Address of Applicant :Assistant Professor, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----

**6)Mr. Karan Tiwari**

Address of Applicant :Assistant Professor, Department of Civil Engineering, SET, IFTM University Moradabad, UP 244102 Moradabad -----

**(57) Abstract :**

The present invention discloses the impact of waste industrial materials such as marble dust, fly ash on the subgrade attributes of Expansive soil. The laboratory investigation is concluded to assess the effect of waste industrial materials addition on the engineering properties and shrink-swell behavior of stabilized expansive soils. Atterberg limits, OMC and MDD, California Bearing Ratio (CBR), swelling pressure tests are performed on natural and proposed soil samples. Measure the results obtained of the natural and treated samples, the CBR increases by 250% (when 30% marble dust and fly ash are added) and the swelling reduction of 58% is found, depending on additive content. The results conclusion shows that the modification of expansive soils by fly ash and marble dust admixture is successful and more economical.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :09/08/2022

(21) Application No.202211045379 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SYSTEM AND METHOD FOR CONTRAST ENHANCEMENT OF COLOR IMAGES USING OPTIMIZED FUZZY INTENSIFICATION

<p>(51) International classification :G06T0005000000, G09G0003360000, G06N0007040000, A61M0005310000, H04N0001409000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr. Abhishek Kumar Mishra</b> Address of Applicant :Associate Professor, Department of Computer Science &amp; Engineering , SCS &amp; A, IFTM University, Moradabad , Uttar Pradesh, Pin Code: 244102 Moradabad ----- <b>2)Mr. Avadhesh Kumar Dixit</b> <b>3)Mr.Brajesh Kumar Sharma</b> <b>4)Dr. Rakesh Kumar Yadav</b> <b>5)Dr. Arvind Kumar Shukla</b> <b>6)Mr. Harpreet Singh Chawla</b> <b>7)Mr.Amit Yadav</b> Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : <b>1)Dr. Abhishek Kumar Mishra</b> Address of Applicant :Associate Professor, Department of Computer Science &amp; Engineering , SCS &amp; A, IFTM University, Moradabad , Uttar Pradesh, Pin Code: 244102 Moradabad ----- <b>2)Mr. Avadhesh Kumar Dixit</b> Address of Applicant :Assistant Professor, Department of Computer Science &amp; Engineering, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh, Pin Code: 224001. Ayodhya ----- <b>3)Mr.Brajesh Kumar Sharma</b> Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Hindustan College of Science and Technology, Farah, Mathura, Uttar Pradesh, Pin Code: 281122 Mathura ----- <b>4)Dr. Rakesh Kumar Yadav</b> Address of Applicant :Assistant Professor, Department of Computer Science &amp; Engineering , SCS &amp; A, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad ----- <b>5)Dr. Arvind Kumar Shukla</b> Address of Applicant :Associate Professor, Department of Computer Application , SCS &amp; A, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad ----- <b>6)Mr. Harpreet Singh Chawla</b> Address of Applicant :Assistant Professor, Department of Computer Science &amp; Engineering , SCS &amp; A, IFTM University, Moradabad Uttar Pradesh, Pin Code: 244102 Moradabad ----- <b>7)Mr.Amit Yadav</b> Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Hindustan College of Science and Technology, Farah, Mathura, Uttar Pradesh, Pin Code: 281122 Mathura -----</p>
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(57) Abstract :

The present invention relates a method for contrast enhancement of color images using optimized fuzzy intensification. The method comprising steps: Step 1: Extract the Red, Green, and Blue channels separately and normalize each channel for better input understanding; Step 2: Define a variable for bright and dark intensities for each normalized channel; Step 3: Add membership function for input defined variable; Step 4: Define the output variable and find out the membership function; Step 5: using parameter and fuzzy inference system an appropriate intensification operator for the given image is calculated for each channel to observe the pixels of the output image; Step 6: obtain output. The system (100) comprises an image dataset unit, an image input unit, an image color channel unit, a defined input variable for bright & dark unit, an add membership functions unit, an output variable and membership functions unit, a evaluate FIS unit; an output.

No. of Pages : 13 No. of Claims : 5



(54) Title of the invention : DEVELOPMENT OF FUNCTIONALIZED SILVER NANOPARTICLES FROM ALLAMANDA NERIIFOLIA

(51) International classification :B82Y0030000000, B82Y0040000000, A61K0033380000, A61L0015460000, G01N0021350000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Mr. Munna Singh**

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Lodhipur Rajput, Delhi Road (NH-24), Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----

**2)Mr. Sateesh Kumar****3)Mr. Sumit Kumar****4)Dr. Sushil Kumar****5)Mr. Raj Kumar Singh Bharti****6)Mr. Mohammad Arif****7)Mr. Shivam****8)Mr. Amit Kumar****9)Ms. Pooja Malik**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Mr. Munna Singh**

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Lodhipur Rajput, Delhi Road (NH-24), Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----

**2)Mr. Sateesh Kumar**

Address of Applicant :Assistant Professor, Radha Govind College of Pharmacy, 7th km Kundarki Road, Near RTO office Moradabad, Uttar Pradesh, Pin Code: 244001 Moradabad -----

**3)Mr. Sumit Kumar**

Address of Applicant :Assistant Professor, Radha Govind College of Pharmacy, 7th km Kundarki Road, Near RTO office Moradabad, Uttar Pradesh, Pin Code: 244001 Moradabad -----

**4)Dr. Sushil Kumar**

Address of Applicant :Professor, School of Pharmaceutical Sciences, IFTM University, Lodhipur Rajput, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----

**5)Mr. Raj Kumar Singh Bharti**

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Lodhipur Rajput, Moradabad, Uttar Pradesh, Pin Code: 244102. Moradabad -----

**6)Mr. Mohammad Arif**

Address of Applicant :Associate Professor, Radha Govind College of Pharmacy, 7th km Kundarki Road, Near RTO office Moradabad, Uttar Pradesh, Pin Code: 244001 Moradabad -----

**7)Mr. Shivam**

Address of Applicant :Assistant Professor, Pharmacy Academy, IFTM University, Lodhipur Rajput, Moradabad-Uttar Pradesh, Pin Code: 244102 Moradabad -----

**8)Mr. Amit Kumar**

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Lodhipur Rajput, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----

**9)Ms. Pooja Malik**

Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Lodhipur Rajput, Moradabad, Uttar Pradesh, Pin Code: 244102. Moradabad -----

## (57) Abstract :

The present invention relates to the preparation of silver Nanoparticles by using the flower extract of Allamanda neriifolia and evaluation of their anti-cytotoxic activity. The characterization of prepared nanoparticles were done by using the UV, FTIR, and SEM analysis. The nanoparticles were prepared by using the eco- friendly method, and involves the rich plethora of plant extracts and a simplified synthetic approach in the UV-Vis cuvette, which enables immediate monitoring of the reaction progress. The UV-Vis spectroscopy & FTIR affirmed the formation of silver nanoparticles. SEM image showed spherical shape with an average particle size of less than 50 nm. The prepared biosynthesized silver nanoparticles were evaluated anticyto toxic activity by using the MC- 7 Cell lines.

No. of Pages : 17 No. of Claims : 3

(54) Title of the invention : AN ANTIBIOTIC LOADED COMPOSITE BONE-ACTIVE BIOMATERIAL AND PROCESS FOR SYNTHESIS THEREOF

(51) International classification :A61K0031496000, A61K0031650000, A61L0024000000, A61L0027520000, A61L0027420000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Indian Institute of Technology Kanpur**

Address of Applicant :Dean, Research & Development, Room Number 151, Faculty Building, Post Office: IIT Kanpur, Kanpur, Uttar Pradesh - 208016, India Kanpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Ashok Kumar**

Address of Applicant :Dean, Research & Development, Room Number 151, Faculty Building, Post Office: IIT Kanpur, Kanpur, Uttar Pradesh - 208016, India Kanpur -----

**2)Irfan Qayoom**

Address of Applicant :Dean, Research & Development, Room Number 151, Faculty Building, Post Office: IIT Kanpur, Kanpur, Uttar Pradesh - 208016, India Kanpur -----

(57) Abstract :

An antibiotic loaded composite bone-active biomaterial and process for synthesis thereof is provided. The antibiotic loaded composite bone-active biomaterial includes a slow degrading composite comprising polypropylene fumarate (PPF) and nanohydroxyapatite (nHAP) loaded with two broad spectrum antibiotics, ciprofloxacin (CIP) and rifampicin (RFP) for treatment of bone infections and bone healing. The antibiotic loaded composite bone-active biomaterial act as a potential carrier of antibiotics to treat acute and chronic bone infections. The antibiotic loaded composite bone-active biomaterial is also found to be biocompatible with ability to differentiate pre-osteoblasts into osteogenic lineage. The antibiotic loaded composite bone-active biomaterial serves dual purpose of infection riddance and bone healing, simultaneously. The present invention also provides the process for synthesis of the antibiotic loaded composite bone-active biomaterial. The process is simple, cost-effective and scalable.

No. of Pages : 32 No. of Claims : 10

(54) Title of the invention : ORAL SUSTAINED DELIVERY OF PIROXICAM FROM IN-SITU GELLING USING GELLAN AND SODIUM ALGINATE FORMULATIONS

<p>(51) International classification :A61K0009000000, A61K0009200000, A61K0047360000, A61K0031541500, A61K0031540000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Mr. Ashwin Kumar Saxena</b>  Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----  <b>2)Dr. Navneet Verma</b>  <b>3)Dr. Sushil Kumar</b>  <b>4)Dr. Mukesh Kumar Singh</b>  <b>5)Mr. Aditya Sharma</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Mr. Ashwin Kumar Saxena</b>  Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----  <b>2)Dr. Navneet Verma</b>  Address of Applicant :Professor and Dean, Pharmacy Academy, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102. Moradabad -----  <b>3)Dr. Sushil Kumar</b>  Address of Applicant :Professor &amp; Director, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----  <b>4)Dr. Mukesh Kumar Singh</b>  Address of Applicant :Associate Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----  <b>5)Mr. Aditya Sharma</b>  Address of Applicant :Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 Moradabad -----</p>
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## (57) Abstract :

The present invention relates to the formulation and evaluation of liquid in- situ gelling system to obtain the oral sustained drug delivery system of Piroxicam. The liquid in-situ gelling formulations capable of floating on simulated gastric fluid (SGF) have been assessed for their potential for the site-specific sustained delivery. The formulations were a dilute suspension of Piroxicam in Gellan gum/Sodium alginate (alone or in combination) solution in deionized water. Calcium carbonate was used as buoyancy imparting as well as crosslinking agent. Further effect of incorporation of Type A/B gelatin and calcium chloride on release of Piroxicam from Gellan/Sodium Alginate formulations were also investigated. Maximum retardation of drug release was observed with in-situ gel formulations. The in vitro release of Piroxicam from in-situ gelling gellan/sodium alginate formulations followed both Korsmeyer and Higuchi kinetics. Wherein the process of preparation of the preparation process is simple, the preparation is stable and reliable in quality.

No. of Pages : 13 No. of Claims : 4

## (54) Title of the invention : SHIELDING DEVICE FOR VEHICLES

(51) International classification :B62D0035000000, B60J0011040000, E05B0083300000, H01Q0001420000, A45B0023000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

-----

**Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)Pranshul Agrawal**

Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---

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## (57) Abstract :

The present invention relates to a shielding device for vehicles comprising a vehicle 3 having a side door, characterized with a platform 1 configured having first pair of rods 2 positioned on a roof of the vehicle 3 at a pre-defined length, a second pair of rods 4 configured with a flexible fabric 5 hinged to the first pair of rod 2 in a horizontal orientation, wherein the rods extends/retracts to expand the fabric 5 for providing a shade, a sensor module 6 connected with a microcontroller installed on the platform 1 for detecting weather condition around the vehicle 3, an artificial intelligence image capturing unit 7 installed on the platform 1 to determine height of the user and a pair of motorized roller 9 wrapped with a sheet and connected with the second pair of rods 4 to cover the user from side portions.

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211008851 A

(19) INDIA

(22) Date of filing of Application :21/02/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : HYGIENIC AND SECURED WATER HEATING DEVICE

(51) International classification :F24H0009200000, H05B0001020000, F24H0009000000, F01N0013000000, G06K0007000000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Chandigarh University**  
Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Harinderpal Singh Bedi**  
Address of Applicant :Department of Civil Engineering, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----  
-----

(57) Abstract :

The present invention relates to hygienic and secured water heating device comprises a rod 1 that includes conductive telescopic casing 3 with filament 4 controlled by microcontroller attached with control box 5, sensor are attached within box 5, which commands microcontroller to conduct heat generated by filament 4, telescopic clamps 6 are attached over horizontal telescopic bar 7 for holding container 2, a display unit 8 with bar 7 linked with temperature sensor attached within casing 3 which enables user to input temperature value and microcontroller analyzes time required to heat water and displays the value time over display unit 8, a button 9 linked with water detection sensor 10 attached, and activates after pressing button 9 for detecting presence of water within container 2, and cleaning module 11 with robotic brushes 12 attached over bar 7 operated by microcontroller to remove deposited salt on the casing 3.

No. of Pages : 15 No. of Claims : 8

(54) Title of the invention : AUTOMATIC EGG PROCESSING DEVICE

(51) International classification :A23L0015000000, A47J0043140000, A47J0029000000, A47G0019280000, G09B0005060000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chandigarh University**

Address of Applicant :National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Ashutosh Tripathi**

Address of Applicant :University Centre For Research & Development, Chandigarh University, National Highway 95, Chandigarh-Ludhiana Highway, Mohali, Punjab 140413, India. ---  
-----

(57) Abstract :

An automatic egg processing device comprising a housing 1 arranged with a touch interactive display panel 2 for receiving input commands from a user regarding consumption of boiled egg/omelet, a slot 3 for accommodating an egg type that is to be processed, a hollow corrugated body 4 mapped with an air chamber 5 for releasing air from the chamber 5 to exert a pressure on the egg for de-shelling the egg, a container 6 configured with a telescopic cutter 7 for collecting the de-shelled egg/yolk and chopping the egg that in turn is collected by a robotic arm 8 and placed in a chamber 9, multiple reservoirs 10 configured with electronically controlled valves 11 for dispensing the additives on the yolk/egg that in turn is mixed by a stirrer 12, a cooking pan 13 configured with a heating unit 14 for collecting the additives mixed yolk to prepare the omelet.

No. of Pages : 16 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211041469 A

(19) INDIA

(22) Date of filing of Application :20/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A WEB APPLICATION, USER INTERFACE BASED AUTOMATIC MOBILE ROBOT (WAMR) TO CARRY PAYLOAD WITH OBSTACLE AVOIDANCE FEATURE

(51) International classification	:G05D0001020000, B25J0009160000, B25J0009000000, B25J0011000000, B25J0005000000	(71)Name of Applicant : <b>1)INDIAN INSTITUTE OF TECHNOLOGY ROORKEE</b> Address of Applicant :ROORKEE Roorkee ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b>
(86) International Application No	:NA	(72)Name of Inventor : <b>1)SAMSAPTAK GHOSH</b> Address of Applicant :Department of Electrical Engineering, Indian Institute of Technology Roorkee, Roorkee- 247667 Roorkee -----
Filing Date	:NA	<b>2)PROF. SOHOM CHAKRABARTY</b> Address of Applicant :Department of Electrical Engineering, Indian Institute of Technology Roorkee, Roorkee- 247667 Roorkee -----
(87) International Publication No	: NA	<b>3)UJJWAL GUPTA</b> Address of Applicant :Department of Mechanical and Industrial Engineering, Indian Institute of Technology Roorkee, Roorkee- 247667, Uttarakhand Roorkee -----
(61) Patent of Addition to Application Number	:NA	<b>4)ETTA DHEERAJ KUMAR REDDY</b> Address of Applicant :Department of Electrical Engineering, Indian Institute of Technology Roorkee, Roorkee- 247667 Roorkee -----
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a low-cost compact-sized web application, user interface based automatic mobile robot (WAMR) to carry payload with obstacle avoidance feature. It is a web-app-based automated mobile robot (WAMR) system that can be operated or controlled by a Web-app-based User interface. This is a low-cost web-app user interface based automated mobile robot (WAMR) targeting small and medium-scale Indian industries for payload carry inside the industrial floor space. The WAMR can carry a payload during its navigation from a given source point to a given destination point of industrial floor space or environment.

No. of Pages : 33 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202211044034 A

(19) INDIA

(22) Date of filing of Application :01/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SUICIDE DOOR HINGE WITH INTEGRATED CHECK-STRAP

(51) International classification :E05D0011000000, E05D0011100000, E05D0005060000, E06B0007280000, E01D0019100000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)PRAVAIG DYNAMICS PRIVATE LIMITED**

Address of Applicant :B-235, Greater Kailash-1, South Delhi - 110048, Delhi, India New Delhi -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)PRASAD, Suraj**

Address of Applicant :House number 238, Dashmesh Nagar, Shiv Mandir Road, Mohali District, near PEC, Nayagaon, Chandigarh 160103, India Chandigarh -----

(57) Abstract :

The present invention discloses a suicide door hinge with integrated check-strap for a vehicle. The integrated check strap is in form of rubber tensioner with roller bearing along with a pair of solenoids which is attached to a single hinge. The integrated check strap is configured to manage speed of the suicide door and helps in automating position locking of the suicide door. The suicide door comprises of a stationary hinge bracket (101) provided with at least three roller securing means (105), a rotary hinge (110) for moving the door, a shaft (115) to assemble the stationary bracket (101) with rotary hinge (110), a lock nut (145) to lock the shaft (115) from both sides, a pair of linear solenoids (125) attached with a pair of solenoid plungers (130) for moving the door, a roller bearing to take loads of the door at axial and radial directions and minimizing friction for rotation of shaft and hinge by fitting the rollers (150) in three different roller securing means (105) and a rubber tensioner (140) for pushing the rollers (150) into roller securing means (105).

No. of Pages : 24 No. of Claims : 10



(54) Title of the invention : A HEALTH MONITORING BASED ON IOT USING RASPBERRY PI AND METHOD THEREOF

(51) International classification :A61B0005000000, A61B0005024000, A61B0005080000, A61B0005145000, A61B0005020500

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Smiley Gandhi**

Address of Applicant :Reseach Scholar, Computer Science and Engineering, Galgotias University, Greater Noida Greater Noida --

**2)Dr. Sampath Kumar Kuppuchamy****3)Nikita****4)Nandita Malik****5)Ghazala Ansari****6)Kanika****7)Abhishek Sharma**

Name of Applicant : NA

Address of Applicant : NA

**(72)Name of Inventor :****1)Smiley Gandhi**

Address of Applicant :Reseach Scholar, Computer Science and Engineering, Galgotias University, Greater Noida Greater Noida --

**2)Dr. Sampath Kumar Kuppuchamy**

Address of Applicant :Professor, School of Computing Science &amp; Engineering, Galgotias University, Greater Noida Greater Noida --

**3)Nikita**

Address of Applicant :Assistant Professor, Computer Science and Engineering, RKGIT, Ghaziabad Ghaziabad -----

**4)Nandita Malik**

Address of Applicant :Assistant Professor, Computer Science and Engineering, Chandigarh University, Mohali Mohali -----

**5)Ghazala Ansari**

Address of Applicant :Assistant Professor, Electronics and Communication Engineering, SRMIST, NCR CAMPUS Modinagar -----

**6)Kanika**

Address of Applicant :Assistant Professor, Pharmacy, Sat Kabir Institute of Pharmacy, Ladrawan, Jhajjar Jhajjar -----

**7)Abhishek Sharma**

Address of Applicant :Assistant Professor, Computer Science and Engineering, Chandigarh University, Mohali Mohali -----

**(57) Abstract :**

The present invention discloses a health monitoring based on IoT using raspberry PI and method thereof. The system includes, but not limited to, a means with an IoT connectivity to receive biometric data detected by a sensor placed on a body of a patient; a processing unit to process the biometric data for monitoring a health status of the patient; and an artificial intelligence-based user interface provided for therapeutic feedback related to a current health status of the monitored health status. Further, the processing unit is connected with a physiological data input module, which is adapted to short-range transmit the physiological data to the personal data accessory in real-time with IoT connectivity.

No. of Pages : 20 No. of Claims : 8

(54) Title of the invention : A METHOD WITH MACHINE LEARNING AND TEMPORAL CONVOLUTIONAL NEURAL NETWORK FOR SOLAR POWER FORECASTING

<p>(51) International classification :G06N0003040000, G06N0003080000, G01W0001100000, G06K0009620000, G06Q0010040000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Anu Prakash</b>  Address of Applicant :Ph.d Scholar, Department of Electrical Engineering, Manipal University Jaipur, Jaipur, India Pincode: 302034 Jaipur -----  <b>2)Dr. Amit Saraswat</b>  <b>3)Dr. Ashish Shrivastava</b>  <b>4)Dr. Jayalakshmi N.S.</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Anu Prakash</b>  Address of Applicant :Ph.d Scholar, Department of Electrical Engineering, Manipal University Jaipur, Jaipur, India Pincode: 302034 Jaipur -----  <b>2)Dr. Amit Saraswat</b>  Address of Applicant :Associate Professor (Senior Scale), Department of Electrical Engineering, Manipal University Jaipur, Jaipur, India Pincode: 302034 Jaipur -----  <b>3)Dr. Ashish Shrivastava</b>  Address of Applicant :Professor, Department of Electrical Engineering, Shri Vishwakarma Skill University Gurgaon, India Pincode: 122003 Gurgaon -----  <b>4)Dr. Jayalakshmi N.S.</b>  Address of Applicant :Professor, Department of Electrical and Electronics Engineering, MIT, MAHE, Karnataka, India Pincode: 576104 Manipal -----</p>
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(57) Abstract :

The present invention discloses a method with machine learning and Temporal Convolutional Neural Network for Solar Power Forecasting wherein the method comprises receiving four-dimensional (4D) weather forecast data, the weather forecast data including a plurality of weather features; processing the 4D weather forecast data using a chain of a plurality of processing blocks of a neural network to derive one or more of the plurality of weather features, each of the plurality of processing blocks including a convolutional layer, an activation layer, and a pooling layer, wherein the convolution layer associates at least one filter to a region of the 4D weather forecast data across a plurality of layers in the 4D weather forecast data; and determining a solar power forecast for a predetermined location based upon the one or more derived weather features.

No. of Pages : 21 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/08/2022

(21) Application No.202211045170 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : A RAILROAD MANAGEMENT SYSTEM AND METHOD BASED ON AI AND ML

<p>(51) International classification :G06Q0010060000, H04L0012240000, G06Q0050160000, G06Q0010000000, G06Q0050180000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Graphic Era Deemed to be University, Dehradun</b> Address of Applicant :Dehradun, Uttarakhand, India 248002 Dehradun -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Bhasker Pant</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>2)Dr. Surendra Kumar Shukla</b> Address of Applicant :Associate Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>3)Mr. Sushant Chamoli</b> Address of Applicant :Assistant Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p>--</p> <p><b>4)Dr. Durgaprasad Gangodkar</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>5)Dr. Kamlesh Singh</b> Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Graphic Era Hill University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p> <p><b>6)Dr. Pravin P Patil</b> Address of Applicant :Professor, Department of Mechanical Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand India, 248002 Dehradun -----</p>
---	---

(57) Abstract :

The present invention consists of artificial intelligence and the machine learning-based railway assessment management system. Property performance management, such as operations and maintenance, condition and reliability monitoring, and the business processes of Property management are all included in the scope of the criteria. General product functions, Property types, deployment strategies, work order management, materials management, labour management, service contract management, financial management, reporting and analytics, and technology architecture are all included in this product. India, a developing country that spends a significant portion of its budget on railways, is an excellent fit for this new invention. Rail operators and transit agencies can use this new technology as a guide to help speed up the selection process for rail property management because it is designed specifically for them. Overall uptime, property longevity, cost control, and safety across a diverse set of properties and technologies are the most critical metrics for the current railway assessment management invention. Complexity and specific technology requirements have made the system a total solution, which has become more challenging to implement. In the drawings of thstoryon, all of the specifics are laid out.

No. of Pages : 12 No. of Claims : 5

(54) Title of the invention : MECHANISM FOR AUTO CHANGING THE COMPRESSION RATIO OF ENGINE DURING ENGINE OPERATION

(51) International classification :F02B0075040000, F02D0015020000, F02D0015000000, B60W0010060000, F02D0041220000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)MIT Academy of Engineering**

Address of Applicant :Dehu Phata, Alandi (D), Pune, Maharashtra 412105, India -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Mishra, Mayank**

Address of Applicant :MIT Academy of Engineering, Dehu Phata, Alandi (D), Pune, Maharashtra – 412105, India -----

**2)Vishwanathan, Gokul Kumar**

Address of Applicant :MIT Academy of Engineering, Dehu Phata, Alandi (D), Pune, Maharashtra – 412105, India -----

**3)Hatte, Prafulla**

Address of Applicant :MIT Academy of Engineering, Dehu Phata, Alandi (D), Pune, Maharashtra – 412105, India -----

(57) Abstract :

**MECHANISM FOR AUTO CHANGING THE COMPRESSION RATIO OF ENGINE DURING ENGINE OPERATION** A variable compression engine is provided with an auxiliary piston to control the swept volume of the cylinder. The engine comprises at least one auxiliary piston located in an engine block and configured to reciprocate in at least one main cylinder of the engine, at least one motion transmitting mechanism comprising a worm gear and a pair of helical gears for transmitting motion to the at least one auxiliary piston, and at least one actuating mechanism comprising a stepper motor for actuating the at least one motion transmitting mechanism. The stepper motor gets real-time feedback about engine speed and fuel fraction percentage for blended fuels and is controlled accordingly for alteration of compression ratio. The change of compression ratio is possible in a robust manner without much maintenance and the user is allowed to operate the engine feasibly. REFER FIGURE 1

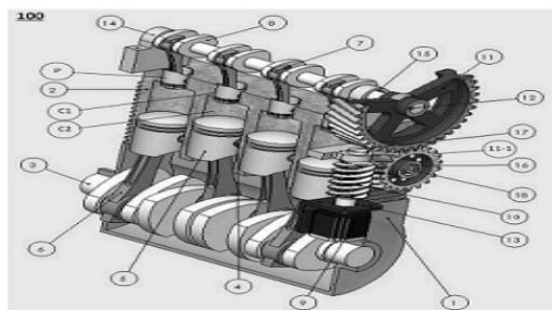


FIGURE 1

No. of Pages : 20 No. of Claims : 10

(54) Title of the invention : A SYSTEM AND METHOD FOR MAINTAINING HUMIDITY, WITH ENERGY SAVINGS, IN A DEFINED ENVIRONMENT

(51) International classification :F25B0041060000, F25B0049020000, F16K0031040000, F24F0110100000, F24F0011610000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)WESTERN INDIA ELECTROMEDICAL SYSTEMS PRIVATE LIMITED**

Address of Applicant :PLOT NO. 14, NARSIMHA INDUSTRIAL ESTATE, TATHAWADE, NEAR BALAJI COLLEGE, AUNDH- RAVET BRT ROAD, PUNE 411057, MAHARASHTRA, INDIA -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)MUKUND RANADE**

Address of Applicant :BUILDING A-2, MEENAL GARDEN, NEAR DEENANATH MANGESHKAR HOSPITAL, ERANDAWANE, PUNE 411004, MAHARASHTRA, INDIA -----

**2)ASHWIN PIMPALE**

Address of Applicant :DNYANAI, PLOT NO.31, CITY S. NO. 4415, SR. NO. 270, PCMC LINK ROAD, NEAR AKSHAY HALL, DEOGHAR SOCIETY, CHINCHWAD, PUNE 411033, MAHARASHTRA, INDIA -----

(57) Abstract :

ABSTRACT A SYSTEM AND METHOD FOR MAINTAINING HUMIDITY, WITH ENERGY SAVINGS, IN A DEFINED ENVIRONMENT A system and method for maintaining humidity, with energy savings, in a defined environment, comprising: an electronic expansion valve (10), with a stepper motor (20), operating on said defined environment's (30) ambient temperature; said electronic expansion valve (10) and said stepper motor (20), both being parallel, to a thermostatic expansion valve (12); said electronic expansion valve (10) and said stepper motor (20), both being in series with an evaporator (14); a proportional controller (40) configured to: obtain a signal (18), from a sensor (16), from said defined environment's (30) ambient temperature; and providing said obtained signal (18) to said stepper motor (20), in response to said defined environment's (30) sensed ambient temperature in order to actuate opening / closing of said electronic expansion valve (10) in order to feed hot gas from a compressor (50) to introduce hot gas before said evaporator (14) but after said thermostatic expansion valve (12). [[FIGURE 7]]

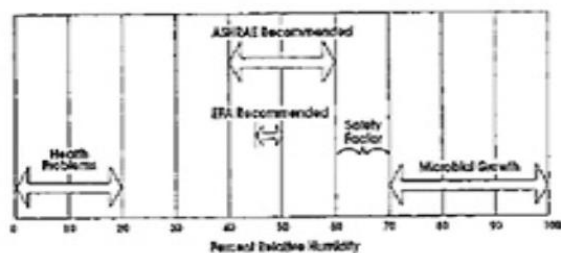


FIGURE 2

No. of Pages : 30 No. of Claims : 9

(51) International classification :G06F0011340000, G06K0009000000, G06Q0030020000, H04W0084120000, G09B0023020000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)MIT Academy of Engineering**

Address of Applicant :Dehu Phata, Alandi (D), Pune, Maharashtra - 412105, India -----

**Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)Myakal, Ashish Ambadas**

Address of Applicant :MIT Academy of Engineering, Dehu Phata, Alandi (D), Pune, Maharashtra 412105, India -----

**2)Rapelli, Navin Sidram**

Address of Applicant :MIT Academy of Engineering, Dehu Phata, Alandi (D), Pune, Maharashtra 412105, India -----

**3)Kota, Vyankatesh Nagnath**

Address of Applicant :MIT Academy of Engineering, Dehu Phata, Alandi (D), Pune, Maharashtra 412105, India -----

**4)Hulbute, Sanjay Siddharam**

Address of Applicant :MIT Academy of Engineering, Dehu Phata, Alandi (D), Pune, Maharashtra 412105, India -----

**5)Shikalgar, Alimurtuza Riyazali**

Address of Applicant :MIT Academy of Engineering, Dehu Phata, Alandi (D), Pune, Maharashtra 412105, India -----

**6)Koli, Dipali Sukhadev**

Address of Applicant :MIT Academy of Engineering, Dehu Phata, Alandi (D), Pune, Maharashtra 412105, India -----

**7)Dr Rajarapolu, Prachi Rohit**

Address of Applicant :MIT Academy of Engineering, Dehu Phata, Alandi (D), Pune, Maharashtra 412105, India -----

## (57) Abstract :

ABSTRACT VISITOR'S STATISTICS MANAGEMENT SYSTEM AND METHOD Described herein is a visitor management system in which an input sub-module is provided to obtain coded data from a barcode. A graphical user interface (GUI) is provided to store coded data5 obtained from the input sub-module. A sorting sub-module sorts this data as per predetermined categories and a data backup sub-module stores the data in a backup storage.

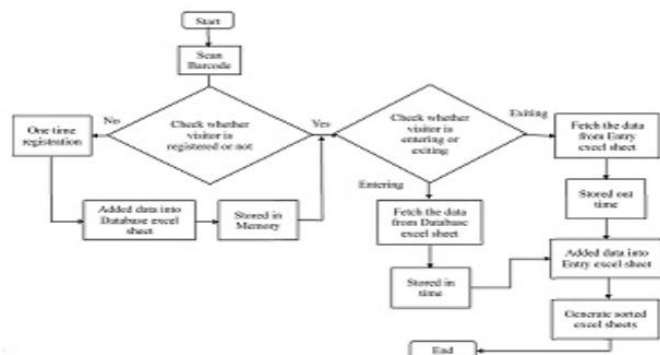


FIGURE 1

No. of Pages : 26 No. of Claims : 8

(54) Title of the invention : CNG/LPG LEAKAGE DETECTION SYSTEM

(51) International classification :F02M0021020000, F02D0019060000, H04N0001327000, F02D0041000000, F02D0019020000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)MIT Academy of Engineering**

Address of Applicant :Dehu Phata, Alandi (D), Pune, Maharashtra - 412105, India -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Patel, Himanshu Waman**

Address of Applicant :MIT Academy of Engineering, of DehuPhata, Alandi (D), Pune, Maharashtra 412105, India -----

**2)Patil, Avadhut Banderao**

Address of Applicant :MIT Academy of Engineering, of DehuPhata, Alandi (D), Pune, Maharashtra 412105, India -----

**3)Oak, Sumeet Jitendra**

Address of Applicant :MIT Academy of Engineering, of DehuPhata, Alandi (D), Pune, Maharashtra 412105, India -----

**4)Pakhale, Vinod Dinkar**

Address of Applicant :MIT Academy of Engineering, of DehuPhata, Alandi (D), Pune, Maharashtra 412105, India -----

(57) Abstract :

DETECTION SYSTEM Described herein is a system for detecting leakage of compressed natural gas or liquefied petroleum gas. Major components of the system include a sensing mechanism, a processor unit, and an output means. The sensing mechanism is configured to detect leakage of natural gas or liquefied petroleum gas in the system. The analog input signals from the sensing mechanism are converted to digital signals by a processing unit, which transmits these digital signals to output means for alerting a user about the leakage. REFER FIGURE 2

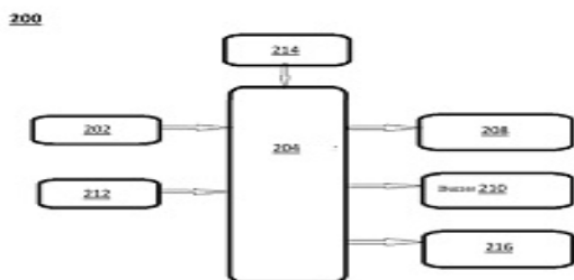


FIGURE 2

No. of Pages : 19 No. of Claims : 6

(54) Title of the invention : RETROFIT NEONATAL CRITICAL CARE SYSTEM

(51) International classification :A61B0005000000, A61B0005020500, A61G0011000000, A61M0001160000, G16H0010600000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Kamal Sehgal**

Address of Applicant :501, Cordia, Nyati Estate, Mohamadwadi, Pune - 411060 -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Kamal Sehgal**

Address of Applicant :501, Cordia, Nyati Estate, Mohamadwadi, Pune - 411060 -----

(57) Abstract :

Disclosed is retrofit neonatal critical care system (100) which capable of connecting to existing baby warmer units having a heater (10), a cradle (20) and a pedestal (30). The neonatal critical care system (100) can either be used as retrofit or can be instilled afresh. The system (100) can be connected to existing baby warmer units easily without making any changes in the existing baby warmer unit. The system of the present invention provides an integrated database of vital parameters with physiological markers and clinical records helps in early prognosis, prevention, and diagnosis of preterm babies. Figure 1

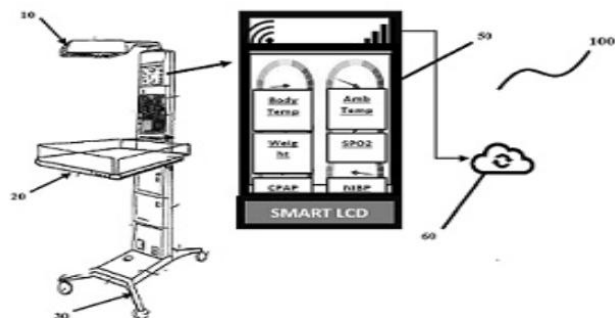


Figure 1

No. of Pages : 20 No. of Claims : 6



(54) Title of the invention : A SYSTEM TO ANALYZE THE QUALITY OF MILK AND TO MAKE THE DISCARDED MILK REUSABLE.

(51) International classification :G01N0033040000, A01J0005013000, A23C0019076000, G01N0021357700, A23K0050100000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Mr. Pushpadant Mahavir Magdum**

Address of Applicant :Plot No. 9, Appasaheb Patil Nagar, Behind Amrai, Near Maruti Showroom, Vakhar Bhag, Sangli, Maharashtra, 416416 -----

**2)Mrs. Rohini Pushpadant Magdum**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Mr. Pushpadant Mahavir Magdum**

Address of Applicant :Plot No. 9, Appasaheb Patil Nagar, Behind Amrai, Near Maruti Showroom, Vakhar Bhag, Sangli, Maharashtra, 416416 -----

**2)Mrs. Rohini Pushpadant Magdum**

Address of Applicant :Plot No. 9, Appasaheb Patil Nagar, Behind Amrai, Near Maruti Showroom, Vakhar Bhag, Sangli, Maharashtra, 416416 -----

**3)Dr. Nandkishor Motiram Dhawale**

Address of Applicant :c/o Thanga Durai 39 Rue Christie Sainte-Anne-de-Bellevue, Quebec, Canada, H9X 1X4 -----

(57) Abstract :

This invention describes a system to collect the discarded milk and to detect the quality, in addition to processing it to make it reusable in varied forms. The component capable of analyzing the milk identifies the percentage of fat and water in addition to identifying the possible form of adulteration of the combination of milk from varied animals obtained into the container of the system. The milk is diverted into different chambers based on the quality and type of milk obtained. In case the milk's quality is good as per the preferred data fed into the system, it will be boiled and retracted to be reused as milk. In case the milk quality is good but has a mixture of milk from different cattle, it will be converted either into milk products like butter, cottage cheese or curd or will be dehydrated into milk solids. In case the milk is contaminated, it will be used to make organic fertilizers. A system to analyze the quality of milk and to make the discarded milk reusable.

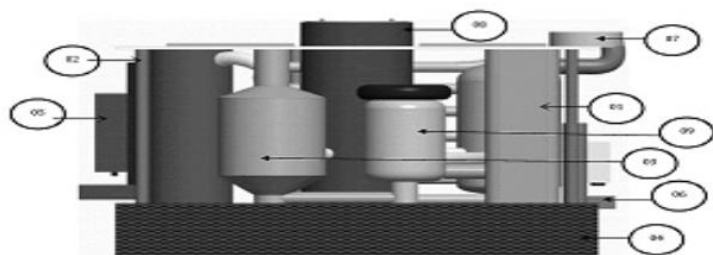


FIGURE - 1

No. of Pages : 24 No. of Claims : 7

(54) Title of the invention : A FITNESS DEVICE FOR PERFORMING EXERCISES

(51) International classification :A63B0021000000, A63B0023120000, A63B0023035000, A63B0022000000, A63B0021040000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)INDAFIT TECH PRIVATE LIMITED**

Address of Applicant :Plot No. B-22/23, Nath Nagar, Behind Sindhi Colony, Aurangabad, 431005 -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Amol Dattatraya Ingale**

Address of Applicant :Plot No B-22, Nath Nagar, Behind Sindhi Colony, Aurangabad-431005, Maharashtra -----

(57) Abstract :

The present invention is to provide a fitness device (100) for performing exercises in accordance with the present invention. The fitness device (100) is capable of performing eccentric and concentric exercises combined. The fitness device (100) includes a frame (200), a resistance unit (300), and a connectivity interface (400). The resistance unit (300) is to provide adjustable resistance/weights to perform exercises. The fitness device (100) is also collapsible thereby saving storage space and helps in easier transportation. The fitness device (100) provides freedom to user to decide whether the user wants concentric force only or combination of concentric and eccentric force together. This makes it helpful for use by elderly as well as young adults which is age-based adaptability and different requirements of individual.

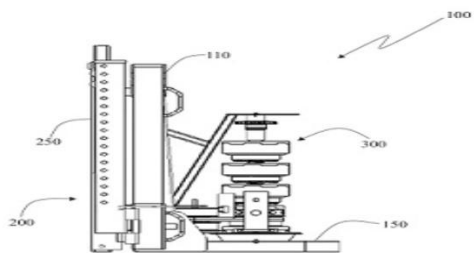


Figure 1

No. of Pages : 46 No. of Claims : 30

(54) Title of the invention : A TRANSMISSION SYSTEM FOR ELECTRIC TRACTORS FOR CONSTANT SPEED PRIMARY MOTORS

(51) International classification :B60K0017280000, F16H0009120000, F16H0063060000, B25J0009100000, F16H0061662000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Ajinkya Ravindra Belsare**

Address of Applicant :518, Sadashiv Peth, Pune, Maharashtra, India-411030 ---

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Ajinkya Ravindra Belsare**

Address of Applicant :518, Sadashiv Peth, Pune, Maharashtra, India-411030 -----

**2)Shreyas Santosh Dhimate**

Address of Applicant :A 402, GPL Audumbar Sankalp, Canal Road, Warje, Pune, Maharashtra, India- 411058 -----

(57) Abstract :

A transmission system for electric tractors for constant speed primary drive motors, the said system comprising of a motor (1) as shown in figure having a fixed speed (RPM) electric induction motor detachably coupled to an assembly of a two constantly varying transmissions (CVT) as shown in figure part no (3) and (6), the motor shaft connected with driving pulley of the first CVT, driven pulley (12) which provides power to the PTO (output) (9) function through the countershaft,

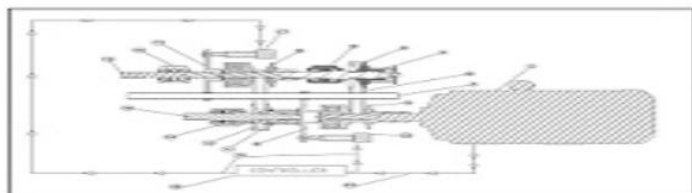


Figure sheet 1

Sr. No.	Components	Sr. No.	Components	Sr. No.	Component
1	Motor	8	Bearing Support Driven Pulley 1	15	PTO Output Shaft
2	Driven Pulley 1	9	Driving Pulley 2	16	Final Drive Shaft
3	Driving Pulley 1	10	Driven Pulley 2	17	Actuator 2
4	Spring	11	Belt 2	18	Actuator 1
5	Belt 1	12	Bearing Support Driven Pulley 2	19	Control Lines
6	Actuator Arm 1	13	Actuator Arm 2	20	Feedback Line
7	Guide Rail	14	Bearing Support Driving Pulley 2		

No. of Pages : 16 No. of Claims : 10

(54) Title of the invention : HIGH BARRIER, PVC FREE, COLD FORMING MULTILAYER BLISTER LAMINATES

(51) International classification :B32B0015080000, B65D0075320000, B32B0027340000, B32B0027320000, B32B0015200000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)BILCARE LIMITED**

Address of Applicant :1028, Shirol, Rajgurunagar Taluk Khed, Pune-410505, Maharashtra, India -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)KULKARNI, Sanjeev Dattatray**

Address of Applicant :Bilcare Ltd. 1028, Shirol, Rajgurunagar Taluk Khed, Pune- 410505, Maharashtra, India -----

**2)MUKHERJEE, Somenath Sainen M**

Address of Applicant :Bilcare Ltd. 1028, Shirol, Rajgurunagar Taluk Khed, Pune- 410505, Maharashtra, India -----

**3)BHANDARI, Shreyans Mohan**

Address of Applicant :Bilcare Ltd. 1028, Shirol, Rajgurunagar Taluk Khed, Pune- 410505, Maharashtra, India -----

**4)BHANDARI, Mohan Harakchand**

Address of Applicant :Bilcare Ltd. 1028, Shirol, Rajgurunagar Taluk Khed, Pune- 410505, Maharashtra, India -----

(57) Abstract :

**ABSTRACT HIGH BARRIER, PVC FREE, COLD FORMING MULTILAYER BLISTER LAMINATES** The present disclosure relates to high barrier, polyvinyl chloride (PVC) free, cold forming multilayer blisters. The laminate comprises an intermediate aluminum layer, defining an operative outer surface and an operative inner surface; at least one polypropylene layer adhered to the inner surface of the intermediate layer and an oriented polyamide layer, metallized on its operative outer surface, and adhered to the operative outer surface of the intermediate layer. The multilayer laminate of the present disclosure has a water vapour transmission rate (WVTR) less than 0.0035 gm/pkg/day. The multilayer laminate of the present disclosure provides high barrier against moisture, light and gas; which enhances the overall shelf life of the product being packaged.

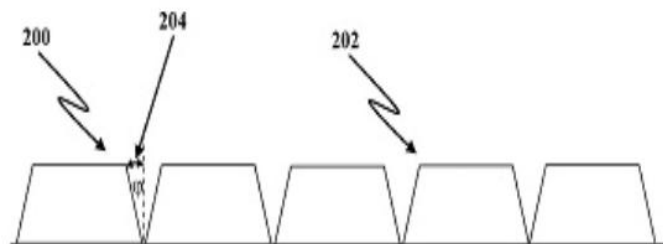


FIGURE 2

No. of Pages : 41 No. of Claims : 20

(54) Title of the invention : HIGH BARRIER, PVC FREE, COLD FORMING MULTILAYER BLISTER LAMINATES

(51) International classification :B32B0015080000, B65D0075320000, B32B0027320000, B32B0027340000, B32B0027080000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)BILCARE LIMITED**

Address of Applicant :1028, Shirol, Rajgurunagar Taluk Khed, Pune- 410505, Maharashtra, India -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)BHANDARI, Shreyans Mohan**

Address of Applicant :Bilcare Ltd. 1028, Shirol, Rajgurunagar Taluk Khed, Pune- 410505, Maharashtra, India -----

**2)KULKARNI, Sanjeev Dattatray**

Address of Applicant :Bilcare Ltd. 1028, Shirol, Rajgurunagar Taluk Khed, Pune- 410505, Maharashtra, India -----

**3)BHANDARI, Mohan Harakchand**

Address of Applicant :Bilcare Ltd. 1028, Shirol, Rajgurunagar Taluk Khed, Pune- 410505, Maharashtra, India -----

**4)MUKHERJEE, Somenath Sainen M**

Address of Applicant :Bilcare Ltd. 1028, Shirol, Rajgurunagar Taluk Khed, Pune- 410505, Maharashtra, India -----

(57) Abstract :

**ABSTRACT HIGH BARRIER, PVC FREE, COLD FORMING MULTILAYER BLISTER LAMINATES** The present disclosure relates to high barrier, polyvinyl chloride (PVC) free, cold forming multilayer blisters. The laminate comprises an intermediate aluminum layer, defining an operative outer surface and an operative inner surface; at least one polyethylene polymer layer adhered to the inner surface of the intermediate layer and an oriented polyamide layer, metallized on its operative outer surface, and adhered to the operative outer surface of the intermediate layer. The MULTILAYER laminate of the present disclosure has a water vapour transmission rate (WVTR) less than 0.0035 gm/pkg/day. The multilayer laminate of the present disclosure provides a high barrier against moisture, light and gas, which enhances the overall shelf life of the product that is being packaged.

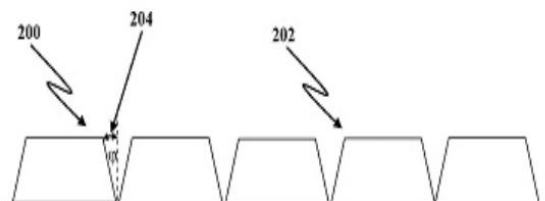


FIGURE 2

No. of Pages : 41 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121057394 A

(19) INDIA

(22) Date of filing of Application :09/12/2021

(43) Publication Date : 19/08/2022

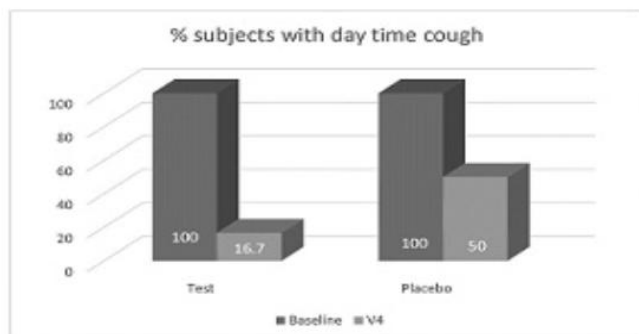
(54) Title of the invention : SUGAR FREE DRY SYRUP OF PHYTOCONSTITUENT AND PROCESSES FOR THE SAME

(51) International classification :A61K0009000000, A61K0009200000, A61K0009160000, A23L0029300000, A23G0009340000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Gplife healthcare Pvt Ltd**  
Address of Applicant :GPLIFE HEALTHCARE PVT LTD 705-706, Orbit-1, building near RRTM Market, Punagam Saroli Road, Surat-395010 -----  
**Name of Applicant : NA**  
**Address of Applicant : NA**  
(72)Name of Inventor :  
**1)Dr. Shridhar Pandya**  
Address of Applicant :GPLIFE HEALTHCARE PVT LTD, 705-706, Orbit-1, building near RRTM Market, Punagam Saroli Road, Surat-395010 -----  
**2)Mr. Chetan Savaliya**  
Address of Applicant :GPLIFE HEALTHCARE PVT LTD 705-706, Orbit-1, building near RRTM Market, Punagam Saroli Road, Surat-395010 -----  
**3)Mr. Kamlesh Thummar**  
Address of Applicant :GPLIFE HEALTHCARE PVT LTD 705-706, Orbit-1, building near RRTM Market, Punagam Saroli Road, Surat-395010 -----  
**4)Mr. Pritesh Shah**  
Address of Applicant :GPLIFE HEALTHCARE PVT LTD 705-706, Orbit-1, building near RRTM Market, Punagam Saroli Road, Surat-395010 -----  
**5)Mr. Prashant Gondaliya**  
Address of Applicant :GPLIFE HEALTHCARE PVT LTD 705-706, Orbit-1, building near RRTM Market, Punagam Saroli Road, Surat-395010 -----  
**6)Mr. Tarun Savaliya**  
Address of Applicant :GPLIFE HEALTHCARE PVT LTD 705-706, Orbit-1, building near RRTM Market, Punagam Saroli Road, Surat-395010 -----  
**7)Mr. Manish Ray**  
Address of Applicant :GPLIFE HEALTHCARE PVT LTD 705-706, Orbit-1, building near RRTM Market, Punagam Saroli Road, Surat-395010 -----

(57) Abstract :

The present invention relates to synergistic phytoconstituent blend of sugar free dry syrup for cough & cold. Further invention relates to process for preparation of sugar free dry syrup comprising phytoconstituents with or without other pharmaceutical acceptable excipients. The present invention is design phytoconstituent based taste masked dry syrup with synergistic effect for respiratory target disease. Taste masking achieved by unique granulation. Stability and micromeritics property improved with synergy blend incorporation by granulation. Fast dissolving action design with unique natural super disintegrants involvement during granulation. Sweetness and Taste with good acceptable palatability is design by replacement of sugar or other sweeteners. Synergy blend is compatible and there is no incompatibility, interaction found by physical characterization like DSC, XRPD, FTIR. Stability is checked for 3 months as per ICH guideline, and it is concluded no incompatibility found, dissolving rate and palatability also remain same. As per case study, Animal toxicity report and human clinical trials, it is proven safe, and therapeutically proven for symptomatic relief in cough cold, allergy, bronchitis, asthma, Pneumonia and in viral disease.



Graph 1: Percent subjects with daytime cough

No. of Pages : 21 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121059510 A

(19) INDIA

(22) Date of filing of Application :20/12/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : A MOLTEN METAL PROTECTIVE FABRIC AND GARMENT THEREFROM

(51) International classification :B22D0039040000, C23C0002400000, B32B0005260000, D03D0001000000, A41D0031000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Arvind Limited**

Address of Applicant :Naroda Road, Ahmedabad - 382345, Gujarat, India -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Pabitra Sahoo**

Address of Applicant :c/o. Arvind Limited, Naroda Road, Ahmedabad - 382345, Gujarat, India -----

**2)Smarita Bharimal**

Address of Applicant :c/o. Arvind Limited, Naroda Road, Ahmedabad - 382345, Gujarat, India -----

**3)Vikas Kumar**

Address of Applicant :c/o. Arvind Limited, Naroda Road, Ahmedabad - 382345, Gujarat, India -----

**4)Palak Kakar**

Address of Applicant :c/o. Arvind Limited, Naroda Road, Ahmedabad - 382345, Gujarat, India -----

(57) Abstract :

The present invention provides a fabric and/or flame-retardant protective garment/apparel that protects personnel against heat and flame and a method for the manufacturing of such fabric/garment/apparel. The protective wear protects against molten iron splashes that are of the level of category 3 (E3) without compromising on breathability and comfort. The protective wear protects against molten iron splashes of E3 level of category even after 50 to 100 washes and also is lighter. This also ensures the durability and functionality of the E3 protective wear.

No. of Pages : 16 No. of Claims : 9

(54) Title of the invention : AN ENHANCED FINGERPRINT IDENTIFICATION SYSTEM USING IMPROVED IMAGE METHODOLOGIES AND DEEP LEARNING

(51) International classification :G06K0099000000, G06K0099620000, G06K0099200000, G06N0003040000, H04L0029060000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No :NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
1)RAM KUMAR SOLANKI  
Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF COMPUTER SCIENCE AND ENGINEERING, SANDIP UNIVERSITY, NASHIK -422213 -----  
-----  
2)PRAJAKTA PAVAN SHIRKE  
3)PUSHPALATA GANESH AHER  
4)PRAGATI VIJAYKUMAR PANDIT  
5)DR. VAIBHAV P. SONAJE  
6)SANJEEV ANIL SHUKLA  
7)DR.PURUSHOTTAM R. PATIL  
8)DR. ANAND SINGH RAJAWAT  
9)SHILPA SACHIN BHOJNE  
10)SHARMILA ZOPE  
11)NARENDRA SHIVAM JOSHI  
12)PRAFULLA PRAKASH CHAUDHARI  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
1)RAM KUMAR SOLANKI  
Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF COMPUTER SCIENCE AND ENGINEERING, SANDIP UNIVERSITY, NASHIK -422213 -----  
-----  
2)PRAJAKTA PAVAN SHIRKE  
Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF COMPUTER SCIENCE AND ENGINEERING, SANDIP UNIVERSITY, NASHIK -422213 -----  
-----  
3)PUSHPALATA GANESH AHER  
Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF COMPUTER SCIENCE AND ENGINEERING, SANDIP UNIVERSITY, NASHIK -422213 -----  
-----  
4)PRAGATI VIJAYKUMAR PANDIT  
Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF COMPUTER SCIENCE AND ENGINEERING, SANDIP UNIVERSITY, NASHIK, 422213 -----  
-----  
5)DR. VAIBHAV P. SONAJE  
Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF COMPUTER SCIENCE AND ENGINEERING, SANDIP UNIVERSITY, NASHIK -422213 -----  
-----  
6)SANJEEV ANIL SHUKLA  
Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF COMPUTER SCIENCE AND ENGINEERING, SANDIP UNIVERSITY, NASHIK -422213 -----  
-----  
7)DR.PURUSHOTTAM R. PATIL  
Address of Applicant :ASSOCIATE PROFESSOR, SCHOOL OF COMPUTER SCIENCES AND ENGINEERING, SANDIP UNIVERSITY, NASHIK-422213 -----  
-----  
8)DR. ANAND SINGH RAJAWAT  
Address of Applicant :ASSOCIATE PROFESSOR, SCHOOL OF COMPUTER SCIENCES AND ENGINEERING, SANDIP UNIVERSITY, NASHIK-422213 -----  
-----  
9)SHILPA SACHIN BHOJNE  
Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF COMPUTER SCIENCE AND ENGINEERING, SANDIP UNIVERSITY, NASHIK, 422213 -----  
-----  
10)SHARMILA ZOPE  
Address of Applicant :ASSISTANT PROFESSOR, COMPUTER ENGINEERING, SCHOOL OF COMPUTER SCIENCE AND ENGINEERING, SANDIP UNIVERSITY, NASHIK, 422213 -----  
-----  
11)NARENDRA SHIVAM JOSHI  
Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF COMPUTER SCIENCE AND ENGINEERING, SANDIP UNIVERSITY NASHIK -422213 -----  
-----  
12)PRAFULLA PRAKASH CHAUDHARI  
Address of Applicant :ASSISTANT PROFESSOR, SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTER, NASHIK -422213 -----

(57) Abstract :  
An enhanced fingerprint identification system using improved image methodologies and deep learning is the proposed invention. The invention aims improving the techniques of finger print identification using image processing methodologies. The proposed invention aims at protecting the important data or information from hacking or cyber threats.

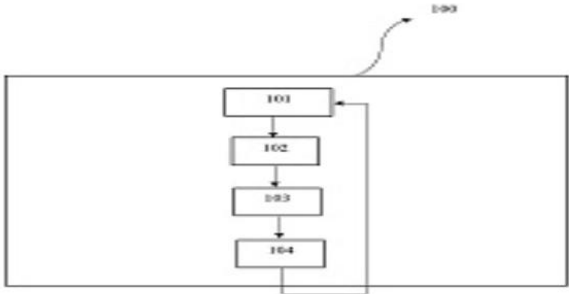


Figure 1: Block Diagram

No. of Pages : 10 No. of Claims : 3



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :23/03/2022

(21) Application No.202221016288 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : PLANT BASED PROBIOTIC DRINK

(51) International classification :A61K0036230000, A23L0033105000, A23L0002520000,  
A61K0039000000, A61K0036310000  
(86) International Application :NA  
No :NA  
Filing Date :NA  
(87) International Publication : NA  
No  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)MAHAKAUSHAL UNIVERSITY**  
Address of Applicant :Village-Aithakheda, Mukunwara Road, Post- Tilwara  
Jabalpur(M.P.) 482003, India -----  
**Name of Applicant : NA**  
**Address of Applicant : NA**  
(72)Name of Inventor :  
**1)Dr. Alpna Gairola**  
Address of Applicant :Assistant Professor, Mahakaushal University, Jabalpur, M.P., India -----  
**2)Dr. Bhaskar Jyoti**  
Address of Applicant :Assistant Professor , Mahakaushal University, Jabalpur, M.P., India -----  
**3)Anvesha Mishra**  
Address of Applicant :Bachelor's of Science, Allahabad University, Uttar Pradesh, India -----  
**4)Dr. R.C Mishra**  
Address of Applicant :Vice Chancellor, Mahakaushal University, Jabalpur, M.P. India -----  
**5)Dr. P. Karthik**  
Address of Applicant :Associate Professor & Head, Department of Food Technology,  
Karpagam Academy of Higher Education (Deemed to be University), Coimbatore - 641 021,  
Tamil Nadu, India -----  
**6)Dr. Jasmeet Kour**  
Address of Applicant :Assistant Professor, Food Science and Technology, Padma Shri Padma  
Sachdev, Govt. PG College for Women, Gandhi Nagar, Jammu, India -----  
**7)Dr. Rakesh Kumar Dwivedi**  
Address of Applicant :Assistant Professor & Head, Department of Botany, Bhakt Darshan  
Government Post graduate College Jaiharikhal, 246193,Uttarakhand, India -----  
**8)Dr. Chandra Prakash Shukla**  
Address of Applicant :Head, Department of Botany, Thakur College of Science and Commerce  
(Autonomous) Kandivali (East) Mumbai, Maharashtra 400101, India -----  
**9)Prof. Amrithesh Chandra Shukla**  
Address of Applicant :Department of Botany, Faculty of Science, University of Lucknow,  
Lucknow- 226007, India -----  
**10)Dr. Ramesh Singh**  
Address of Applicant :Associate Professor, Department of Plant Pathology, Sardar Vallabh  
Bhai Patel University of Agriculture & Technology, Meerut, U.P., India -----  
**11)Dr. H.B Singh**  
Address of Applicant :Distinguished Professor, Biotechnology, GLA University, Mathura,  
U.P., India -----

(57) Abstract :

The present invention relates to probiotic drink fortified with carrot and beetroot. The objective of the present invention is to solve the problems in the prior art method and composition of probiotic drink. The present drink is useful for health benefits to human being in multiple ways like boost immune system, and lowers cholesterol and blood pressure.

No. of Pages : 20 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :01/04/2022

(21) Application No.202221019843 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : SUSTAINED RELEASE COMPOSITION OF PROGESTERONE

<p>(51) International classification :A61K0009200000, A61K0031570000, A61K0009480000, A61K0009000000, A61K0009500000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)SUN PHARMACEUTICAL INDUSTRIES LIMITED</b> Address of Applicant :SUN HOUSE, 201 B/1, WESTERN EXPRESS HIGHWAY, GOREGAON (E), MUMBAI MAHARASHTRA, INDIA ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)SINGH ROMI BARAT</b> Address of Applicant :Sun Pharmaceutical Industries Limited, Plot – Gp-5, Sector-18, HSIDC, Gurugram, Haryana-122015, India ---- ----- <b>2)AMRUTKAR PANKAJ PRABHAKAR</b> Address of Applicant :Sun Pharmaceutical Industries Limited, Survey No. 127/1, Tandalja, Vadodara, Gujarat-390020, India ---- ----- <b>3)VAHORA ALTAF ILYAS</b> Address of Applicant :Sun Pharmaceutical Industries Limited, Survey No. 127/1, Tandalja, Vadodara, Gujarat-390020, India ---- ----- <b>4)KULKARNI SHREYAS RAJENDRA</b> Address of Applicant :Sun Pharmaceutical Industries Limited, Survey No. 127/1, Tandalja, Vadodara, Gujarat-390020, India ---- ----- <b>5)KHURANA LALIT KUMAR</b> Address of Applicant :Sun Pharmaceutical Industries Limited, Survey No. 127/1, Tandalja, Vadodara, Gujarat-390020, India ---- -----</p>
---	---

(57) Abstract :

ABSTRACT SUSTAINED RELEASE COMPOSITION OF PROGESTERONE The present invention relates to a sustained-release oral dosage form of Progesterone or its pharmaceutically acceptable salts thereof. The sustained release composition according to present invention is for once daily administration would be consistent with good therapeutic efficacy while avoiding an unacceptable incidence or severity of side effects associated with conventional progesterone compositions.

No. of Pages : 29 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :11/04/2022

(21) Application No.202221021666 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : REAL TIME APPLICATION OF SINGLE PHASE SHIFT (SPS) CONTROLLED DUAL ACTIVE BRIDGE (DAB) CONVERTER FOR INTERMITTENCY REMOVAL AT KANDLA PORT (GUJARAT)

<p>(51) International classification :H02M0003335000, H02M0001000000, H02J0003380000, H02M0003156000, H02M0001440000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)IES College of Technology, Bhopal</b> Address of Applicant :IES College of Technology, main Road, Kali Kheda, Ratibad, Madhya Pradesh 462044 ----- <b>2)Dr. Arun Rathore</b> <b>3)Dr. Subhendu Chakroborty</b> Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : <b>1)Dr. Arun Rathore</b> Address of Applicant :Assistant Professor, Department of EX, IES College of Technology, Bhopal, Madhya Pradesh - 462044 ----- <b>2)Dr. Anupam Kumar</b> Address of Applicant :Assistant Professor, Department of EX, IES College of Technology, Bhopal, Madhya Pradesh - 462044 ----- <b>3)Dr. Pallavee Bhatnagar</b> Address of Applicant :Assistant Professor, Department of EX, IES College of Technology, Bhopal, Madhya Pradesh - 462044 ----- <b>4)Dr. Shubhendra Pratap Singh</b> Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Teerthankar Mahaveer University, Moradabad, U.P. ----- <b>5)Mr. Bhupchand Kumhar</b> Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, IES University, Bhopal, Madhya Pradesh - 462044 ----- <b>6)Dr. Pooja Bijlani</b> Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, IES University, Bhopal, Madhya Pradesh - 462044 ----- <b>7)Dr. Subhendu Chakroborty</b> Address of Applicant :Assistant Professor, Department of Basic sciences, IES University, Bhopal, Madhya Pradesh - 462044 -----</p>
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(57) Abstract :

The Dual Active Bridge (DAB) converter acting as the power electronics interface working in Single Phase Shifted (SPS) control mode is presented. The optimum operating zone for DAB facilitating energy exchange between the renewable energy source and storage element is obtained. Various closed loop controllers based on inductor current, output current, etc. are already presented. Thus a closed loop controller having output voltage as the target variable is proposed which is utilized for carrying out the energy exchange in DC Microgrid. For applicability of the proposed controller, meteorological data of Kandla port (Gujarat) is utilized at the renewable source side.

No. of Pages : 27 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202221021935 A

(19) INDIA

(22) Date of filing of Application :12/04/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : HUMAN CHAKRA HEALING SYSTEM BASED ON ACUPRESSURE TECHNIQUES PROCESSED THROUGH ARTIFICIAL INTELLIGENCE

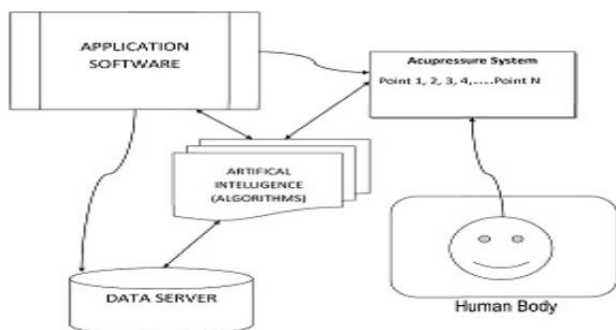
(51) International classification :A61H0039040000, A61N0005060000, A61H0039060000, G06K0009000000, G06N0003020000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)IES College of Technology, Bhopal**  
Address of Applicant :IES College of Technology, main Road, Kali Kheda, Ratibad, Madhya Pradesh 462044 -----  
**2)Dr. Geetesh Goga**  
**3)Mr. Bhanu Pratap Singh Sikarwar**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr. Geetesh Goga**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, IES College of Technology, Bhopal - 462044 -----  
**2)Dr. Manmohan Singh**  
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, IES College of Technology, Bhopal - 462044 -----  
**3)Dr. Rajan Kumar**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, IES College of Technology, Bhopal - 462044 -----  
**4)Dr. Pooja Bijlani**  
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, IES University, Bhopal, Madhya Pradesh - 462044 -----  
**5)Mr. Bhanu Pratap Singh Sikarwar**  
Address of Applicant :Assistant Professor, Department of Civil Engineering, IES University, Bhopal, Madhya Pradesh - 462044 -----  
**6)Dr. Subhendu Chakroborty**  
Address of Applicant :Assistant Professor, Department of Basic sciences, IES University, Bhopal, Madhya Pradesh - 462044 -----  
**7)Mr. Bhupchand Kumhar**  
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, IES University, Bhopal, Madhya Pradesh - 462044 -----

(57) Abstract :

The present invention relates to a human chakra healing system based on acupressure techniques processed through artificial intelligence. In human there are various internal and external systems which are still hidden and waiting to expand in a new way. As we know about every living thing have energy, vibrations and sounds at various levels. Chakra is the most undefined, unaccepted and unexplained area by western and some Indian scientists. But if we talk about in spiritual sciences, chakra is the most integral part of human body. There are some experts in this field to heal the various points in the human body by which a particular problem can be overcome or healed by some traditional techniques. One of the most scientific techniques is acupressure. In which a systematic treatment or healing process done with patients or who need some therapy for his or her health. Presently, Practitioners uses various techniques and instruments in some cases to heal chakra and other body parts using hybrid or mixed techniques. They still need a proper system by which they can be more advanced. Here comes a need of a proper system in which users can give some inputs and then processed by artificial intelligence application. Our proposed system uses acupressure techniques through artificial intelligence which provides a systematic analyzed data.

Figure 1: Data Flow Diagram



No. of Pages : 7 No. of Claims : 1

(54) Title of the invention : EFFECT OF B-SITE DISORDER ON THE FERRO ELECTRIC PROPERTIES OF BZT CERAMICS

(51) International classification :H01L0041187000, G06N0020000000, G06K0009620000, C04B0035495000, C07K0016280000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)PARMENDRA BAJPAI**  
 Address of Applicant :PROFESSOR OF PHYSICS, DEAN, SCHOOL OF PHYSICAL SCIENCES, GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR -----  
**2)DR K N SINGH**  
**3)ANAMIKA DWIVEDI**  
**4)DEEPAK PATEL**  
**5)AMARNATH KUMAR THAKUR**  
**6)DR MANISH UPADHYAY**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)PARMENDRA BAJPAI**  
 Address of Applicant :PROFESSOR OF PHYSICS, DEAN, SCHOOL OF PHYSICAL SCIENCES, GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR -----  
**2)DR K N SINGH**  
 Address of Applicant :DEPARTMENT OF PHYSICS OP JINDAL UNIVERSITY PUNJIPATHARA RAIGAH CHHATTISGARH -----  
**3)ANAMIKA DWIVEDI**  
 Address of Applicant :PHD SCHOLAR, DEPARTMENT OF PURE & APPLIED PHYSICS GGV BILASPUR, CHHATTISGARH. -----  
**4)DEEPAK PATEL**  
 Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF CHEMISTRY, SCHOOL OF SCIENCE, OP JINDAL UNIVERSITY, RAIGARH, CG, INDIA -----  
**5)AMARNATH KUMAR THAKUR**  
 Address of Applicant :PROFESSOR, DEPT.OF MATHEMATICS, DR.C.V.RAMAN UNIVERSITY, KOTA,BILASPUR (CG)-495001 -----  
**6)DR MANISH UPADHYAY**  
 Address of Applicant :PROFESSOR, CHEMISTRY , DR C V RAMAN UNIVERSITY KOTA BILASPUR CHHATTISGARH 495113 -----

(57) Abstract :  
 Effect of b-site disorder on the ferro electric properties of BZT ceramics is the proposed invention. The proposed invention focuses on training a machine learning module to study the effects of B-site disorder. The invention will study the impact of B-site disorder on the ferro-electric properties of BZT ceramics.

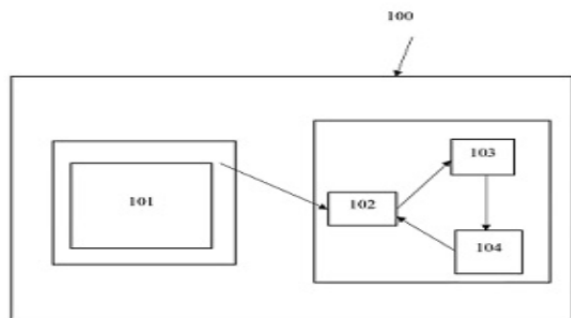


Figure 1: Schematic view

No. of Pages : 11 No. of Claims : 4

(54) Title of the invention : A PROCESS FOR PREPARING ACTIVATED CARBON NANOPARTICLE AND ITS APPLICATION THEREOF

(51) International classification :G01N0030060000, G01N0001400000, C07C0005100000, G01N0033180000, C07C0213020000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ICAR-National Research Centre for Grapes**

Address of Applicant :P.B. No. 3, P.O. Manjari Farm, Solapur Road, Pune – 412307, Maharashtra, India -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Ahammed Shabeer TP**

Address of Applicant :c/o. ICAR-National Research Centre for Grapes, P.B. No. 3, P.O. Manjari Farm, Solapur Road, Pune – 412307, Maharashtra, India -----

**2)Bapurao Gangaram Bharate**

Address of Applicant :c/o. ICAR-National Research Centre for Grapes, P.B. No. 3, P.O. Manjari Farm, Solapur Road, Pune – 412307, Maharashtra, India -----

(57) Abstract :

Provided herein is a simple one-pot synthesis of activated carbon nanoparticles from grape pomace without using high temperature, high pressure and high-tech instruments and its application as dispersive solid phase extraction (d-SPE) cleaning agent in multiresidue analyses of pesticides and used as a cost-effective alternative of expensive graphitized carbon black (GCB). Figure 3

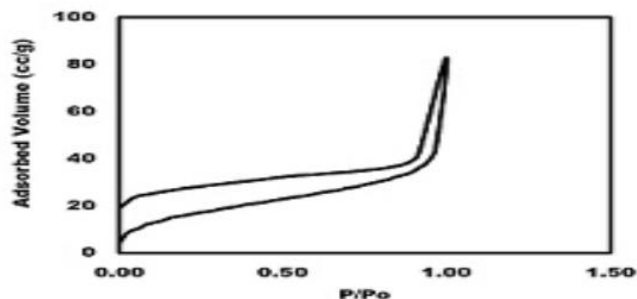


Figure 3

No. of Pages : 33 No. of Claims : 10

(54) Title of the invention : A PERSONAL PROTECTION EQUIPMENT KIT: AN ONE PIECE WARRIOR SHIELD

(51) International classification :A41D0013110000, A41D0013120000, A62B0017000000, C03C0017320000, A62B0023020000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)DNYANESHWAR SHRIDHARRAO PATALE**

Address of Applicant :main road -----

**2)TRUPTI LAXMAN LOKHANDE**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)DNYANESHWAR SHRIDHARRAO PATALE**

Address of Applicant :main road -----

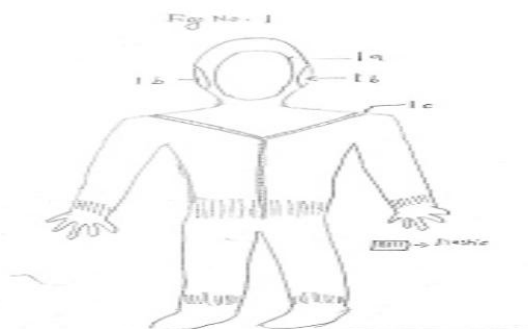
**2)TRUPTI LAXMAN LOKHANDE**

Address of Applicant :Kali peth, Basmath Nagar, Hingoli -----

-----

(57) Abstract :

**TITLE: A PERSONAL PROTECTION EQUIPMENT KIT : AN ONE PIECE WARRIOR SHIELD** The purpose of Personal Protection Equipment (PPE) is to protect the person wearing it from infectious fluids and droplets. Drawbacks of current PPEs: • Fogging of spectacles affecting visibility • Not comfortable for routine activity at patient site • Fear of N95 mask getting loose while working • Difficult for donning and doffing The personal protection equipment disclosed in this specification is an elegant device to protect the wearer from infectious fluids and droplets contact. It is very simple, sleek, user friendly and ergonomic device to use. Unlike other personal protection equipment it does not need multiple components. An invention in first aspect provide a personal protection equipment in an one piece bodysuit made up of chlorinated polyethylene non-woven fabric with in-built shoe cover and gloves. It has oval piece visor made up of 300 microns super transparent recyclable polyethylene terephthalate plastic for visibility and breathable patch made up of four layers of 100gsm non-woven polypropylene fabric. It is easy for donning and doffing with one piece bodysuit for healthcare workers.



No. of Pages : 14 No. of Claims : 6

(54) Title of the invention : AN APPARATUS AND A METHOD TO SEPARATE HULL-CHAFF FROM PADDY RICE

(51) International classification :B02B0003080000, B04C0005140000, F16F0015080000, B04B0001200000, F02M0035104000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA  
Filing Date :NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Dr. Rajesh S. Prabhu Gaonkar**

Address of Applicant :Mechanical Engineering Department, Goa College of Engineering, Farmagudi, Ponda, Goa – 403401 -----

**2)Dr. Shridhar D. Mhalsekar****3)Raul Anthony Pereira****4)John Agnelo Rebello****5)Minaz Bi Sheikh**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Dr. Rajesh S. Prabhu Gaonkar**

Address of Applicant :Mechanical Engineering Department, Goa College of Engineering, Farmagudi, Ponda, Goa – 403401 -----

**2)Dr. Shridhar D. Mhalsekar**

Address of Applicant :Mechanical Engineering Department, Goa College of Engineering, Farmagudi, Ponda, Goa – 403401 -----

**3)Raul Anthony Pereira**

Address of Applicant :H. No. 85, A.V. Lourenco road, Next to Old Presentation Convent High School, Old Market, Margao, Salcete – Goa -----

**4)John Agnelo Rebello**

Address of Applicant :H. No. 431, Gabriel Cruz ward, Utorda, Majorda, Salcete - Goa -----

**5)Minaz Bi Sheikh**

Address of Applicant :Assistant Professor in MathematicsScience &amp; Humanities Department, Goa College of Engineering, Farmagudi, Ponda - Goa 403401 -----

## (57) Abstract :

The present disclosure an apparatus to separate hull-chaff from paddy rice, the apparatus includes a separation chamber (102) that includes a cylindrical part (114) connected on top of a conical part (116). A top surface of a cylindrical part (114) has an air exhaust opening (104). The cylindrical part (114) includes an opening (118) to inlet the air and paddy rice. The conical part (116) includes a rice exhaust opening (120) connected with a bucket (112) to disburse the rice kernels after separation of the hull-chaff from the paddy rice. The apparatus also includes a hopper part (106) that includes a pipe, wherein one end (120) of the pipe is connected the opening (118) provided at the cylindrical part (114), and a conical part (202) connected at an opening (124) provided at a middle of the pipe, wherein in hopper part is adapted to disburse the paddy rice to the pipe. The apparatus also includes a blower (108) connected with the another end (122) of the pipe.

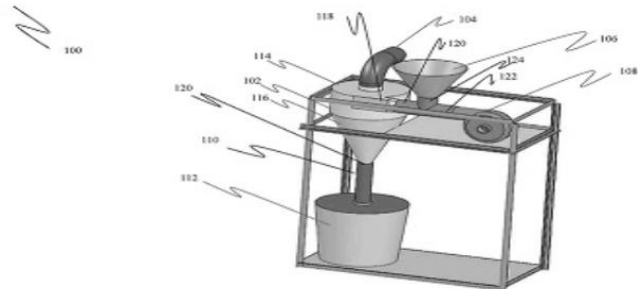


Fig. 1

No. of Pages : 25 No. of Claims : 10



(54) Title of the invention : MECHANICAL WASHER TO PREVENT LOOSENING OF A BOLTED JOINT AND A METHOD THEREOF

(51) International classification :F16B0043000000, F16B0039240000, B21J0015140000, B21J0015020000, F16B0039100000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :

**1)PUJA INDUSTRIES**

Address of Applicant :K1/884/9, GIDC IND ESTATE, MAKARPURA, VADODARA, 390010, GUJARAT, INDIA -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)DARSHAN C MEHTA**

Address of Applicant :21, SHANTIKUNJ SOCIETY NO. 2, BEHIND SHANTIKUNJ GARDEN, MANJALPUR, VADODARA, GUJARAT, INDIA -----

(57) Abstract :

A mechanical washer (10) to prevent loosening of a bolted joint is provided. The mechanical washer includes a first surface (20) including a plurality of serrations (30). The mechanical washer also includes a second surface (40) including a plurality of knurlings (50). The mechanical washer further includes a circular cavity (60) connecting the first surface and the second surface. The circular cavity is adapted to receive a fastener (70) utilized for fastening a first work piece (80) and a second work piece (90). The plurality of serrations of the first surface and the plurality of knurlings of the second surface are adapted to create a plurality of impressions underneath head of the fastener and on top of the first work piece respectively, when the fastener is driven through the circular cavity, the first work piece and the second work piece to obtain the bolted joint. FIG. 1

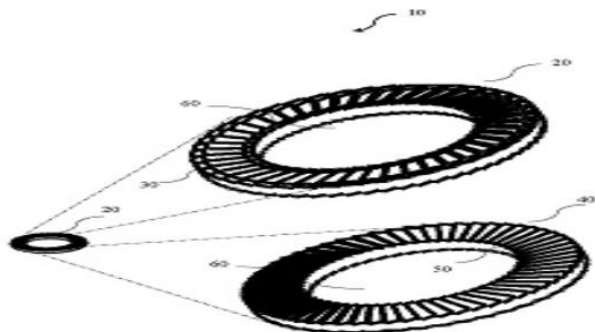


FIG. 1

No. of Pages : 17 No. of Claims : 10

(54) Title of the invention : A SOLAR THERMAL CONCENTRATOR AND METHOD OF MAKING THE SAME

(51) International classification :F03G0006060000, F24S0020200000, F24S0030425000, F24S0023700000, F24S0023710000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARS GLASSTECH PVT LTD**

Address of Applicant :B-327, 3rd FLOOR, MONALISA COMPLEX, MANJALPUR, VADODARA – 390 011, GUJARAT, INDIA. -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Rajesh Verma**

Address of Applicant :B-327, 3rd FLOOR, MONALISA COMPLEX, MANJALPUR, VADODARA – 390 011, GUJARAT, INDIA. -----

**2)Rajat Verma**

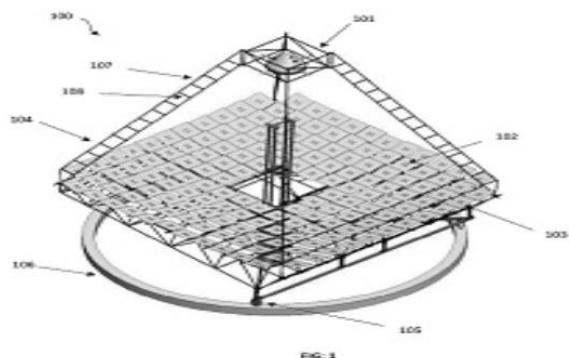
Address of Applicant :B-327, 3rd FLOOR, MONALISA COMPLEX, MANJALPUR, VADODARA – 390 011, GUJARAT, INDIA. -----

**3)Sugna Verma**

Address of Applicant :B-327, 3rd FLOOR, MONALISA COMPLEX, MANJALPUR, VADODARA – 390 011, GUJARAT, INDIA. -----

(57) Abstract :

**ABSTRACT A SOLAR THERMAL CONCENTRATOR AND METHOD OF MAKING THE SAME** The present invention discloses a solar thermal concentrator (100) includes a receiver (101), a set of mirrors (102), a main frame (103), a fluid pipe (104), a roller (105), a rotating path (106), a steam pipe (107). The said concentrator stored solar energy and converts into thermal energy. The solar thermal concentrator work as solar boiler. Fig.: 1 for publication



No. of Pages : 14 No. of Claims : 10

(54) Title of the invention : AUTOMATION OF NUTRIENT SUPPLY BASED SMART SYSTEM FOR MULTILEVEL HYDROPONIC FARMING AND METHOD THEREOF

(51) International classification :A01G0031020000, A01G0031060000, A01G0007040000, A01G0009240000, A61J0001140000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

**1)SYMBIOSIS INSTITUTE OF TECHNOLOGY-PUNE SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)**

Address of Applicant :SYMBIOSIS KNOWLEDGE VILLAGE, GRAM LAVAL, TAL MULSHI, PUNE - 412115, MAHARASHTRA, INDIA. -----

**Name of Applicant : NA**

**Address of Applicant : NA**

## (72)Name of Inventor :

**1)UJWALA ANIL KSHIRSAGAR**

Address of Applicant :SYMBIOSIS KNOWLEDGE VILLAGE, GRAM LAVAL, TAL MULSHI, PUNE - 412115, MAHARASHTRA, INDIA. -----

**2)NITIN KESHAORAO KHEDKAR**

Address of Applicant :SYMBIOSIS KNOWLEDGE VILLAGE, GRAM LAVAL, TAL MULSHI, PUNE - 412115, MAHARASHTRA, INDIA. -----

**3)SONALI MANGESH TIDKE**

Address of Applicant :SYMBIOSIS KNOWLEDGE VILLAGE, GRAM LAVAL, TAL MULSHI, PUNE - 412115, MAHARASHTRA, INDIA. -----

**4)VIJAYSHRI NITIN KHEDKAR**

Address of Applicant :SYMBIOSIS KNOWLEDGE VILLAGE, GRAM LAVAL, TAL MULSHI, PUNE - 412115, MAHARASHTRA, INDIA. -----

## (57) Abstract :

The present subject matter provides a smart system for nutrient supply in vertical farming comprises an ESP32 system (3) controlled by a mobile application (1) using a Wi-Fi router (2) as communicating channel. The nutrients such as NPK and water nutrients are stored in reservoir system (4) separately and connected to a dispensing unit (5) fixed with submersible DC motor (10) for supply to plants. Further plurality of sensors to sense temperature (74), liquid level (11), pH level (12), light intensity sensor (71), a servomotor (72) for flipping of roof of greenhouse (73), foggers (75) for reducing temperature of greenhouse recorded by temperature sensor (74), a high end rolling camera (76) for periodic image capturing and storing images on cloud-based database server (8) for further analysis. The images stored on cloud-based database server to be used by image processing module to predict growth and health of crop. [To be published with Figure 1]

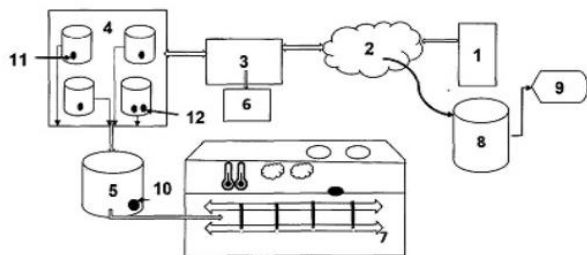


Figure 1

No. of Pages : 17 No. of Claims : 10

(54) Title of the invention : A PROCESS FOR BIOSYNTHESIS OF ZNO NANOPARTICLES FROM RIVINA HUMILIS PLANT EXTRACT

(51) International classification :A61P0031040000, B82Y0030000000, C07K0014255000,  
A61K0033380000, C07K0014210000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Shri Ramdeobaba College of Engineering and Management**  
Address of Applicant :Shri Ramdeobaba College of Engineering and Management Katol Road,  
Gittikhadan,Nagpur- 440013, Maharashtra, India Nagpur -----  
**2)PANDHURNEKAR, Chandrashekhar Pundalikrao**  
**3)MUNGOL, Arvind Janardhan**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)PANDHURNEKAR, Chandrashekhar Pundalikrao**  
Address of Applicant :Department of Chemistry, Shri Ramdeobaba College of Engineering and  
Management,Nagpur - 440013,Maharashtra, India Nagpur -----  
**2)MUNGOL, Arvind Janardhan**  
Address of Applicant :Department of Botany, Nevjabai Hitkarini College, Bramhapuri, Dist.Chandrapur  
441206,Maharashtra, India chandrapur -----  
**3)MALADHARI, sanaj Sheikh Rafik**  
Address of Applicant :GramgeetaMahavidyalaya, Chimur, Dist.Chandrapur, Maharashtra, India - 442903  
chandrapur -----  
**4)PANDHURNEKAR,Hi mani Chandrashekhar**  
Address of Applicant :Department of Chemistry, Dada RamchandBakhru Sindhu Mahavidyalaya,Nagpur,  
Maharashtra, India - 440017 Nagpur -----  
**5)KANFADE, Harsha Prabhakar**  
Address of Applicant :ShantabaiBhaiyaMahilaMahavidhyalaya, Bramhapuri, Dist. Chandrapur, Maharashtra,  
India - 441206 chandrapur -----  
**6)WADEKAR, Mohan Bhaurao**  
Address of Applicant :Department of Botany,Nevjabai Hitkarini College, Bramhapuri, Dist. Chandrapur,  
Maharashtra, India - 441206 Bramhapuri -----  
**7)PAWAR, Abhimanyu Parasram**  
Address of Applicant :Department of Chemistry,Nevjabai HitkariniCollege, Bramhapuri 441206 Dist.  
Chandrapur, Maharashtra, India Bramhapuri -----  
**8)PARSHURAMKAR,Dal eshManiram**  
Address of Applicant :Department of Physics, Nevjabai Hitkarini College, Bramhapuri, Dist.Chandrapur  
441206,Maharashtra, India Bramhapuri -----

(57) Abstract :

ABSTRACT A PROCESS FOR BIOSYNTHESIS OF ZnO NANOPARTICLES FROM RIVINA HUMILIS PLANT EXTRACT The present invention relates a process for biosynthesis of ZnO nanoparticles from rivina humilis plant extract. The object of the proposed invention is to help to control infection and inhibit bacterial growth. Proposed invention has significant antimicrobial activity against different bacterial species. It can be used for the development of new antibacterial drugs to cure many disorders caused by the different bacterial species. Proposed synthesized ZnO nano-particles possesses moderate to good anti-bacterial activities against Staphylococcus aureus, Proteus vulgaris, Escherichia coli, Salmonella typhi, Bacillus subtilis, and Pseudomonas aeruginosa.

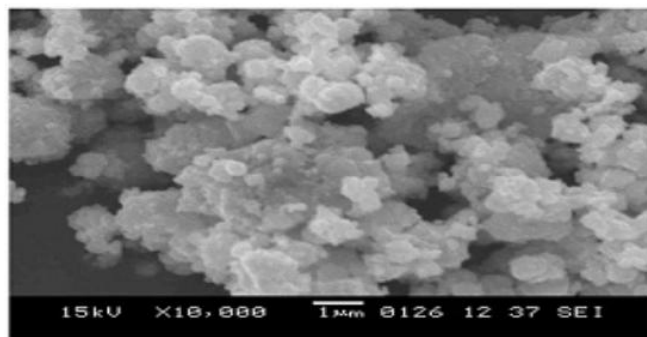


Figure 1

No. of Pages : 17 No. of Claims : 1

## (54) Title of the invention : A THREE-PHASE GRID DISTURBANCE EMULATOR

(51) International classification :H02J0003380000, H02M0007538700, H02M0001000000,  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to : NA  
 Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application :NA  
 Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

**1)AWARE, Mohan Vithalrao**

Address of Applicant :Department of Electrical Engineering, Visvesvaraya National Institute of Technology, South Ambazari Road, Nagpur, Maharashtra, India - 440010 -----

**2)UMRE, Bhimrao Sitaram****3)KUMAR, Anup****4)WAGHMARE, Manoj Arun****5)PATNE, Nita Ravindra**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)AWARE, Mohan Vithalrao**

Address of Applicant :Department of Electrical Engineering, Visvesvaraya National Institute of Technology, South Ambazari Road, Nagpur, Maharashtra, India - 440010 -----

**2)UMRE, Bhimrao Sitaram**

Address of Applicant :Department of Electrical Engineering, Visvesvaraya National Institute of Technology, South Ambazari Road, Nagpur, Maharashtra, India - 440010 -----

**3)KUMAR, Anup**

Address of Applicant :C/O Sri Arun Kumar Gupta, Kharanja Lane, Telbigha, R.B. Road, Gaya, Bihar, India - 823002 -----

**4)WAGHMARE, Manoj Arun**

Address of Applicant :C/O Arun V. Waghmare, Plot No. 26, Thool Layout, Ashok Nagar, Sindhi Meghe, Wardha, Maharashtra, India - 442001 -----

**5)PATNE, Nita Ravindra**

Address of Applicant :Department of Electrical Engineering, Visvesvaraya National Institute of Technology, South Ambazari Road, Nagpur, Maharashtra, India - 440010 -----

## (57) Abstract :

A three-phase grid disturbance emulator is invented and the developed product is capable to emulate the grid supply considering all the disturbances simultaneously. The grid disturbances considered are DC-offset, harmonics (3rd + 5th), voltage sag, and voltage swell under grid frequency ride-through conditions. This emulator is used to test the performance of the AC grid-connected inverter systems, which is widely used to interface the renewable/energy storage/inter-grid synchro-stabilizer to the main power system. This emulator is a voltage source inverter (VSI) having the capability to generate the voltage profile required with distortions by using the appropriate modulating signals. This modulating signal is a non-sinusoidal periodic waveform with various programmable disturbances required to be emulated. This programmable waveform is generated on the digital signal processor (DSP) which is then compared with the carrier signal to generate the PWM signals for triggering the inverter switches.

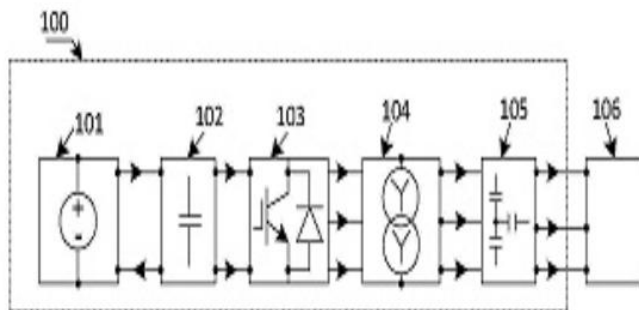


Figure 1

No. of Pages : 13 No. of Claims : 6

(54) Title of the invention : A PORTABLE SPIT CONTAINER

(51) International classification :A47J0037040000, B29C0045000000, B29K0105000000, B60J0010750000, C03B0037018000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)URBANDOSE PRIVATE LIMITED**

Address of Applicant :#501, Dipti Solitaire MG Road-LBS Road Junction, Ghatkopar(w), Mumbai- 400086, India. -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr Purushottam Singh Chauhan**

Address of Applicant :Vill. Ramtala, post- sendri, dist- Bilaspur, Chhattisgarh-495009, INDIA. -----

**2)Abhay Kumar**

Address of Applicant :C/O Anuj Kumar, vijyapuram colony, Vijaya Residence, Flat no. 202, Block B-3, seepat road. Landmark - Science College, Bilaspur, Chhattisgarh-495001, INDIA -----

(57) Abstract :

A PORTABLE SPIT CONTAINER ABSTRACT Embodiments of the present disclosure provide a portable spit container (100) for freezing spits to form a solid material. The portable spit container comprises a body (102) and a cap (104) to cover an upper side of the body (102). An absorbent solution is deposited on an inner wall of the body (102) of the portable spit container (100). The absorbent solution deposited on the inner wall of the body (102) comprises a mixture of sodium polyacrylate in 4 grams by weight, glue in 2 grams by weight, and aromatic compound in 10 millimetres by volume for every 100 grams by weight of the glue. The corresponding method is also disclosed. (Figure 1)

100



FIG. 1

No. of Pages : 16 No. of Claims : 10

(54) Title of the invention : DESIGN AND DEVELOPMENT OF E-JACKET FORWOMEN'S SAFETY: RAKSHIKA

(51) International classification :F41H0009100000, H04W0004900000, H04W0012060000, F41B0015000000, G08B0015020000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

1)KNNandurkar

Address of Applicant :K. K. Wagh Institute of Engineering Education &amp; Research, Amrut Dham, Panchavati, Nasik -----

2)Dr. Dinesh Madhukar Chandwadkar

3)Dr. Sunita Aniruddha Patil

4)Neha Shashikant Tisgaonkar

5)Swarali Surendra Varkhede

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

1)Dr. Dinesh Madhukar Chandwadkar

Address of Applicant :K.K.Wagh Institute of Engineering Education &amp; Research Nashik Nashik -----

2)Dr. Sunita Aniruddha Patil

Address of Applicant :K.K.Wagh Institute of Engineering Education &amp; Research Nashik Nashik -----

3)Neha Shashikant Tisgaonkar

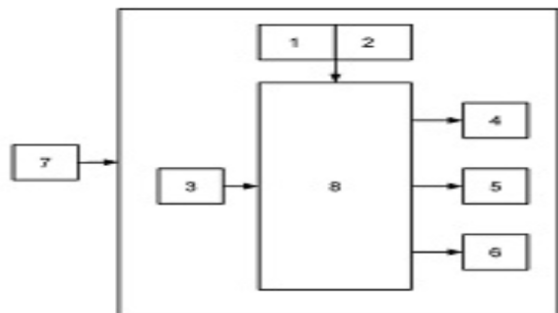
Address of Applicant :K.K.Wagh Institute of Engineering Education &amp; Research Nashik Nashik -----

4)Swarali Surendra Varkhede

Address of Applicant :K. K. Wagh Institute of Engineering Education &amp; Research Nashik Nashik -----

## (57) Abstract :

Objectives: According to the reports of WHO, NCRB-social-government organization 35% women all over the world are facing a lot of unethical physical harassment in public places such as railway-bus stands, footpaths etc. Method/Analysis: Using Controller for the hardware devices is the most efficient and it consumes less power. The purpose of the project is to provide security for the women. In case of emergency situations, a woman will press an emergency button which will activate the MC60 for location tracking and an email/sms will be sent to the family members of the woman. A shock circuit is used to give the mild pulses to the attacker for self-defense and a sounder is used to grab the attention of the surrounding and throw the attacker off-guard. Findings: We analyzed that there is no security device for our total safety. The user has to carry multiple devices. We are proposing an ALL-IN-ONE security device that has all the features in one click.



No. of Pages : 7 No. of Claims : 6

## (54) Title of the invention : IOT-BASED INTELLIGENT ELECTRIC VEHICLE CHARGING STATION

(51) International classification :H02J0007020000, B60L0053300000, B60L0053630000, B60L0053200000, B60L0053660000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No :NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Mehul Pravinchandra Barot**  
 Address of Applicant :Professor and Head of the IT Department, Computer Engineering Department, L.D.R.P Institute of Technology & Research. ....  
 ....  
**2)Dr. Pandarimath Potluri**  
**3)Mahesh, P. Wankhade**  
**4)B. Priyalakshmi**  
**5)Dr. Anurag Chauhan**  
**6)Dr. Suketu Jani**  
**7)Dr. Pasupuleti Subrahmanya Ranjit**  
**8)Dr. Pradeep Yadav**  
**9)Dr. Vishal Dahiya**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Dr. Mehul Pravinchandra Barot**  
 Address of Applicant :Professor and Head of the IT Department, Computer Engineering Department, L.D.R.P Institute of Technology & Research. ....  
**2)Dr. Pandarimath Potluri**  
 Address of Applicant :Professor & Principal, swarnandhra institute of engineering and technology, Narsapur, Andhra Pradesh, Pin -534280. ....  
**3)Mahesh, P. Wankhade**  
 Address of Applicant :Associate Professor, Department of Computer Engineering, Sinhgad College of Engineering Pune. ....  
**4)B. Priyalakshmi**  
 Address of Applicant :Assistant Professor, Department of ECE, College of engineering and technology, SRM institute of Science and technology, SRM Nagar, Katankulathur-603203, Chengalpattu Dist .....  
**5)Dr. Anurag Chauhan**  
 Address of Applicant :Assistant Professor, Department of Electrical Engineering, Rajkiya Engineering College Banda, Uttar Pradesh-210201, India .....  
**6)Dr. Suketu Jani**  
 Address of Applicant :Associate Professor & HoD, Department of Automobile Engineering, ITE, Indus University, Ahmedabad. ....  
**7)Dr. Pasupuleti Subrahmanya Ranjit**  
 Address of Applicant :Professor, Department Of Mechanical Engineering, Adithya Engineering College, Surampalem, E G Dist. Andra Pradesh - 533437 .....  
 ....  
**8)Dr. Pradeep Yadav**  
 Address of Applicant :Associate Professor, Department of CSE, ITM Gwalior, India. ....  
**9)Dr. Vishal Dahiya**  
 Address of Applicant :Professor, Professor & Head, Computer Science Department, IICT, Indus University, Ahmedabad .....

(57) Abstract :  
 ABSTRACT IOT-BASED INTELLIGENT ELECTRIC VEHICLE CHARGING STATION A method for charging an EV vehicle using an intelligent electrical vehicle charging station based on IOT. The method includes receiving power from the grid. Converting the AC power received from the grid into DC power. Converting the DC power to AC power. Compensating the converted AC power from the DC to AC converter. The compensator comprises a transmitting coil and the receiving coil. Converting the AC power into DC from the DC power received in a receiving compensator. Providing the converted DC to the battery bank to provide charge to the EV vehicles. Connecting a plurality of charging hub with the cloud and provide the detailed data and location of the plurality of charging hub. Finding the location of the charging hub in the city through the cloud data. Monitoring the vehicles entering into the charging hub in the city. Monitoring status of the plurality of EV vehicle and battery status of the plurality of EV vehicle and details of the plurality of EV vehicle. Intimating the condition of the battery of the determined vehicle in the future.

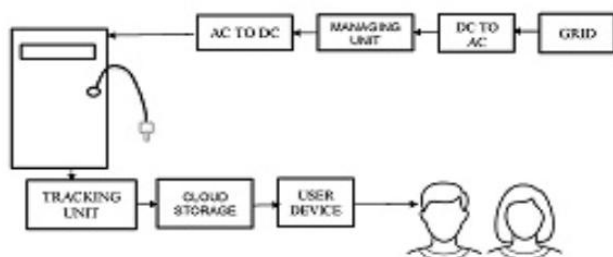


Figure: 1

No. of Pages : 16 No. of Claims : 5



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :02/08/2022

(21) Application No.202221044249 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : ADDITIVE MANUFACTURING THROUGH BINDER JETTING TECHNIQUEFOR BIOMEDICAL EQUIPMENT

(51) International classification :B33Y001000000, B33Y007000000, B33Y008000000, B29C0064165000, B33Y003000000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No :NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
1)Dr. Ravindra G Dabhadre  
Address of Applicant :Associate professor, Department of Electronics and Telecommunication, Matoshri college of Engineering and Research center, Nashik, India. -----  
2)Tushar Santosh Nikumbh  
3)Dr. Ram Subbiah  
4)Mr. Chikane Yogesh Ramdas  
5)Dr. S. Ganesh Kumar  
6)Dr. Sumit Bhattacharjee  
7)Dr. Pasupuleti Subrahmanya Ranjit  
8)Dr. Jarapala Murali Naik  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
1)Dr. Ravindra G Dabhadre  
Address of Applicant :Associate professor, Department of Electronics and Telecommunication, Matoshri college of Engineering and Research center, Nashik, India. --  
-----  
2)Tushar Santosh Nikumbh  
Address of Applicant :Professor, Assistant professor, Department of Mechanical department, Dr vishwanath Karad, world peace University, Pune, India. -----  
-----  
3)Dr. Ram Subbiah  
Address of Applicant :Professor, Department of Mechanical engineering, Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad. -----  
-----  
4)Mr. Chikane Yogesh Ramdas  
Address of Applicant :Assistant Professor, Department of Information Technology, Amrutvahini college of engineering, Sangamer, Maharashtra, India. -----  
-----  
5)Dr. S. Ganesh Kumar  
Address of Applicant :Professor, Department of Mechanical, Er. Perumal Manimekalai College of Engineering, Hosur, India. -----  
-----  
6)Dr. Sumit Bhattacharjee  
Address of Applicant :Principal, Department of CSE, Affiliated to university of Mumbai, R. V. Patel College of Science, Commerce and Arts, -----  
-----  
7)Dr. Pasupuleti Subrahmanya Ranjit  
Address of Applicant :Professor, Department Of Mechanical Engineering, Adithya Engineering College, Surampalem, E G Dist. Andhra Pradesh - 533437 -----  
-----  
8)Dr. Jarapala Murali Naik  
Address of Applicant :Associate Professor, Department of Mechanical Engineering, Holy Mary Institute of Technology and Science, Bogaram (v), Keesaram(m), Medchal Dist, Hyderabad- 501301 -----

(57) Abstract :  
Additive manufacturing through binder jetting technique for biomedical equipment Abstract: Advanced manufacturing (AM, often known as a 3D printer) is employed in a variety of professions and sectors. Each individual gets different in the healthcare as well as dentistry fields, thus AM offers a lot of promise in individualized and tailored services. Binder jets stand out from AM techniques because it allows for the quick creation of complicated forms with isotropic characteristics. Furthermore, current improvements in AM have made it easier to build patient-specific medical services. Before AM technology, customizing numerous medical equipment and solutions, like implantation, medication distribution systems, medicinal tools, prostheses, and in vitro modeling, will have proven extraordinarily difficult, but not unattainable. This invention is intended in the development of the method for 3-dimensional printing of the organs using the binder jetting technique. This method involves the additive manufacturing technique namely binder jetting method. This helps in providing the highly reliable and efficient biomedical equipment.

Diagram

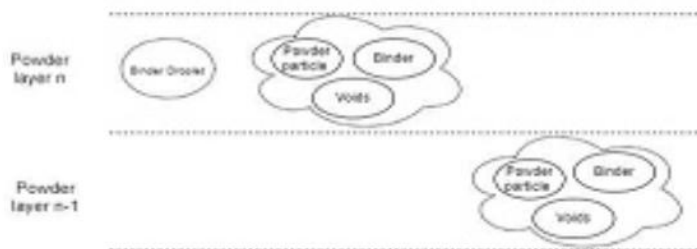


Figure 1: Schematic diagram of the binder jetting process

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202221044413 A

(19) INDIA

(22) Date of filing of Application :03/08/2022

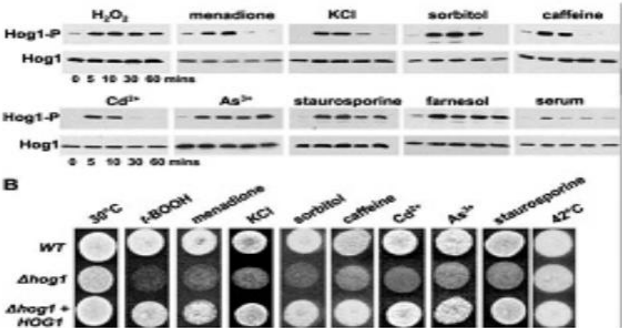
(43) Publication Date : 19/08/2022

(54) Title of the invention : MOLECULAR IDENTIFICATION AND ANTIFUNGAL ACTIVITY OF ANTIMYCOTICS BY FARNESOL AND REDUCTION OF CANDIDA ALBICANS PATHOGENICITY IN FISSION YEAST

(51) International classification	A61K0031704800, C12N0001200000, C12Q0001180000, C07K0014400000, C12Q0001020000
(56) International Application No	NA
(57) Filing Date	NA
(57) International Publication No	NA
(61) Patent of Addition to Application Number	NA
(62) Filing Date	NA
(62) Divisional to Application Number	NA
(62) Filing Date	NA

(71) Name of Applicant :	1)Dr. Shivani Sharma
Address of Applicant :	Assistant Professor & HOD, Department of Biotechnology, Swami Shri Swarnopnand Saraswati Mahavidyalaya, Amd Nagar, Hudco, Bihari, Pin code - 490009, Chhatisgarh, India -----
(72) Name of Inventor :	2)Dr. Shama Afruz Raig 3)Ms. Apurva Sharma 4)Ms. Yogita Lakhande 5)Dr. Sreety Langhiyana 6)Dr. S.K. Langhiyana 7)Dr. Mohd. Wasid Khan 8)Dr. Abhishek Pandey 9)Ms. Basantha singh Gautam 10)Ms. Renu Sharma 11)Dr. Mainak Bhattacharya 12)Dr. Sal Sagar
Name of Applicant :	NA
(72) Name of Inventor :	NA
Address of Applicant :	Assistant Professor & HOD, Department of Biotechnology, Swami Shri Swarnopnand Saraswati Mahavidyalaya, Amd Nagar, Hudco, Bihari, Pin code - 490009, Chhatisgarh, India -----
Address of Applicant :	Assistant Professor & HOD, Department of Microbiology, Swami Shri Swarnopnand Saraswati Mahavidyalaya, Amd Nagar, Hudco, Bihari, Pin code - 490009, Chhatisgarh, India -----
3)Ms. Apurva Sharma	Address of Applicant :Assistant Professor, Department of Biotechnology, Swami Shri Swarnopnand Saraswati Mahavidyalaya, Amd Nagar, Hudco, Bihari, Pin code - 490009, Chhatisgarh, India -----
4)Ms. Yogita Lakhande	Address of Applicant :Assistant Professor, Department of Microbiology, Swami Shri Swarnopnand Saraswati Mahavidyalaya, Amd Nagar, Hudco, Bihari, Pin code - 490009, Chhatisgarh, India -----
5)Dr. Sreety Langhiyana	Address of Applicant :Professor, School of Pharmacy, Chonksey Engineering College, Bilaspur 495001, Chhatisgarh, India -----
6)Dr. S.K. Langhiyana	Address of Applicant :Asst. Professor, SLT Institute of Pharmaceutical Sciences, Gunu Ghansidai Vishwavidyalaya, Bilaspur, 495009, Chhatisgarh, India -----
7)Dr. Mohd. Wasid Khan	Address of Applicant :Asst. Professor, Department of P.G.Studies and Research in Chemistry and Pharmacy,Rani Durgavati Vishwavidyalaya Jabalpur Madhya Pradesh, India -----
8)Dr. Abhishek Pandey	Address of Applicant :Assistant professor, Department of P.G.Studies and Research in Chemistry and Pharmacy,Rani Durgavati Vishwavidyalaya,Jabalpur, Madhya Pradesh, India -----
9)Ms. Basantha singh Gautam	Address of Applicant :Assistant Professor Department of Pharmaceutics, School of Pharmacy, Chonksey Engineering College, Lal Khadan, Masturi Road, Bilaspur, Chhatisgarh 495004, India -----
10)Ms. Renu Sharma	Address of Applicant :Associate Professor, Department of Pharmaceutical Chemistry, Pacific College of Pharmacy, PAHER University, Pacific Hills, Pratap Nagar Extension, Airport Road, Debari, Udaipur-313024, Rajasthan -----
11)Dr. Mainak Bhattacharya	Address of Applicant :Intern, Maitri College of Dentistry and Research Center, Durg, Pin-491001, Chhatisgarh -----
12)Dr. Sal Sagar	Address of Applicant :Senior House Surgeon Govt Hospital,Neyyattinkara,Thiruvananthapuram, TC-812259 Thampunoor, Thiruvananthapuram, Kerala 695001, India -----

(57) Abstract  
ABSTRACT MOLECULAR IDENTIFICATION AND ANTIFUNGAL ACTIVITY OF ANTIMYCOTICS BY FARNESOL AND REDUCTION OF CANDIDA ALBICANS PATHOGENICITY IN FISSION YEAST A method for molecular identification and antifungal activity of antimycotics by farnesol and reduction of candida albicans pathogenicity in fission yeast. The method includes regulating a biofilm in an organized community by the exchange of chemical signals among cells in a process known as quorum sensing. Producing and releasing more quorum sensing molecules (QSM) in formed biofilms than during planktonic growth. Displaying a mature C. albicans biofilm with higher cell density more antifungal resistance than an early biofilm with lower cell density. Producing a Farnesol is an extracellular QSM by C. albicans a certain concentration of farnesol inhibits the yeast-to-hypha transition and compromises biofilm formation. Keeping the Farnesol C. albicans biofilm in stationary phase and inhibits its maturation. Determining the sensitivity of YLP to antimycotic drugs. Antimycotic drugs comprises a nystatin (40 µg), amphotericin B (15 µg), ketoconazole (15 µg), clotrimazole (15 µg), voriconazole (15 µg), fluconazole (15 µg), micafungin (15 µg), and itraconazole (15 µg). Stimulating candidiasis of the gastrointestinal tract in an in vivo quail model. As an unusual experimental design, this study investigated the effects of pretreated C. albicans in quails, not the in vivo pathogenicity of C. albicans. FIG.1



No. of Pages : 17 No. of Claims : 1

## (54) Title of the invention : METHOD AND PROCESS HYDROGEN FUEL POWER.

(51) International classification :G02C0007060000, F02C0007080000, F17C0005000000, F02M0025120000, H01M0008065600  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

## 1)Vivek Vijay Tikait

Address of Applicant :Vivek Tikait, Flat B505, River Residency, Dehu alandi road, Chikhali, Pune, MH, India. E-mail: vivektikait@gmail.com Pune -----

## 2)Dr Siddharth Suhas Kulkarni

## 3)Quantum University

## 4)Mahatma Education Society

## 5)Miss. Parinidhi Singh

## 6)Prof.(Dr.) B.K Sarkar ( Patent Expert/Guru)

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

## 1)Vivek Vijay Tikait

Address of Applicant :Vivek Tikait, Flat B505, River Residency, Dehu alandi road, Chikhali, Pune, MH, India. E-mail: vivektikait@gmail.com Pune -----

## 2)Dr Siddharth Suhas Kulkarni

Address of Applicant :Aston Professional Engineering Centre (APEC), School of Engineering &amp; Technology, College of Engineering and Physical Sciences, Aston University, Birmingham B4 7ET, UK. drsidd10@hotmail.com -----

## 3)M Kannan

Address of Applicant :Quantum University, Dehradun Highway, Mandawar, Roorkee, Uttarakhand 247167, India Roorkee -----

## 4)Mr. Pawan Kumar Singh

Address of Applicant :Dr. Pillai Global Academy, Sector-7, Khanda Colony, New Panvel, Navi Mumbai- 410206, India. Mumbai ----

## 5)Miss. Parinidhi Singh

Address of Applicant :Dr. Pillai Global Academy, Sector-7, Khanda Colony, New Panvel, Navi Mumbai- 410206, India. Mumbai ----

## 6)Prof. (Dr.) Reena Singh

Address of Applicant :FL no -104, Pawan House, Jamuai, Jamuhar, Chunar-2313-5, Mirzapur, UP, India. Chunar -----

## 7)Prof.(Dr.) B.K Sarkar ( Patent Expert/Guru)

Address of Applicant :Mahatma Education Society, Chembur Naka, Mumbai - 400 071, Maharashtra, India. Mumbai -----

## (57) Abstract :

ABSTRACT Our Invention Method and Process Hydrogen Fuel Power is a changes that are becoming noticeable today are difficult for the worldwide exploration local area. The fixed applications area is one of the main energy purchasers. Tackling the capability of environmentally friendly power overall is right now being considered to track down options for acquiring energy by utilizing innovations that offer greatest effectiveness and least contamination. In this specific situation, new energy age advances are expected to both produce low fossil fuel byproducts, as well as recognizing, arranging and carrying out the headings for saddling the capability of sustainable power sources. Hydrogen power device innovation addresses one of the elective answers for future clean energy frameworks. This article surveys the particular qualities of hydrogen energy, which prescribes it as a spotless energy to drive fixed applications. The proposed shortcoming identification strategy is reproduced and checked utilizing information from a specific kind of fluid hydrogen and fluid oxygen rocket motor. The analysis results demonstrate the way that this strategy can actually analyze this fluid hydrogen and fluid oxygen rocket motor progressively. The proposed strategy has higher framework responsiveness and vigor contrasted and the outcomes got from a solitary BP brain network model and a BP brain network model enhanced by a customary hereditary calculation (GA), and the technique has designing application esteem.

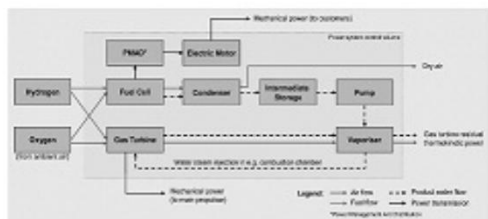


Fig.1: Automatic Fault Notification Rocket Engine Hydrogen Fuel System Flow

No. of Pages : 9 No. of Claims : 8

(54) Title of the invention : ANALYSIS OF AN ENANTIOSELECTIVE OXIDATIVE SPIROKETALIZATION.

(51) International classification :A61K0045060000, C07D0495040000, C07D0473380000, C07C0291020000, A61K0031530000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Jaidip Babasaheb Wable**  
 Address of Applicant :Assistant professor K J Somaiya College Of Science And Commerce Vidyavihar Mumbai, India. Mumbai -----  
**2)Quantum University**  
**3)Mahatma Education Society**  
**4)Miss Parinidhi Singh**  
**5)Prof. (Dr.) Reena Singh**  
**6)Prof.(Dr.) B.K Sarkar ( Patent Expert/Guru)**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Jaidip Babasaheb Wable**  
 Address of Applicant :Assistant professor K J Somaiya College Of Science And Commerce Vidyavihar Mumbai, India. Mumbai -----  
**2)Saloni Arora**  
 Address of Applicant :Quantum University, Dehradun Highway, Mandawar, Roorkee, Uttarakhand 247167, India Roorkee -----  
**3)Mr. Pawan Kumar Singh**  
 Address of Applicant :Dr. Pillai Global Academy, Sector-7, Khanda Colony, New Panvel, Navi Mumbai-410206, India. Mumbai -----  
**4)Miss Parinidhi Singh**  
 Address of Applicant :Dr. Pillai Global Academy, Sector-7, Khanda Colony, New Panvel, Navi Mumbai-410206, India. Mumbai -----  
**5)Prof. (Dr.) Reena Singh**  
 Address of Applicant :FL no -104, Pawan House, Jamuai, Jamuhar, Chunar-2313-5, Mirzapur, UP, India. Chunar -----  
**6)Prof.(Dr.) B.K Sarkar ( Patent Expert/Guru)**  
 Address of Applicant :Mahatma Education Society, Chembur Naka, Mumbai - 400 071, Maharashtra, India. Mumbai -----

(57) Abstract :

ABSTRACT [500] Our Invention Analysis of an enantioselective oxidative Spiroketalization is a Another one-pot, two-step silver-catalyzed Spiroketalization of the in-situ produced Quinone imine ketals (QIKs) with  $\beta$ -alkenyl ketones has been laid out, empowering different C-O and C-C security shaping responses to get to thickly functionalized Spiro[benzofuran-2,1'-isochromene] subsidiaries with for the most part great yields. The utilization of  $\beta$ -alkenyl ketones bearing alkyl and aryl bunches situated at the  $\alpha$ -position of the carbonyl gathering could prompt profoundly diastereoselective spiro [chromane-2, 1'-isochromene] subsidiaries. The response highlights wide substrate scope, gentle oxidative synergist conditions and superb diastereoselectivity. Reactant oxidative functionalization of alkynes has arisen as a powerful strategy in engineered science in late many years. Nonetheless, enantioselective changes through metal carbene intermediates are very uncommon because of the absence of hearty chiral impetuses, particularly in the intermolecular forms. In this, we report the principal uneven three-part response of financially accessible alkynes with nitrones and alcohols, which bears  $\alpha$ -alkoxy- $\beta$ -amino-ketones in great yields with high to phenomenal enantioselectivity utilizing consolidated catalysis by an achiral gold mind boggling and a chiral spiro phosphoric corrosive (CPA). Robotically, this molecule monetary response includes a reactant alkyne oxidation/ylide development/Mannich-type expansion grouping that utilizes nitron as the oxidant and the leaving section imine as the electrophile, giving a clever strategy to multi-functionalization of economically accessible terminal alkynes.

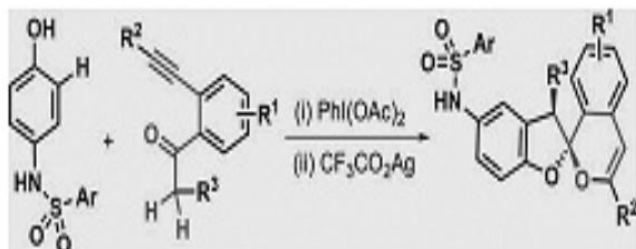


Fig.1: Analysis of an enantioselective oxidative Spiroketalization/ Flow Chart.

No. of Pages : 12 No. of Claims : 6

## (54) Title of the invention : INTERNET OF THINGS (IOT) BASED DRIP IRRIGATION SYSTEM

(51) International classification :A01G0025020000, H04L0029080000, A01G0025160000, H01F0007060000, G05B0019190000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Rucha Rakesh Kallurkar**

Address of Applicant :Westros CHS, Flat 201, 2nd Floor, Kalamkar Park Lane 1, Baner, Pune 411045 Pune -----

**2)Rakesh C Kallurkar**

**Name of Applicant : NA**

**Address of Applicant : NA**

## (72)Name of Inventor :

**1)Rakesh C Kallurkar**

Address of Applicant :Westros CHS, Flat 201, 2nd Floor, Kalamkar Park Lane 1, Baner, Pune 411045 Pune -----

## (57) Abstract :

**ABSTRACT INTERNET OF THINGS (IOT) BASED DRIP IRRIGATION SYSTEM** The present invention provides internet of things (IOT) based drip irrigation system. The system includes a Hardware Device (2 Port), Drip System (Pipe, connectors, drippers etc.) and a third-party android/iOS application. The system includes an intermediary controller device (102) configured to connect with a portable electronic device (104) and a solenoid valve (106) of a drip system. The intermediary controller device (102) connects with the portable electronic device (104) through a hotspot created by the intermediary controller device (102) and when the portable electronic device (104) is in proximity of the intermediary controller device (102). The portable electronic device (104) controls one or more operations of the solenoid valve (106) of the drip system by operating it remotely through the intermediary controller device (104). The portable electronic device (104) controls operations of the solenoid valve (106) of the drip system by operating it remotely through the intermediary controller device (104). FIG. 1 shall be the reference figure

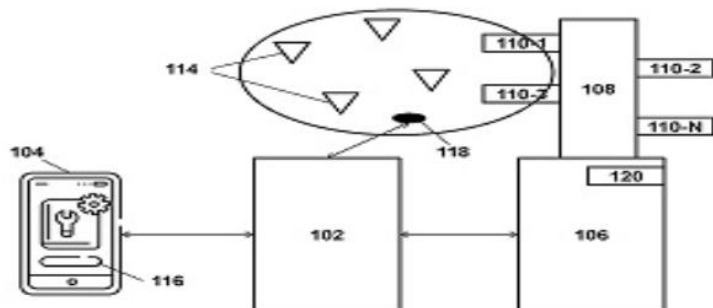


FIG. 1

No. of Pages : 22 No. of Claims : 10

(54) Title of the invention : AUTOMATIC MATERIAL FOLDING OR CUTTING MACHINE

(51) International classification :B65H0035000000, B65H0027000000, B23C0003120000, B65H0020020000, A01G0003000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Patel Amiben Nirav**

Address of Applicant :62, Madhavbag Society Opposite Khodiyar Dairy, Chandlodiya Road, Nirnaynagar Ahmedabad Gujarat India Ahmedabad -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Patel Nirav Natvarlal**

Address of Applicant :62, Madhavbag Society Opposite Khodiyar Dairy, Chandlodiya Road, Nirnaynagar Ahmedabad Gujarat India 382481 Ahmedabad -----

(57) Abstract :

An Automatic Material Folding or Cutting Machine, discloses a novel Feeder Roller (1), Guide roller assembly (3), Gripper assembly (5), Cutter (609), Special assembly for the sensor (8), Platform (9), Guide Roller Assembly plates (301), and Guide roller (304) along with other components for folding and/or cutting operations of Material (18) without deforming or damaging the same, along with removal of air entrapment while folding the Material (18) by Guide roller (304). The Material (18) passes from Feeder Roller (1) to Guide roller assembly (3), and gripped by Gripper assembly (5) to cut it with Cutter (609). The Guide roller assembly (3) assist in changing the folding direction and for transporting Material (18) to prepare stake on Platform (9). Special assembly for the sensor (8) maintains proper height of Material (18) to be staked on Platform (9). All sequences of operations and components are controlled via PLC control panel (20).

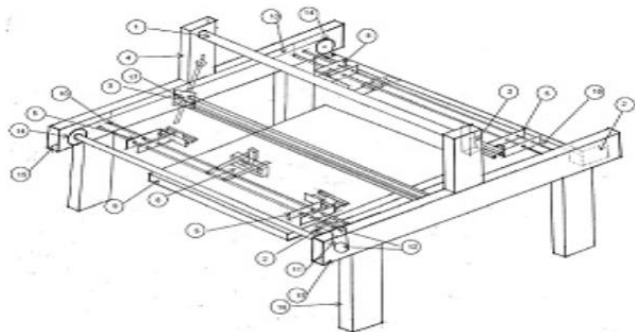


Figure 1: Isometric View of the novel Automatic Material Folding or Cutting Machine

No. of Pages : 30 No. of Claims : 10

(54) Title of the invention : INTEGRATING IOT AND MACHINE LEARNING REVOLUTION: THE DRIVING FORCE OF INDUSTRY 4.0

(51) International classification :H04L0029080000, G06Q0010060000, G05B0019418000, G06Q0050100000, G06Q0010000000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No :NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Premanand S Chauhan**  
 Address of Applicant :Director, S D Bansal College of Technology, Indore, Madhya Pradesh, India - 453331 -----  
**2)Dr. Rahul Jalinder Jadhav**  
**3)Aryan Gautam Jadhav**  
**4)Prasanna Rajaram Rasal**  
**5)Swati Nigam**  
**6)Rituraj Patil**  
**7)Bhasker Pant**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Dr. Premanand S Chauhan**  
 Address of Applicant :Director, S D Bansal College of Technology, Indore, Madhya Pradesh, India - 453331 -----  
**2)Dr. Rahul Jalinder Jadhav**  
 Address of Applicant :HOD and Associate Professor, Department of Computer Applications, Bharati Vidyapeeth (Deemed to be University), Yashwant Rao Mohite Institute of Management Karad, Maharashtra, India -----  
**3)Aryan Gautam Jadhav**  
 Address of Applicant :Engineering Student, Department of Mechanical Engineering, Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering and Technology, Baramati, Pune, Maharashtra, India -----  
**4)Prasanna Rajaram Rasal**  
 Address of Applicant :Assistant Professor, Department of Computer Applications, Bharati Vidyapeeth (Deemed to be University) Yashwant Rao Mohite Institute of Management Karad, Maharashtra, India -----  
**5)Swati Nigam**  
 Address of Applicant :Assistant Professor, Department of Electronics & Communication, New Horizon College of Engineering, Bangalore, Karnataka, India -----  
**6)Rituraj Patil**  
 Address of Applicant :Senior Analyst, Tetra Pak India Private Limited, Pune, Maharashtra, India - 411033 -----  
**7)Bhasker Pant**  
 Address of Applicant :Professor, Department of Computer Science & Engineering, Graphic Era Deemed to be University, Dehradun, Uttarakhand, India -----

## (57) Abstract :

Cyber-physical systems (CPSs), which update and modify industrial processes using cloud computing and the Internet of Things, play a part in the German strategic Industry 4.0 programme, which creates intelligent factories (IoT). In the era of Industry 4.0, the digital twin monitors the physical process. This system integrates machines, sensors, and humans to create real-time intelligent decisions. Industry 4.0 combines sophisticated industrial processes with embedded systems. This might change manufacturing, industry, and commercial value chains. In Industry 4.0, production systems are improved to an intelligent level, allowing for modern manufacturing technologies and sophisticated information to develop a smart, adaptable, and reconfigurable manufacturing process that can keep up with global and dynamic market circumstances.

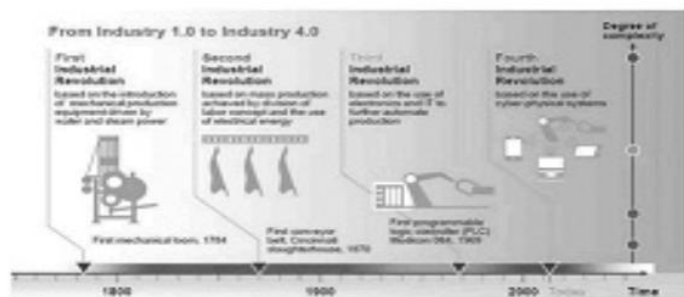


Fig. 3 Depicts the development of the intelligent industry as presented in the AI business.

No. of Pages : 13 No. of Claims : 8

(54) Title of the invention : METHOD AND SYSTEM FOR PROVIDING ADVANCED MEDICAL RESOLUTIONS USING ANTIBIOTICS

(51) International classification :A61K0031167000, A61K0031245000, A61L0024000000, A61L0027540000, A61L0027020000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)DR. CHINTANKUMAR J. TANK (ASSOCIATE PROFESSOR)**  
 Address of Applicant :SCHOOL OF PHARMACY, DR. SUBHASH UNIVERSITY JUNAGADH - 362001, GUJARAT, INDIA. e-mail: Phone: +919725209035 -----  
**2)MR. JAY S. UPADHYAY (ASSISTANT PROFESSOR)**  
**3)DR. DINESH K. DANGAR (ASSISTANT PROFESSOR)**  
**4)MS. KIRAN R. RATHOD (ASSISTANT PROFESSOR)**  
**5)MS. HIRAL S. POPANIYA (ASSISTANT PROFESSOR)**  
**6)MS. KHYATI N. BHAGDEV (ASSISTANT PROFESSOR)**  
**7)MS. PAYAL N. VAJA (ASSISTANT PROFESSOR)**  
**8)MS. ARTI P. BHETARIYA (ASSISTANT PROFESSOR)**  
**9)MS. MORVI M. RAVAL (ASSISTANT PROFESSOR)**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)DR. CHINTANKUMAR J. TANK (ASSOCIATE PROFESSOR)**  
 Address of Applicant :SCHOOL OF PHARMACY, DR. SUBHASH UNIVERSITY JUNAGADH - 362001, GUJARAT, INDIA. e-mail: Phone: +919725209035 -----  
**2)MR. JAY S. UPADHYAY (ASSISTANT PROFESSOR)**  
 Address of Applicant :SCHOOL OF PHARMACY, DR. SUBHASH UNIVERSITY JUNAGADH - 362001, GUJARAT, INDIA. e-mail: Phone: +918980640350 -----  
**3)DR. DINESH K. DANGAR (ASSISTANT PROFESSOR)**  
 Address of Applicant :SCHOOL OF PHARMACY, DR. SUBHASH UNIVERSITY JUNAGADH - 362001, GUJARAT, INDIA. e-mail: Phone: +919586446445 -----  
**4)MS. KIRAN R. RATHOD (ASSISTANT PROFESSOR)**  
 Address of Applicant :SCHOOL OF PHARMACY, DR. SUBHASH UNIVERSITY JUNAGADH - 362001, GUJARAT, INDIA. e-mail: Phone: +919909063283 -----  
**5)MS. HIRAL S. POPANIYA (ASSISTANT PROFESSOR)**  
 Address of Applicant :SCHOOL OF PHARMACY, DR. SUBHASH UNIVERSITY JUNAGADH - 362001, GUJARAT, INDIA. e-mail: Phone: +919510688605 -----  
**6)MS. KHYATI N. BHAGDEV (ASSISTANT PROFESSOR)**  
 Address of Applicant :SCHOOL OF PHARMACY, DR. SUBHASH UNIVERSITY JUNAGADH - 362001, GUJARAT, INDIA. e-mail: Phone: +917600023301 -----  
**7)MS. PAYAL N. VAJA (ASSISTANT PROFESSOR)**  
 Address of Applicant :SCHOOL OF PHARMACY, DR. SUBHASH UNIVERSITY JUNAGADH - 362001, GUJARAT, INDIA. e-mail: Phone: +918780541846 -----  
**8)MS. ARTI P. BHETARIYA (ASSISTANT PROFESSOR)**  
 Address of Applicant :SCHOOL OF PHARMACY, DR. SUBHASH UNIVERSITY JUNAGADH - 362001, GUJARAT, INDIA. e-mail: Phone: +919714682291 -----  
**9)MS. MORVI M. RAVAL (ASSISTANT PROFESSOR)**  
 Address of Applicant :SCHOOL OF PHARMACY, DR. SUBHASH UNIVERSITY JUNAGADH - 362001, GUJARAT, INDIA. e-mail: Phone: +919429077029 -----

(57) Abstract :  
 METHOD AND SYSTEM FOR PROVIDING ADVANCED MEDICAL RESOLUTIONS USING ANTIBIOTICS ABSTRACT The present invention provides a method and system for providing advanced medical resolutions using antibiotics. The method and system material comprising a carrier material having antimicrobial properties, the carrier material comprising one of acidified calcium sulfate, a calcium phosphate, collagen, cancellous, cortical autograft bone, a resorbable polymer, or a composite material comprising any two or more thereof and wherein one or more local anesthetic(s) are selected from the group consisting of lidocaine, prilocaine, tetracaine, pramoxine and mixtures thereof and comprising a carboxylic salt of an alkali or alkaline earth metal.

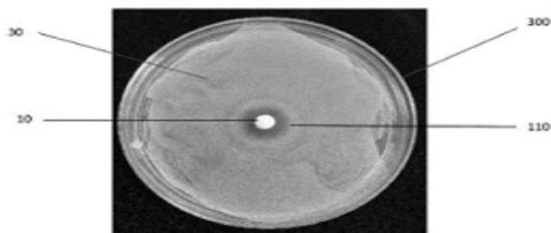


FIG. 1

No. of Pages : 20 No. of Claims : 5



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :04/08/2022

(21) Application No.202221044684 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : GERIATRIC-ORIENTATION OF SEDEM (SEDIMENT DELIVERY MODEL) EXPERT SYSTEMS IN PAEDIATRIC IBUPROFEN TABLETS

(51) International classification :A61K0009200000, A61K0009000000, A61K0009460000, A61K0009160000, A61K0031737000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No :NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
1)Dr. Bhagwat Nivruttirao Pool  
Address of Applicant :Principal, Maharashtra Poly (D.Pharm) Institute , Main Road, Nilanga, Tal: Nilanga, Latur-413521, Maharashtra, India -----  
2)Dr. Rahul Shivajirao Solunke  
3)Dr. Prem Shankar Chauhan  
4)Dr. Rushita Atulbhai Shah  
5)Mr. Bhushan Muley  
6)Mrs. Shuchi Jain  
7)Dr. Prince Prashant Sharma  
8)Ms. Sandhya singh  
9)Mr. Chhatrapal  
10)Dr. Chandrashekar Yavagal  
11)Dr. Mahesh Hiregoudar  
12)Mr. Mihir Ota  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
1)Dr. Bhagwat Nivruttirao Pool  
Address of Applicant :Principal, Maharashtra Poly (D.Pharm) Institute , Main Road, Nilanga, Tal: Nilanga, Latur-413521, Maharashtra, India -----  
2)Dr. Rahul Shivajirao Solunke  
Address of Applicant :HOD & Associate Professor, Department of Pharmaceutics, Maharashtra College of Pharmacy, Main Road, Nilanga, Tal: Nilanga, Latur-413521, Maharashtra, India -----  
3)Dr. Prem Shankar Chauhan  
Address of Applicant :Post Graduate 3rd Year, Department Of Pediatric And Preventive Dentistry Army College Of Dental Sciences Secunderabad, 500087 -----  
4)Dr. Rushita Atulbhai Shah  
Address of Applicant :Post Graduate Student Department Of Pediatric And Preventive Dentistry, 5, Madhuban Apartment, Behind Municipal School, Mukti Medan, Muninagar Cross Road, Ahmedabad 380008 -----  
5)Mr. Bhushan Muley  
Address of Applicant :Associate Professor Shri Rawatpura Sarkar Institute of Pharmacy, behind power grid corporation, Kumbhari, Dist Durg. C.G. 490042 -----  
6)Mrs. Shuchi Jain  
Address of Applicant :Associate professor School of pharmacy, Chouksey Engineering College, Lal Khadan, Masturi Road, Bilaspur (C.G.)495004 -----  
7)Dr. Prince Prashant Sharma  
Address of Applicant :Assistant Professor, Department of Pharmaceutical Sciences, Gurukula Kangri, Deemed To Be University, Haridwar, Uttarakhand, Pin 249404, India -----  
8)Ms. Sandhya singh  
Address of Applicant :Assistant professor, Netaji Subhas University, Pokhari, Bhilai Pahari, Jamshedpur, Jharkhand India- 831012, India -----  
9)Mr. Chhatrapal  
Address of Applicant :Assistant Professor, Columbia institute of Pharmacy, Raipur, Pin- 493111, Chhattisgarh -----  
10)Dr. Chandrashekar Yavagal  
Address of Applicant :MDS, DOrth, PhD Professor and Head of Paediatric Dentistry Maratha Mandal's NGH Institute of Dental Sciences, Near KSRR Grounds, Bauxite Road Belagavi, Karnataka 590010 -----  
11)Dr. Mahesh Hiregoudar  
Address of Applicant :M.D.S., (Ph.D) Professor, Dept. Public Health Dentistry College attached: Al-Badar Dental College and Hospital Kalaburagi-585101 -----  
12)Mr. Mihir Ota  
Address of Applicant :Asst. Professor, Parul Institute of Pharmacy Parul University P.O.Limda, Ta. Waghodia - 391760 Dist. Vadodra, Gujarat (India) -----

(57) Abstract :  
GERIATRIC-ORIENTATION OF SEDEM (SEDIMENT DELIVERY MODEL) EXPERT SYSTEMS IN PAEDIATRIC IBUPROFEN TABLETS A method for geriatric-orientation of sedem expert systems in paediatric ibuprofen tablets. The method includes formulating two principal therapeutic high-dose nutraceuticals, chondroitin sulphate and glucosamine were formulated into an oral disintegration tablet (ODT) intended for sublingual administration, and optimized to improve compliance and achieve rapid onset of action in osteoarthritis treatment. Preparing either by melt granulation or direct compression techniques. Excipients at different ratios such as super disintegrants, pharmaburst™ C1, spray-dried mannitol, and polyethylene glycols to enhance the disintegration time for the ODT system. Representing a better option than conventional tablets for geriatric population, owing to their fast onset of action and their better patient compliance. Expressing albacans HOG1 heterologously in styl- cells and phosphorylation of Hog1 was analyzed under the same conditions. The albacans Hog1 in response to temperature shift from 27 to 49°C. preparing either by melt granulation or direct compression techniques. FIG.1

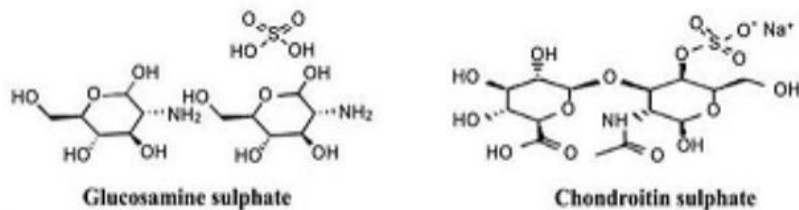


FIG. 1

No. of Pages : 14 No. of Claims : 1

(54) Title of the invention : JUTE FIBER MAT REINFORCED EPOXY BASED POLYMER COMPOSITES AND NANOCOMPOSITES

(51) International classification :B29C0070080000, G01N0003080000, B29C0070300000, C08K0003040000, C08J0005060000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARUN KUMAR SHARMA**

Address of Applicant :B-1219,B-block sagartaal road,near sagartaal chauraha Anand nagar,bahodapur gwalior -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Arun Kumar sharma**

Address of Applicant :b 1219 B block anand nagar bahodapur gwalior madhya pradesh India 474012 Gwalior -----

**2)Dr. rakesh Bhandari**

Address of Applicant :187, Vakil Colony,Bhilwara, 311001 Bhilwara -----

**3)Dr. Shri Krishna Dhakad**

Address of Applicant :B-6, Block-A ,UIT RGPV,Shivpuri ,473793 Shivpuri -----

**4)Sarika sharma**

Address of Applicant :b 1219 B block anand nagar bahodapur gwalior madhya pradesh India 474012 Gwalior -----

**5)Dr. Camelia Pinca – Bretotean**

Address of Applicant :Ap.16, Bl.3 ,nr.7, Str. Republicii,Hunedoara 331032 -----

(57) Abstract :

The purpose of this research is to evaluate the mechanical characteristics of a jute fiber/Multi wall Carbon Nanotube (MWCNT)/Graphene reinforced epoxy composite. This research examines the tensile characteristics of jute composites and study was completed using UTM. When the epoxy matrix is reinforced its mechanical, qualities improved. In comparison to artificial fibers, jute fiber offers better qualities throughout the composite sector. As part of this research, composites have been manufactured using hand layup procedure. Jute fibers accounted for a volume proportion of 30% in all instances and (Graphene+MWCNT) is in varying proportions. Experimental data were compared to determine the tensile properties of the composites that had been created. It has been shown that the qualities of all the created composites are highly influenced by the reinforcing material's tensile characteristics.

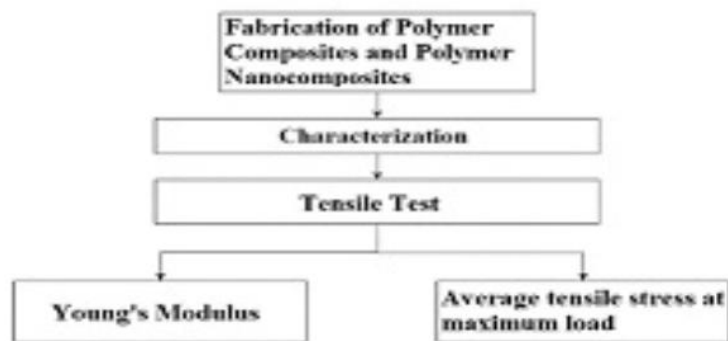


Figure :1

No. of Pages : 14 No. of Claims : 9

(54) Title of the invention : MULTIWALL CARBON NANOTUBE, GRAPHENE AND JUTE MAT FIBRE REINFORCED EPOXY NANOCOMPOSITES

(51) International classification :C08J0005060000, B29K0311100000, C08L0067040000, C08L0003020000, C10G0001000000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to :NA

Application Number :NA

Filing Date :NA

(62) Divisional to Application :NA

Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)ARUN KUMAR SHARMA**

Address of Applicant :B-1219,B-block sagartaal road,near sagartaal chauraha Anand nagar,bahodapur gwalior -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Arun Kumar Sharma**

Address of Applicant :B1219 , B Block Anand Nagar, Bahodapur,Gwalior Gwalior -----

**2)Dr. Rakesh Bhandari**

Address of Applicant :187,Vakil colony , bhilwara Bhilwara -----

**3)Dr. Shri Krishna Dhakad**

Address of Applicant :B-6, Block-A, UIT Shivpuri Campus,Shivpuri, 473793 Shivpuri -----

**4)Sarika Sharma**

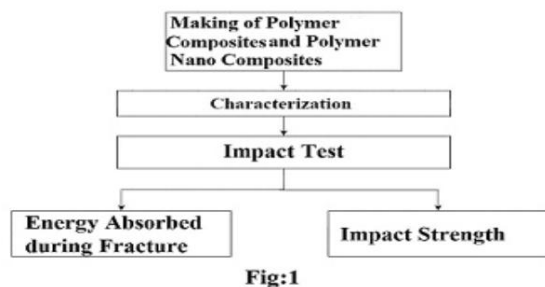
Address of Applicant :B1219 , B Block Anand Nagar, Bahodapur,Gwalior Gwalior -----

**5)Dr. Camelia Pinca – Bretotean**

Address of Applicant :Ap.16, Bl.3 ,nr.7 , Str. Republicii , Hunedoara, 331032 -----

(57) Abstract :

The growth of a civilization that is pollution-free and good for the environment has been made possible by the contemporary world and the shifting demands it places on society. In this scenario, one of the most viable solutions is the use of natural fibre polymer composites. When it comes to the processing of materials, natural fibres have a number of advantages over synthetic materials, low cost, easily available and provide high-quality characteristics. In this research Jute mat fibre with multi-wall carbon nanotube (MWCNT) and Graphene (Gr) are used as reinforcing material in the epoxy matrix and investigate the best possible combination of reinforcement which have the best impact properties.



No. of Pages : 15 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202221044730 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AI BASED SMART FINANCE AND ACCOUNTING MANAGEMENT MODEL

(51) International classification :G06Q0010060000, G06Q0040000000, G06Q0010100000, G06Q0040020000, G06Q0010080000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No :NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Sachin Balwantrao Deshmukh**  
Address of Applicant :A-304, Dreams Elna, Satav Nagar, Hadapsar, Pune-411028 Pune -----  
**2)Dr. Vivek M Diwan**  
**3)Dr. Sonali Gadekar**  
**4)Dr. Rahul Vajinath Bavage**  
**5)Dr. Vijaykumar Kahvala**  
**6)Dr.Manjushree Sardeshpande**  
**7)Dr. Sushil Gadekar**  
**8)Dr. Swati Srivastava**  
**9)Dr. Rajesh.Santoshrao Bahurupi**  
**10)Dr. Chandrabas Dixit**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr. Sachin Balwantrao Deshmukh**  
Address of Applicant :A-304, Dreams Elna, Satav Nagar, Hadapsar, Pune-411028 Pune -----  
**2)Dr. Vivek M Diwan**  
Address of Applicant :R S Mundle Dharampeth Arts and Commerce College, Nagpur Nagpur -----  
**3)Dr. Sonali Gadekar**  
Address of Applicant :Plot no LB/47, Laxmi Nagar, Nagpur 440022 Nagpur -----  
**4)Dr. Rahul Vajinath Bavage**  
Address of Applicant :322, Laxmi Nagar, Nagpur 440 022 Nagpur -----  
**5)Dr. Vijaykumar Kahvala**  
Address of Applicant :H.No.3-11-331/2, Plot No 203, Soundarya Sadan Apartment, L.B.Nagar , Hyderabad-500074 Hyderabad -----  
**6)Dr.Manjushree Sardeshpande**  
Address of Applicant :231-B, Gokulpeth, Nagpur 440010 Nagpur -----  
**7)Dr. Sushil Gadekar**  
Address of Applicant :Plot no LB/47, Laxmi Nagar, Nagpur 440022 Nagpur -----  
**8)Dr. Swati Srivastava**  
Address of Applicant :406 Millennium Chowk Road, Sunder Nagar, Raipur Raipur -----  
**9)Dr. Rajesh.Santoshrao Bahurupi**  
Address of Applicant :Plot No 09, Sahkar Nagar, Kharbi Road, Near Durga Devi Mandir Post -Hanuman, Nagpur - 440024 Nagpur -----  
**10)Dr. Chandrabas Dixit**  
Address of Applicant :Flat no A 104, Bajrang complex, Umer road, Reshimbug chowk, Siraspath, Nagpur 440024 Nagpur -----

(57) Abstract :  
New demands have been put up for the financial management method of enterprise groups as a result of the development of contemporary business systems and the formation of certain large-scale enterprise groups created via asset restructuring, industry alliances, and cross-industry mergers. Within the context of artificial intelligence, the smart accounting management model architecture is the primary research focus of this paper. The accounting sharing centre on the service platform is not affiliated with any regional logistics department. The accounting sharing centre helps the logistics company's branches with standardized and unified accounting, asset management, currency income and expenditure, and more. Meanwhile, in a networked setting, the financial and accounting sharing platform is not restricted to outsiders. Since all of the departments report to the same supervisors, they are in a position to provide input, make suggestions, and oversee the central repository for all accounting data. One should merely disregard the program's inherent logical structure and internal attributes and instead concentrate just on its outward qualities while conducting tests. The boundary value analysis technique, the equivalence class division method, and the causality approach are all applied, with the tested system treated as a black box. Technical approaches are put to the test at the system's interface to see whether they can properly accept and produce findings, such as the graph approach and the error speculation approach. In order to have reliable evaluations of connected activities, it is essential that the accounting management model of accounting shared services to be put into practice. A high level of quantification in the assessment index system is essential. Experts may utilize the whole score system to score points in a particular scoring, which improves the operability and enforceability of the assessment activity and guarantees the objectivity of the evaluation findings.

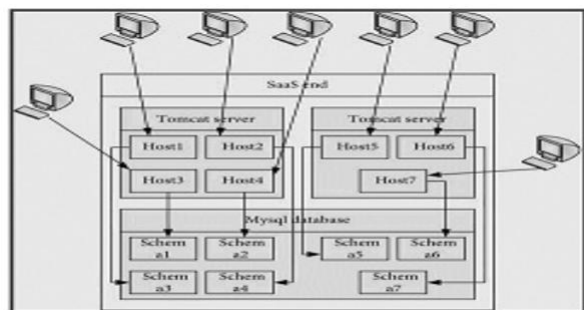


Figure 1: System architecture

No. of Pages : 22 No. of Claims : 5

(54) Title of the invention : HYBRID NANOCOMPOSITES, POLYMER COMPOSITES COMPRISING THE SAME AND FABRICATION TECHNIQUES THEREOF

(51) International classification :C08K0003040000, C08J0005000000, C08K0007240000, B29C0070080000, G01N0003420000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)ARUN KUMAR SHARMA**

Address of Applicant :B-1219,B-block sagartaal road,near sagartaal chauraha Anand nagar,bahodapur gwalior -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Arun kumar sharma**

Address of Applicant :B1219 , B Block Anand Nagar. Bahodapur, Gwalior Gwalior -----

**2)Dr. Rakesh Bhandari**

Address of Applicant :187,Vakil colony,Bhilwara Bhilwara -----

**3)Dr. Shri Krishna Dhakad**

Address of Applicant :B-6, Block-A, UIT RGPV Shivpuri Campus, Shivpuri Shivpuri -----

**4)Sarika sharma**

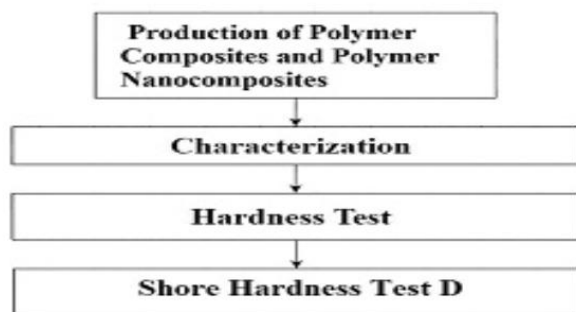
Address of Applicant :B1219 , B Block Anand Nagar. Bahodapur, Gwalior Gwalior -----

**5)Dr. Camelia Pinca – Bretotean**

Address of Applicant :Ap.16, Bl.3 ,nr.7,Str. Republicii ,Hunedoara -----

(57) Abstract :

Graphene (Gr) and Multiwall carbon nanotube (MWCNT)are evolutionary kind of nanofiller that has a number of desirable qualities. These attributes include remarkable capabilities and good compatibility with the majority of polymers. In this investigation, Graphene/MWCNT was used to strengthen the Jute mat fibre/epoxy composites in order to improve the hardness of these materials, its hardness values were studied. This research was undertaken with the intention of presenting a way for improving the hardness characteristics of composites for use in practical applications. The findings presented here may point the way to an important new direction of making fibre-reinforced thermoset composites that are reinforced with nanofillers and have a superior hardness value.



**Fig : 1**

No. of Pages : 11 No. of Claims : 10

(54) Title of the invention : A PUBLIC RATION DISTRIBUTION SYSTEM

(51) International classification :G06Q0030060000, G06K0009000000, G06Q0050340000, H04W0004800000, G07B0017000000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

**1)Shri Ramdeobaba College of Engineering and Management**

Address of Applicant :Ramdeo Tekdi, Gittikhadan, Katol Road, Nagpur-440013, Maharashtra, India Nagpur -----

**2)AOTE, Shailendra S.****3)JOGEKAR, Ravindra****4)LOHI, Shantanu****5)GOREWAR, Harish****Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)AOTE, Shailendra S.**

Address of Applicant :Shri Ramdeobaba College of Engineering and Management, Ramdeo Tekdi, Gittikhadan, Katol road, Nagpur- 440013, Maharashtra, India. Nagpur -----

**2)JOGEKAR, Ravindra**

Address of Applicant :Shri Ramdeobaba College of Engineering and Management, Ramdeo Tekdi, Gittikhadan, Katol road, Nagpur-440013, Maharashtra, India. Nagpur -----

**3)LOHI, Shantanu**

Address of Applicant :Shri Ramdeobaba College of Engineering and Management, Ramdeo Tekdi, Gittikhadan, Katol road, Nagpur-440013, Maharashtra, India. Nagpur -----

**4)GOREWAR, Harish**

Address of Applicant :Shri Ramdeobaba College of Engineering and Management, Ramdeo Tekdi, Gittikhadan, Katol road, Nagpur-440013, Maharashtra, India. Nagpur -----

## (57) Abstract :

Abstract Title: A Public Ration Distribution System The present invention provides a public ration distribution system (100). The system (100) includes a buyer portal (10) for registration and buying ration and a vendor portal (20) for authenticating an identity of a buyer and dispensing ration. The system (100) has a unique identity identification module (20a) to identify buyers during each distribution by comparing the unique identity number of a buyer with encrypted unique identity number stored in a central database (100a). The system (100) has a buyer's data update module (20b) to update the buyer's data in real time and a face recognition module (20c) to identify and authenticate the buyer's information for enabling the buyer to buy desired ration. Further the system (100) has a ration distribution module (20d). The system (100) is user friendly and prevents corruption. Figure 1



No. of Pages : 29 No. of Claims : 10

(51) International classification :B64C0039020000, H04N0007180000, G06Q0050020000, G06K0009000000, A01G0025160000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Dr. Rajmohan Sharma**

Address of Applicant :Assistant Professor, JNKVV, College of Agriculture, Ganjbasoda Distt. Vidisha 464221. Vidisha -----

**2)Dr. Mujahida Sayyed**

**3)Dr. Anay Rawat**

**4)Dr. Siddarth Nayak**

**5)Dr. Shraddha Bhople**

**6)Dr. Vikas Jain**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Rajmohan Sharma**

Address of Applicant :Assistant Professor, JNKVV, College of Agriculture, Ganjbasoda Distt. Vidisha 464221. Vidisha -----

**2)Dr. Mujahida Sayyed**

Address of Applicant :Assistant Professor, JNKVV, College of Agriculture, Ganjbasoda Distt. Vidisha 464221. Vidisha -----

**3)Dr. Anay Rawat**

Address of Applicant :Scientist, JNKVV, Jabalpur 482004. Jabalpur -----

**4)Dr. Siddarth Nayak**

Address of Applicant :Scientist, JNKVV, Jabalpur, 482004. Jabalpur -----

**5)Dr. Shraddha Bhople**

Address of Applicant :Young Professional, JNKVV, Jabalpur 482004. Jabalpur -----

**6)Dr. Vikas Jain**

Address of Applicant :Assistant Professor, JNKVV, College of Agriculture, Powarkheda, Narmadapuram- 461110. HOSHANGABAD -----

(57) Abstract :

The current idea reveals a drone-based system tracking crop development on agricultural lands. The operation of monitoring the development of the crops on farmland is mostly finished via the orientation cruise of the drone and the fixed point shooting of the image gadget carried by the drone. When the drone remote sensing system is combined with advanced agricultural detecting methods, the farmer no longer has to personally monitor crop development on the farms, which results in significant savings for both labour and time. Moreover, the picture data collected by the computer can be checked and compared at any time, allowing for a more precise analysis of the real growing conditions of the crops on the farms and easing the implementation of unified planning and management.

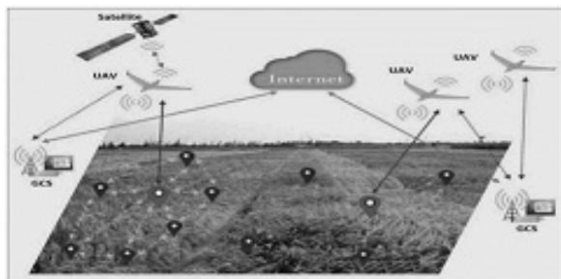


Figure 1: Functional diagram of proposed invention

No. of Pages : 21 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202221044960 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : ADVANCED INSTRUMENT FOR MARKING CORNEA

(51) International classification :A61F0009008000, B23K0026060000, A61F0009013000, H01S0003060000, H01S0003000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr Neeraj A Israni**

Address of Applicant :Savitiri Sadan, B-18 Railway Row Houses, Sec 2, Vashi, Navi Mumbai, Maharashtra. Mumbai -----  
-----

**2)Dr Shruti Kochar**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr Neeraj A Israni**

Address of Applicant :Savitiri Sadan, B-18 Railway Row Houses, Sec 2, Vashi, Navi Mumbai, Maharashtra. Mumbai -----  
-----

**2)Dr Shruti Kochar**

Address of Applicant :CHL Hospital, AB Rd, near L.I.G Square, Rss Nagar, Indore, Madhya Pradesh Indore -----  
-----

**3)Dr. Amol Kadu**

Address of Applicant :Kantai Netralaya, Jain Pipe nagar, Nimkhedi Road, Jalgaon Jalgaon -----  
-----

**4)Dr. Shreya Shah**

Address of Applicant :Rushabh Eye Hospital, Chembur Chembur -----  
-----

(57) Abstract :

The present disclosure answers the problem statement of stable, economical and accurate marking solution. Hand holding devices many a times creates inaccurate and stressed condition while marking the cornea before the corneal surgery. The present invention is related to the come with all solutions of accuracy, stability, patient's comprehensives, adjustability and economical viable model.

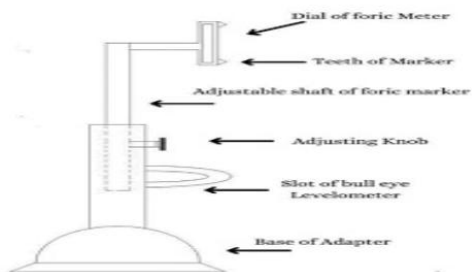


Fig.1 of 2

No. of Pages : 10 No. of Claims : 7



(54) Title of the invention : A NOVEL POLYHERBAL FORMULATION FOR WOUND HEALING AND METHOD OF PREPARING THEREOF

<p>(51) International classification :A61K0036906600, A61K0036906000, A61K0009060000, A61K0009000000, A61K0047380000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Rishi Paliwal</b> Address of Applicant :Department of Pharmacy Indira Gandhi National Tribal University -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Rishi Paliwal</b> Address of Applicant :Department of Pharmacy Indira Gandhi National Tribal University -----</p> <p><b>2)Rameshroo Kenwat</b> Address of Applicant :Department of Pharmacy, Indira Gandhi National Tribal University, Amarkantak, MP, India, 484887 Amarkantak -----</p> <p><b>3)Chiranjeev Singh</b> Address of Applicant :Department of Pharmacy, Indira Gandhi National Tribal University, Amarkantak, MP, India, 484887 Amarkantak -----</p>
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(57) Abstract :

The present invention relates to a polyherbal composition, its formulation as gel for wound healing and method of preparation thereof. It particularly relates to herbal extracts which comprises of gel formation topically applied on skin and wound area. The gel formulation comprises Hedychium Coronarium (HC), Curcuma Caesia (CC) and Curcuma Amada (CA) water and additive ingredients particularly useful for gel preparations.



Figure 1

No. of Pages : 17 No. of Claims : 6

(54) Title of the invention : A NOVEL POLYHERBAL GEL FOR RHEUMATOID ARTHRITIS MANAGEMENT

(51) International classification :A61K0036906600, A61K0036906000, A61K0009060000, A61K0051120000, A61K0008979400

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Rishi Paliwal**

Address of Applicant :Department of Pharmacy Indira Gandhi National Tribal University -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Rishi Paliwal**

Address of Applicant :Department of Pharmacy Indira Gandhi National Tribal University -----

**2)Rameshroo Kenwat**

Address of Applicant :Department of Pharmacy, Indira Gandhi National Tribal University, Amarkantak, MP, India, 484887 Amarkantak -----

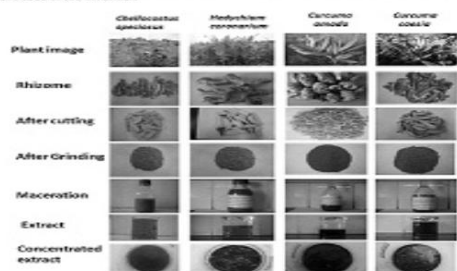
**3)Chiranjeev Singh**

Address of Applicant :Department of Pharmacy, Indira Gandhi National Tribal University, Amarkantak, MP, India, 484887 Amarkantak -----

(57) Abstract :

The present invention discloses a novel polyherbal gel formulation for rheumatoid arthritis management and method of preparation thereof. It particularly relates to herbal extracts which comprises of gel formation topically applied on inflamed joints for arthritis management. The gel formulation comprises rhizome extracts of *Cheilocostus speciosus* (CS), *Hedychium coronarium* (HC), *Curcuma caesia* (CC) and *Curcuma amada* (CA) and water and additive ingredients particularly useful for gel preparations.

Fig. 1: Example 1: Summary of the plants and plant parts at various stages of formulation development used in the invention



No. of Pages : 15 No. of Claims : 4

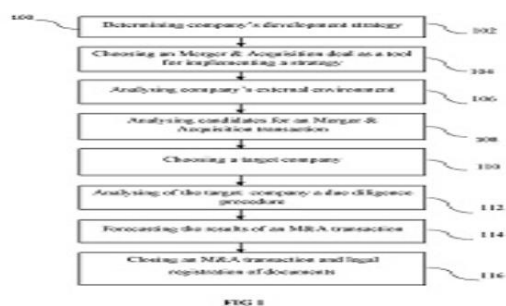
(54) Title of the invention : TECHNIQUES TO MONITOR RISK IN MERGERS AND ACQUISITIONS BASED ON RISK PARAMETERS

(51) International classification :G06Q0050180000, G06Q0040020000, H04W0084180000, A01D0084000000, A01D0057200000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Dr. (CA) Manmeet Singh**  
 Address of Applicant :Professor & HOD, Department of Management, Oriental University, Indore, Madhya Pradesh -----  
**2)Dr. Jaikishan Shau**  
**3)Dr. Mohitash Nagotra**  
**4)Dr. Neha Shau**  
**5)Dr. Vaibhav Modak**  
**6)Dr. Asha Mishra**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Dr. (CA) Manmeet Singh**  
 Address of Applicant :Professor & HOD, Department of Management, Oriental University, Indore, Madhya Pradesh -----  
**2)Dr. Jaikishan Shau**  
 Address of Applicant :Assistant Professor, Department of Commerce, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Madhya Pradesh -----  
**3)Dr. Mohitash Nagotra**  
 Address of Applicant :Assistant Professor, Department of Economics & Management, Indore Institute of Management & Research & Indore, Madhya Pradesh -----  
**4)Dr. Neha Shau**  
 Address of Applicant :Associate Professor, Department of Management IBMR- IPS Academy – Indore, Madhya Pradesh -----  
**5)Dr. Vaibhav Modak**  
 Address of Applicant :Associate Professor, Department of Commerce, Indore Institute of Management & Research Indore, Madhya Pradesh -----  
**6)Dr. Asha Mishra**  
 Address of Applicant :Assistant Professor, Department of Mathematics, Indore Institute of Management & Research Indore, Madhya Pradesh -----

(57) Abstract :

ABSTRACT TECHNIQUES TO MONITOR RISK IN MERGERS AND ACQUISITIONS BASED ON RISK PARAMETERS A method (100) to monitor risk in Mergers and Acquisitions based on risk parameters, wherein a step of method it comprising of determining (102) company's development strategy; choosing (104) a Merger & Acquisition tool for implementing a strategy; analysing (106) a company's external environment; analysing (108) candidates for a Merger & Acquisition transaction; choosing (110) a target company; analysing (112) a target company for a due diligence procedure; forecasting (114) the results of a Merger & Acquisition transaction; closing (116) an Merger & Acquisition transaction and legal registration of documents. Wherein the process of company integration (118), the results of the M&A transaction are evaluated (120), compared to the projected results of the transaction, and If a positive assessment is given, the process of formation and if a negative assessment is given, it is executed to adjusting (122) completion of the Merger and Acquisition transaction. (Reference Fig attached)



No. of Pages : 16 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202221045082 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : POLYHERBAL FORMULATION FOR THE TREATMENT OF PILES

(51) International classification	:A61K0036610000, A61K0036850000, A61K0036670000, A61K0009200000, A61K0009160000	(71)Name of Applicant : <b>1)Chaitanya Ganesh Nagmal</b> Address of Applicant :Sadguru Gadage Maharaj Collage, Karad, India and A/P Vadgaon (J.S.) Taluka: - Khatav, District: - Satara. 415512, Maharashtra Satara ----- <b>2)Dr. Mohan Martand Rajmane.</b> <b>3)Dr. Manasi Shirish Patil.</b> Name of Applicant : NA Address of Applicant : NA
(86) International Application No	:NA	(72)Name of Inventor : <b>1)Chaitanya Ganesh Nagmal</b> Address of Applicant :Sadguru Gadage Maharaj Collage, Karad, India and A/P Vadgaon (J.S.) Taluka: - Khatav, District: - Satara. 415512, Maharashtra Satara ----- <b>2)Dr. Mohan Martand Rajmane.</b> Address of Applicant :Sadguru Gadage Maharaj Collage, Karad, India and Indraprastha, Trupti society, Golibar maidan, Satara Maharashtra 415001. Satara ----- <b>3)Dr. Manasi Shirish Patil.</b> Address of Applicant :Sadguru Gadage Maharaj Collage, Karad, India and Behind krishani petrol pump, Geetanjali housing society F-9E ward, taluka: - kolhapur, kolhapur RS Maharashtra Kolhapur -----
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention related to herbal synergistic formulation comprising dark red Lantana camara, black pepper and clove useful in the treatment of piles. Further invention relates to the process for preparation of herbal formulation. The herbal formulations are selected from powder, granules, tablets or capsules dosage form. The herbal synergistic formulation is synergistic mixture of plant extracts having anti-inflammatory, cooling, diuretic, nerves relaxant properties and antinociceptive properties. The herbal synergistic formulation comprising dark red Lantana camara, black pepper, clove and other pharmaceutical acceptable excipients. The other pharmaceutical acceptable excipients are selected from group consisting of disintegrators, binders, fillers, and lubricants.

No. of Pages : 17 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/08/2022

(21) Application No.202221045119 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMATIC ORGANIC WASTE COMPOST MACHINE.

(51) International classification :B65F0001140000, C05F0017907000, C05F0017964000, C05F0017900000, C05F0017500000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No :NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1|BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI**  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1|PRATHAMESH SAMPAT KAKADE**  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
**2|JANMAY ANIL MHATRE**  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
**3|SUMIT JETENDRA MAJI**  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
**4|SUNEDH LAXMAN BOYWARE**  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
**5|JAYDEEP SARJERAO PATIL**  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
**6|AYATI BHIMRAO SHINDE**  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
**7|DR.SHIVAGOND N TELI**  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
**8|DR.SANDHYA DILIP JADHAV**  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
**9|DR.SANDIP S. KANASE**  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
**10|PRATHAMESH D.PATIL**  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....

(57) Abstract :  
The generation of vast quantities of solid waste has exponentially increased in the past decades owing to rapidly growing population, changing consumption patterns and rapidly growing population. The existing process for collection, transportation and disposal, as an integral part of solid waste management, is under undue stress. Hence improper disposal of solid waste poses a huge risk to public health. Food Composting is now seen as the go to way to a sustainable and eco-friendly environment. Organic food waste composting, a type of natural food waste decomposition process, is carried out under controlled aerobic conditions whereby food wastes are being broken down into their simplest components by microorganisms. Aeration, water retention capacity of the soil is enhanced due to the composting process. Thus we plan to present the study, design and realization of a new composter destined to convert the residue food and all types of organic waste to obtain a mature compost with high quality. The process is fully automated, equipped with sensors, it consists of several steps under controlled environmental conditions (i.e. temperature, humidity) to fasten the process. Reference: FIG.02

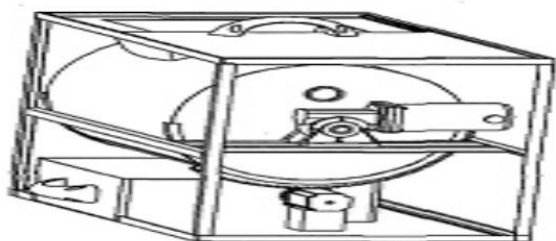


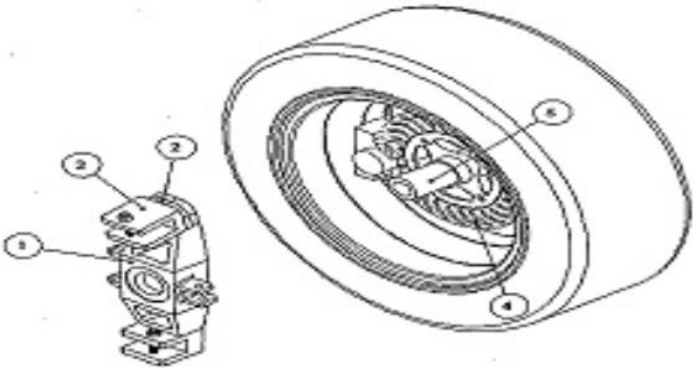
FIG.01

No. of Pages : 9 No. of Claims : 3

(51) International classification :B60C0019000000, B60F0005020000, A63H0017360000, B62K0003000000, B62D0035000000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No :NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
1)BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
1)DR.SANDHYA DJADHAY  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
2)YAYATI BHIMRAO SHINDE  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
3)PRATHAMESH SAMPAT KARADE  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
4)ANUJ DEEPAK HOWAL  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
5)ABHISHEK SANJAY CHAVAN  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
6)ATHARV ANANDKUMAR YERAM  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
7)MITHILESH MUKUND SURYAVANSHI  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
8)PRAJWAL SIDDHARTH KUSARE  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
9)ANURAGKUMAR ARUNKUMAR SHARMA  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
10)ROHAN GAJENDRA KADAM  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....  
11)NIRAJ SANTOSH MAHADIK  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. ....

(57) Abstract :  
In a Formula Student Car or in any car as such, the part that connects the main frame of the body with the wheels through suspension arms is known as the Wheel Assembly. It is a part of the Final drive as well. While designing and developing any automobile the designing of the wheel assembly is critical. It is due to the reason that a lot of forces are acting on the wheel assembly during accelerating, braking, cornering and tilting. Furthermore, the Wheel Assembly is an important part of an automobile and its failure is hazardous endangering human life. Therefore it is required to design the Wheel Assembly and its components considering all the factors leading to the failure by developing a safe Design. It must also be noted that, the components must be designed in such a way that they have a minimum weight at the same time care must be taken that they do not cross a certain limit of stress value. The innovation deals with finding out the dimensions of the individual components and also detecting the probable regions of stress concentration. Reference: FIG.01



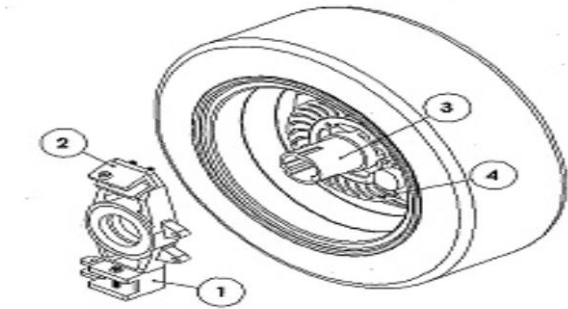
No. of Pages : 9 No. of Claims : 2

(54) Title of the invention : REAR WHEEL ASSEMBLY OF A FORMULA STUDENT CAR

(51) International classification : B62D0007150000, B62K0003000000, A47L0009000000, B62K0025200000, B62M0009100000  
(56) International Application No : NA  
Filing Date : NA  
(57) International Publication No : NA  
(61) Patent of Addition to Application Number : NA  
Filing Date : NA  
(62) Divisional to Application Number : NA  
Filing Date : NA

(71) Name of Applicant : 1)BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA.  
Name of Applicant : NA  
Address of Applicant : NA  
(72) Name of Inventor : 1)DR.SANSHY A D JADHAV  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA.  
2)AMIT A S MEET SAMEL  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA.  
3)HISHAR BHARAT NARKHIDE  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA.  
4)NIKITA RAJESH DHOLE  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA.  
5)YASH DILIP TAWADE  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA.  
6)HARSH NILESH PARTE  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA.  
7)SAKSHI CHANDRASHEKHAR SASALE  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA.  
8)MUKUND KRISHNA CHIKODI  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA.  
9)HARSH KAMUL BENDKHALE  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA.  
10)ATHARVA MAHESH KUMBHAR  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA.  
11)VISHAKHA SURESH KOLI  
Address of Applicant :BHARATI VIDYAPEETH COLLEGE OF ENGINEERING,NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA.

(57) Abstract :  
In a Formula Student Car or in any car as such, the part that connects the main frame of the body with the wheels through suspension arms is known as the Wheel Assembly. It is a part of the Final drive as well. While designing and developing any automobile the designing of the wheel assembly is critical. It is due to the reason that a lot of forces are acting on the wheel assembly during accelerating, braking, cornering and tilting. Furthermore, the Wheel Assembly is an important part of an automobile and its failure is hazardous-endangering human life. Therefore it is required to design the Wheel Assembly and its components considering all the factors leading to the failure by developing a safe Design. It must also be noted that, the components must be designed in such a way that they have a minimum weight at the same time care must be taken that they do not cross a certain limit of stress value. The innovation deals with finding out the dimensions of the individual components and also detecting the probable regions of stress concentration. Reference: FIG.01



No. of Pages : 9 No. of Claims : 2

## (54) Title of the invention : AN EFFECTIVE MECHANISM OF DATA HIDING FOR MAGNIFYING CAPACITY USING REVERSIBLE DATA HIDING

(51) International classification :G06T0001000000, H04N0001320000, H04N0019467000, G09C0005000000, H04L0009300000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Priyanka V. Deshmukh**  
 Address of Applicant :Chandravir Apartment, Sonal Colony, Shegaon-Rahatgaon Road, Amravati -----  
 -----  
**2)Dr. Avinash S. Kapse**  
**3)Dr. V. M. Thakare**  
**4)Dr. Arvind S. Kapse**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Priyanka V. Deshmukh**  
 Address of Applicant :Chandravir Apartment, Sonal Colony, Shegaon-Rahatgaon Road, Amravati -----  
 -----  
**2)Dr. Avinash S. Kapse**  
 Address of Applicant :Associate Professor & Head, Department of IT, Anuradha College of Engineering, Chikhali, Maharashtra -----  
**3)Dr. V. M. Thakare**  
 Address of Applicant :Professor & Head, Department of CSE, SGBAU, Amravati, Maharashtra -----  
 -----  
**4)Dr. Arvind S. Kapse**  
 Address of Applicant :Professor, New Horizon College of Engineering, Bengaluru, Karnataka -----  
 -----

## (57) Abstract :

An invention uses Reversible Data Hiding for embedding the data in the image; intension is to make use of image as transporter for providing the information with the help of cryptography techniques. Combination of Cryptography and steganography will produce high measure of security for the data. Steganography is use for hiding the data inside image whereas cryptography converts into unreadable format picture so that no one can use this. By using Reversible Data hiding techniques, it is possible to huge large portion of information, also it brings excessive insertion amount with good reconstructed image quality. Elliptic curve cryptography is use for image encryption, decryption and authenticate the cipher image. Multi-MSB data hiding scheme is use for the data hiding. The suggested method outperforms conventional Reversible data hiding strategies in terms of embedding performance. This demonstrates that the suggested scheme's embedding rate is near to 3.5 bpp respectively, which ensures the high level of security for the hidden data. To evaluate the execution of proposed procedure, parameters like PSNR, MSE will be taken in consideration.

An Effective Mechanism of Data Hiding for Magnifying Capacity using Reversible Data Hiding  
 BRIEF DESCRIPTION OF DRAWINGS

- a. Context Owner  
 i. Reserving space for embedding data  
 ii. Image Encryption  
 b. Data Hider  
 i. Multi-MSB Substitution  
 ii. Modified Encrypted Media  
 c. Receiver  
 i. Data Extraction  
 ii. Media Recovery



Figure 3

No. of Pages : 6 No. of Claims : 4



(54) Title of the invention : AN IMPROVED REGENERATION METHOD OF SPENT ACTIVATED CARBON SORBED WITH PHENOLIC COMPOUNDS

(51) International classification :B01J0020200000, B01J0020340000, C02F0001280000, A61B0005083000, B01D0015000000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

**1)Kaushik Nath**

Address of Applicant :Professor, Department of Chemical Engineering, G H Patel College of Engineering & Technology, Bakrol Road, Vallabh Vidyanagar-388120, Gujarat, India Vallabh Vidyanagar -----

**Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)Kaushik Nath**

Address of Applicant :Professor, Department of Chemical Engineering, G H Patel College of Engineering & Technology, Bakrol Road, Vallabh Vidyanagar-388120, Gujarat, India Vallabh Vidyanagar -----

**2)Suresh C Panchani**

Address of Applicant :Assistant Professor, Department of Chemical Engineering, G H Patel College of Engineering & Technology Bakrol Road, Vallabh Vidyanagar-388120, Gujarat, India Vallabh Vidyanagar -----

**3)Tejal M Patel**

Address of Applicant :Former Associate Professor, Department of Chemical Engineering, G H Patel College of Engineering & Technology Bakrol Road, Vallabh Vidyanagar-388120, Gujarat, India Vallabh Vidyanagar -----

**4)Haresh K Dave**

Address of Applicant :Assistant Professor, Department of Chemical Engineering, G H Patel College of Engineering & Technology Bakrol Road, Vallabh Vidyanagar-388120, Gujarat, India Vallabh Vidyanagar -----

**5)Vinay B Patel**

Address of Applicant :Assistant Professor, Department of Chemical Engineering, G H Patel College of Engineering & Technology Bakrol Road, Vallabh Vidyanagar-388120, Gujarat, India Vallabh Vidyanagar -----

**6)Vivaksha N Patel**

Address of Applicant :Assistant Professor, Department of Chemical Engineering, G H Patel College of Engineering & Technology Bakrol Road, Vallabh Vidyanagar-388120, Gujarat, India Vallabh Vidyanagar -----

## (57) Abstract :

Abstract AN IMPROVED REGENERATION METHOD OF SPENT ACTIVATED CARBON SORBED WITH PHENOLIC COMPOUNDS The present invention relates to a novel, improved and eco-friendly regeneration method of activated carbon sorbed with phenolic impurities in presence of suitable strains of microorganisms. The developed regeneration process was fast, more selective and energy-efficient. The process employs synergic combination of adsorption and biodegradation. Extent of bioregeneration is quantified using direct determination of substrate content on adsorbent, indirect measurement of substrate consumption by measuring carbon dioxide production and measurement of oxygen uptake. The process is influenced by type of activated carbon, porosity and particle size, microbial uptake rate, adsorbate concentration, contact time, and biodegradability of sorbed compounds. The extent of bio-regeneration varied between 55-75%.

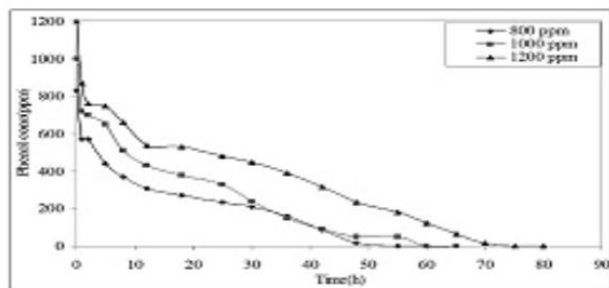


Figure 1 show the concentration profile of phenol in course of time

No. of Pages : 24 No. of Claims : 5

(54) Title of the invention : SYNTHESIS AND FUNCTIONALIZATION OF CERIUM OXIDE NANOFILAKES FOR BIOMEDICAL APPLICATIONS

(51) International classification :A61K0031198000, A23L0033175000, B01J0020280000, B01F0013080000, A61K0008410000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

1)SALAMA AHMED SAGHEER YASEEN

Address of Applicant :Department of Physics, Dr. Babasaheb Ambedkar Marathwada University Aurangabad -----

2)FAIZAA AWAD YEHYA SAIF

3)AHMED SALEH MOQBEL ABDULLAH ALAMEEN

4)SACHIN B. UNDRE

5)PRABHAKAR BHAGWATRAO UNDRE

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

1)SALAMA AHMED SAGHEER YASEEN

Address of Applicant :Department of Physics, Dr. Babasaheb Ambedkar Marathwada University Aurangabad -----

2)FAIZAA AWAD YEHYA SAIF

Address of Applicant :Department of Physics, Dr. Babasaheb Ambedkar Marathwada University Aurangabad -----

3)AHMED SALEH MOQBEL ABDULLAH ALAMEEN

Address of Applicant :Department of Physics, Dr. Babasaheb Ambedkar Marathwada University Aurangabad -----

4)SACHIN B. UNDRE

Address of Applicant :Department of Chemistry, Indian Institute of Teacher Education Gandhinagar -----

5)PRABHAKAR BHAGWATRAO UNDRE

Address of Applicant :Department of Physics, Dr. Babasaheb Ambedkar Marathwada University Aurangabad -----

## (57) Abstract :

The present embodiment provides functionalized cerium oxide nanoflakes with a plurality of amino acids. The plurality of amino acids includes alanine, serine, valine, cysteine, aspartic, L-glutamine, L-glutamic, L-methionine, and L-arginine. The FCEO2 are surface modified by magnetic stirring and have a crystalline fluorite structure. The functionalized cerium oxide nanoflakes possess anticancer and antifungal activity. Reference Figure 1

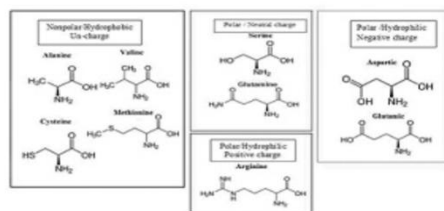


Figure 1

No. of Pages : 49 No. of Claims : 9

(51) International classification :G06Q0040080000, G08G0001080000, G08G0001010000, C12N0009100000, H04L0012700000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No :NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
 1)Dr. Pramod D. Patil  
 Address of Applicant :Professor, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune-18, India .....  
 2)Aitharva Mangeshkumar Agrawal  
 3)Lakshitaa sehgal  
 4)Anshul Aggarwal  
 5)Chandana Sowmya Yelamancheli  
 6)Rohan Binaykia  
 7)Tejashwi Shubham  
 8)Kumar Ayush  
 9)Mohit Gupta  
 10)Ritwik Kumar  
 11)Ankita Rameshchandra Pandey  
 12)Laman Ansari  
 13>Rutika pandurang shinde  
 14)Pujayant Kumar  
 15)Amit Nath Gupta  
 16)Sravan Potturi  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
 1)Dr. Pramod D. Patil  
 Address of Applicant :Professor, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune-18, India .....  
 2)Aitharva Mangeshkumar Agrawal  
 Address of Applicant :Vellore Institute of technology .....  
 3)Lakshitaa sehgal  
 Address of Applicant :University Institute of Engineering and Technology, Panjab University, Chandigarh .....  
 4)Anshul Aggarwal  
 Address of Applicant :University Institute of Engineering and Technology, Panjab University, Chandigarh .....  
 5)Chandana Sowmya Yelamancheli  
 Address of Applicant :ICFAL University Hyderabad .....  
 6)Rohan Binaykia  
 Address of Applicant :Korimal College .....  
 7)Tejashwi Shubham  
 Address of Applicant :Kalinga Institute of Industrial Technology. ....  
 8)Kumar Ayush  
 Address of Applicant :SRM Institute of science and Technology, Kattankulathur, 603203, .....  
 9)Mohit Gupta  
 Address of Applicant :Indian Institute of Information Technology Senapati, Manipur .....  
 10)Ritwik Kumar  
 Address of Applicant :Indian Institute of Information Technology Senapati, Manipur .....  
 11)Ankita Rameshchandra Pandey  
 Address of Applicant :Veermata Jijabai Technological Institute .....  
 12)Laman Ansari  
 Address of Applicant :Netaji Subhas University of Technology .....  
 13>Rutika pandurang shinde  
 Address of Applicant :Savitribai Phule Pune University (SPPU) .....  
 14)Pujayant Kumar  
 Address of Applicant :Dr.APJ ABDUL KALAM TECHNICAL UNIVERSITY .....  
 15)Amit Nath Gupta  
 Address of Applicant :Birla Institute of Technology – Mesra .....  
 16)Sravan Potturi  
 Address of Applicant :National Institute of Technology – Raipur .....  
 17)Abhijit D. Jadhav  
 Address of Applicant :Dr. D. Y. Patil Institute of Technology, Pimpri .....

(57) Abstract :  
 In this invention as a result, a better traffic control system is required. Static traffic control employs a traffic signal with a countdown for each phase that is set in stone and does not respond to real-time traffic on the road. Because the collection of super records is regularly based on sophisticated and high priced technology, and as a result confined price range will decrease the range of centers, accuracy and coverage are often in warfare whilst using digital sensors, such as proximity sensors or loop detectors. Furthermore, due to the fact maximum sensors have a confined powerful range, total insurance throughout a community of facilities usually necessitates a massive wide variety of sensors.

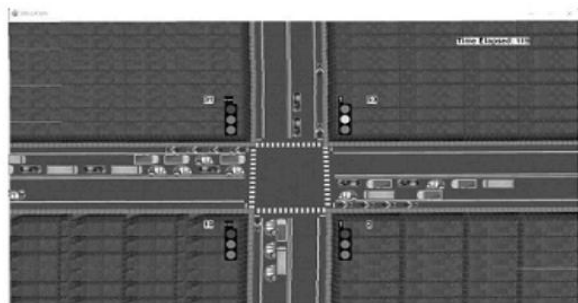


Fig. 1: System Design

No. of Pages : 9 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/08/2022

(21) Application No.202211045319 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : ENHANCEMENT OF ADVANCED ENCRYPTION STANDARD ALGORITHM TO SECURE IOT DEVICES.

(51) International classification :H04L0009060000, H04L0009000000, H04W0012100000, G06F0021320000, H04L0029080000  
(86) International Application No :NA  
(87) International Publication No :NA  
(61) Patent of Addition to Application Number :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA  
Filing Date :NA

(71)Name of Applicant :  
1)Dr. Pramod D. Patil  
Address of Applicant :Professor, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune-18, India -----  
2)Vidyam Sree Vathsav Sharma  
3)Chandana Sowmya Yelamancheli  
4)Rutika Pandurang Shinde  
5)Vanshika Sethi  
6)Panthangi Sai Lohith  
7)Amit Nath Gupta  
8)Raiyan Ahmed  
9)Abhijit D. Jadhav  
10)Atharva Mangeshkumar Agrawal  
11)M Nagadeepika  
12)Ujjwal Gaur  
13)Ziyad Ahmed Mohammed  
14)Pujayant Kumar  
15)Aditya Chaurasia  
16)Tushar Parmanand Budhwani  
17)Mohit Parmanand Budhwani  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
1)Dr. Pramod D. Patil  
Address of Applicant :Professor, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune-18, India -----  
2)Atharva Mangeshkumar Agrawal  
Address of Applicant :Vellore Institute of technology ( VIT) -----  
3)M Nagadeepika  
Address of Applicant :Information Science and engineering, BNM Institute of Technology -----  
4)Ujjwal Gaur  
Address of Applicant :Manav Rachna university -----  
5)Ziyad Ahmed Mohammed  
Address of Applicant :ChaitanyaBharathi Institute of Technology (CBIT), Hyderabad -----  
6)Pujayant Kumar  
Address of Applicant :Aligarh College of Engineering and Technology, Aligarh, Dr.APJ ABDUL KALAM TECHNICAL UNIVERSITY -----  
7)Aditya Chaurasia  
Address of Applicant :Indian Institute of Technology (ISM), Dhanbad -----  
8)Tushar Parmanand Budhwani  
Address of Applicant :Thadomal Shahani Engineering college -----  
9)Mohit Parmanand Budhwani  
Address of Applicant :Thadomal Shahani Engineering college -----  
10)Vidyam Sree Vathsav Sharma  
Address of Applicant :NIIT UNIVERSITY -----  
11)Chandana Sowmya Yelamancheli  
Address of Applicant :ICFAI University Hyderabad -----  
12)Rutika Pandurang Shinde  
Address of Applicant :Savitribai Phule Pune University(SPPU) -----  
13)Vanshika Sethi  
Address of Applicant :UIET – Kurukshetra University -----  
14)Panthangi Sai Lohith  
Address of Applicant :Sreenidhi institute of science and technology -----  
15)Amit Nath Gupta  
Address of Applicant :Birla Institute of Technology - Mesra -----  
16)Raiyan Ahmed  
Address of Applicant :SRM University -----  
17)Abhijit D. Jadhav  
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Pimpri -----

(57) Abstract :

ABSTRACT: Cryptography has an important role in securing information which has gained prominence due to the digitization. Exchange of sensitive personal data such as medical information tends to take place frequently throughout the globe; therefore, protecting data from unauthorized adversary access is imperative. Advanced Encryption Standard (AES) algorithm is one of the algorithms which is broadly employed because of its exemplary security and usage in extensive applications. This invention demonstrates a better algorithm as a fall back to AES algorithm, if it ever to be breached, additionally solves the problem of implementing in simple IoT devices and immune to cache collision timing attacks.

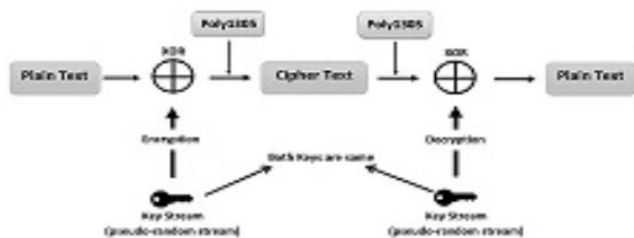


Fig. 1 : Diagrammatic description of working of ChaCha20 and Poly1305

No. of Pages : 11 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202221045342 A

(19) INDIA

(22) Date of filing of Application :09/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN IOT BASED SYSTEM FOR INTELLIGENT WINTER ROAD MAINTENANCE IN HILLY AREA

(51) International classification :E01H0010000000, G07C0005000000, H04W0036000000, G08G0001040000, G08G0001090000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)MIT World Peace University**  
Address of Applicant :School of Polytechnic and Skill Development, Kothrud, Pune-411038 India Pune ---  
-----  
**Name of Applicant : NA**  
**Address of Applicant : NA**  
(72)Name of Inventor :  
**1)Mrs. A.R. Sanap**  
Address of Applicant :Assistant Professor, Electronics and Communication Engineering, MITWPU, School of Polytechnic and Skill Development, Pune, Maharashtra, India - 411038 Pune -----  
**2)Mrs. N.S. Dutte**  
Address of Applicant :Assistant Professor, Electronics and Communication Engineering, MITWPU, School of Polytechnic and Skill Development, Pune, Maharashtra, India - 411038 Pune -----  
**3)Mrs. A.A. Bakare**  
Address of Applicant :Program Head, Electronics and Communication Engineering, MITWPU, School of Polytechnic and Skill Development, Pune, Maharashtra, India - 411038 Pune -----  
**4)Mrs. M.S. Joshi**  
Address of Applicant :Assistant Professor, Electronics and Communication Engineering, MITWPU, School of Polytechnic and Skill Development, Pune, Maharashtra, India - 411038 Pune -----  
**5)Mrs. M.R. Kuveskar**  
Address of Applicant :Assistant Professor, Electronics and Communication Engineering, MITWPU, School of Polytechnic and Skill Development, Pune, Maharashtra, India - 411038 Pune -----  
**6)Mrs. V.V. Pangave**  
Address of Applicant :Assistant Professor, Electronics and Communication Engineering, MITWPU, School of Polytechnic and Skill Development, Pune, Maharashtra, India - 411038 Pune -----  
**7)Mrs. S.K. Pawar**  
Address of Applicant :Assistant Professor, Electronics and Communication Engineering, MITWPU, School of Polytechnic and Skill Development, Pune, Maharashtra, India - 411038 Pune -----

(57) Abstract :

Disclosing an Internet of Things-based system for intelligent winter road maintenance in hilly areas, the system includes a number of vehicle management units, a number of current data systems, a communication gateway, a winter road management server, and a road forecast management unit. All of these components are included in the system. The present invention utilizes the plurality of vehicle management unit, which is embedded into the vehicles for tracking the weather of travelling road and condition of the road, the plurality of current data system, which is installed on the travelling road for monitoring health data of the road and weather condition of the road, the communication gateway, which provides communication between the vehicle management unit, the current data system, and the winter road management server, and the winter road management server. Additionally, the present invention utilises the plurality of communication gateway, which provides communication between the vehicle management unit. The winter road management of mountainous locations in winter is provided by the present invention, which integrates with both LoRa and Wi-Fi modems.

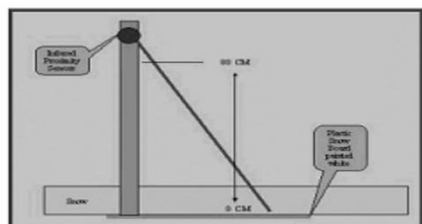


Figure 1: Snow detection sensor

No. of Pages : 18 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202221045343 A

(19) INDIA

(22) Date of filing of Application :09/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SYNTHESIS METHOD AND PROCESS OF SILVER NANOPARTICLES USING MINT EXTRACT METHOD THEREOF

(51) International classification	:A61K0036534000, H05K0001090000, B22F0009240000, A61K0009060000, D21H0021520000	(71)Name of Applicant : <b>1)Dr. Ramesh Baburao Bhise</b> Address of Applicant :Assistant Professor, Balasaheb Jadhav Arts, Commerce and Science College, Ale, Junnar, Pune, Maharashtra, Pin: 412411 Pune ----- <b>2)Dr. Mahendra Shantaram Shinde</b> Name of Applicant : NA Address of Applicant : NA
(86) International Application No	:NA	(72)Name of Inventor : <b>1)Dr. Ramesh Baburao Bhise</b> Address of Applicant :Assistant Professor, Balasaheb Jadhav Arts, Commerce and Science College, Ale, Junnar, Pune, Maharashtra, Pin: 412411 Pune ----- <b>2)Dr. Mahendra Shantaram Shinde</b> Address of Applicant :Assistant Professor, Mahant Jamanadas Maharaj Arts, Commerce and Science College Karanjali (Peth), Nashik, Maharashtra, Pin:422208 Nashik -----
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The proposed invention related to providing a solution that contains silver nitrate, providing an extract of mint, mixing the silver nitrate solution with the extract solution to form an aqueous mixture, and allowing the aqueous mixture to rest for a period of time in order to form silver nanoparticle are all steps that can be included in a method that uses mint to synthesize silver nanoparticle.

No. of Pages : 16 No. of Claims : 3

(54) Title of the invention : BIO-ORGANIC LIQUID FERTILIZER CONTAINING BANANA STEM JUICE AND METHOD OF PREPARATION THEREOF

(51) International classification :C05G0003000000, A23L0019000000, C05G0003600000, C05F0001000000, C05F0005000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Rahul Ravindra Shah**

Address of Applicant :B-504, Neelkanth Regent regalia, P-2, Ram Narayan Narkar Marg, Ghatkopar east -----

**2)Shah Geeta Rahul**

**3)Charla Kejal Ajay**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Rahul Ravindra Shah**

Address of Applicant :B-504, Neelkanth Regent regalia, P-2, Ram Narayan Narkar Marg, Ghatkopar east -----

**2)Shah Geeta Rahul**

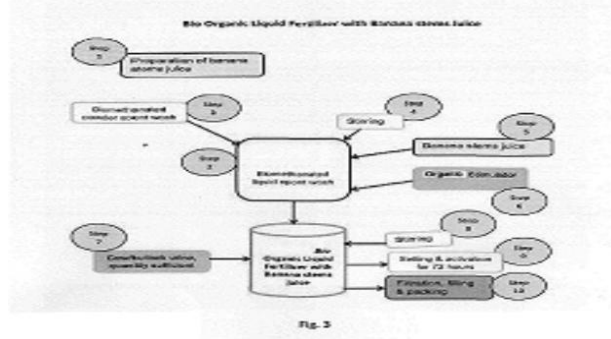
Address of Applicant :B-504, Neelkanth Regent Regalia, P-2, Ram Narayan Narkar Marg, Ghatkopar (East), Mumbai - 400077 Maharashtra, India. Mumbai ---

**3)Charla Kejal Ajay**

Address of Applicant :1501, Sunrise Venetia 168,, 172 JSS Road, Near Ambewadi Post Office, Girgaon Mumbai City Mumbai - 400004 Maharashtra, India. Mumbai -----

(57) Abstract :

**ABSTRACT** Bio-organic liquid fertilizer containing banana stem juice and method of preparation thereof The present invention describes a bio-organic liquid fertilizer which is made from (Fig. 1) banana stem juice, biomethanated liquid spent wash, biomethanated powder spent wash, cow/bullock urine and an organic stimulator made from (Fig. 2) banana stem pulp and juice, different parts of wild trees and grass found in the forests, left over of fruits and raw vegetable wastes, cow/bullock urine and natural salts. All the ingredients are mixed (Fig. 4) and kept in a closed vessel for 72 hours for setting and activation, to prepare the bio-organic liquid fertilizer. This bio-organic fertilizer contains all the essential nutrients required for the luxuriant growth of plants and has high fertilizer efficiency. It prevents diseases in plants and eliminates the harmful effects of pesticides, chemical fertilizers, arsenic and heavy metal residues from plants/crop yields. Fig. 3



No. of Pages : 27 No. of Claims : 9

(54) Title of the invention : AN INVESTIGATIVE STUDY ON THE CAUSES AND SOLUTIONS TO SECONDARY SCHOOL STUDENTS IN FURTHER MATHEMATICS

(51) International classification :G06Q0050200000, G09B0019020000, G09B0007000000, G09B0023040000, G06Q0010100000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Reema Dewangan**  
 Address of Applicant :Assistant professor, Department of Education St. Thomas College Ruabandha Sector, Bhilai,Durg Chhattisgarh Pin-490006 -----  
**2)Ms. Pooja Sharma**  
**3)Dr. Anupama Gangrade**  
**4)Dr. Pushpa Sharma**  
**5)Dr. Gurpreet Kour Chhabra**  
**6)Dr. Kavita Verma**  
**7)Dr. Rupa shrivastava**  
**8)Dr. Shabnam Khan**  
**9)Dr. Sumita Singh**  
**10)Dr. Jyotsna Gadpayle**  
**11)Mrs. Mamta Rani Yadu**  
**12)Dr. Shalini verma**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Dr. Reema Dewangan**  
 Address of Applicant :Assistant professor, Department of Education St. Thomas College Ruabandha Sector, Bhilai,Durg Chhattisgarh Pin-490006 -----  
**2)Ms. Pooja Sharma**  
 Address of Applicant :Assistant professor, HOD , Department of Education, Dr.C.V. Raman University, 28 Subhash nagar, Sihada Road, Khandwa,Pin- 450001, Madhya Pradesh, India -----  
**3)Dr. Anupama Gangrade**  
 Address of Applicant :Assistant professor, Department of Education St. Thomas College Ruabandha Sector, Bhilai, Dis-Durg, Chhattisgarh Pin-490006, India -----  
**4)Dr. Pushpa Sharma**  
 Address of Applicant :Associate professor Mansa College of Education, Kohka Road Kurud BHILAI- 490024 Dist- Durg, Chhattisgarh -----  
**5)Dr. Gurpreet Kour Chhabra**  
 Address of Applicant :Principal, Sanskar City College of Education, Thankutola, Dist- Rajnandgaon, - 490006, Chhattisgarh -----  
**6)Dr. Kavita Verma**  
 Address of Applicant :Assistant Professor, Kalyan P G College Bhilai Nagar, Dist- Durg , Chhattisgarh, India -----  
**7)Dr. Rupa shrivastava**  
 Address of Applicant :Assistant Professor Department of Education St. Thomas College Ruabandha Sector, Bhilai, Chhattisgarh Pin-490006 -----  
**8)Dr. Shabnam Khan**  
 Address of Applicant :Assistant Professor Department of Education St. Thomas College Ruabandha Sector, Bhilai, Chhattisgarh Pin-490006 -----  
**9)Dr. Sumita Singh**  
 Address of Applicant :Assistant Professor Department of Education St. Thomas College Ruabandha Sector, Bhilai, Chhattisgarh Pin-490006 -----  
**10)Dr. Jyotsna Gadpayle**  
 Address of Applicant :Assistant Professor Department of Education St. Thomas College Ruabandha Sector, Bhilai, Dist-Durg, Chhattisgarh Pin-490006 -----  
**11)Mrs. Mamta Rani Yadu**  
 Address of Applicant :Asst. Professor Sanskar City College of Education, Thankutola, Dist- Rajnandgaon, - 490006, Chhattisgarh ---  
**12)Dr. Shalini verma**  
 Address of Applicant :Asst. Professor Bhilai Maitri College Risali Sector, Bhilai, Dist- Durg- 490006 Chhattisgarh -----

## (57) Abstract :

This study tackles a worldwide problem, manifested in the low-level academic achievement in mathematics, by placing mathematics in a real life context beyond the border of book publications. It discusses the important role that mathematics plays in practice, as well as the effects of poor performance in mathematics on the academic career of students. The three pillars of the educational process are summarized in this article. In addition, the reasons for low-level academic achievement in mathematics are categorized in five divisions: student-related factors, teacher-related factors, curriculum-related factors, school-related factors and family-related factors. The article also states the stages in which mathematics goes through during school study, which are acquiring a strong foundation, practising mathematics, and the self-stage. Then it goes on more specifically to discuss the stages in which the teaching of any new concept or subject in mathematics must pass through. The researcher followed the qualitative approach based on in-depth interviews. The study ends up with suggested solutions for the problem of low-level achievement in mathematics for the student, teacher, parents and school. FIG.1

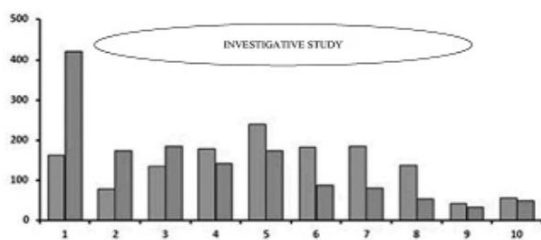


FIG. 1

No. of Pages : 16 No. of Claims : 1



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202221045557 A

(19) INDIA

(22) Date of filing of Application :09/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : MACHINE LEARNING BASED SYSTEM FOR EARLY DISEASE PREDICTION USING MEDICAL RECORDS

(51) International classification :G06N0020000000, G16H0010600000, G16H0050200000, G16H0050700000, G16H0050300000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr. Nilesh Jain**

Address of Applicant :Associate Professor, Department of Computer Applications, Mandsaur University, Mandsaur, M.P. - 458001 -----

**2)Madonna Lamin**

**3)Gyanendra Kumar shukla**

**4)Dr. Sheshang Degadwala**

**5)Prof. Rahul Kumar Gour**

**6)Govinda Rajulu, Lanke**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Nilesh Jain**

Address of Applicant :Associate Professor, Department of Computer Applications, Mandsaur University, Mandsaur, M.P. - 458001 -----

**2)Madonna Lamin**

Address of Applicant :Assistant Professor, Computer Science Engineering, Head of Department, Computer science and Engineering, ITM SLS Baroda University, Vadodara, Gujarat - 391510 -----

**3)Gyanendra Kumar shukla**

Address of Applicant :Asso. Prof., Computer Application, Lingaya's Lalita Devi Institute of Management and Sciences, New delhi -110047 ---

**4)Dr. Sheshang Degadwala**

Address of Applicant :Associate Professor & Head of Department, Department of Computer Engineering, Sigma Institute of Engineering, Vadodara, Gujarat -----

**5)Prof. Rahul Kumar Gour**

Address of Applicant :Assistant Professor, Bansal Institute of Science And Technology, Bhopal -----

**6)Govinda Rajulu, Lanke**

Address of Applicant :M.Tech. , Data Science & Engineering, Birla Institute of Technology & Science, Pilani, Rajasthan -----

(57) Abstract :

The present innovation relates to a machine learning based system for early disease prediction using medical records. The invention focuses on designing a machine learning based framework to give accurate predictions of disease. The biomedical interventions to the medical records with machine learning will help for betterment treatment of the disease by delivering drug molecules to the targeted location.

No. of Pages : 6 No. of Claims : 5

(54) Title of the invention : SECURED ROUTING APPROACH FOR ENERGY CONSTRAINED DEVICES USING TRUST MANAGEMENT.

<p>(51) International classification :H04L0029060000, H04L0012721000, H04L0012751000, H04L0012753000, H04L0009000000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Anup W. Burange</b> Address of Applicant :A/p:- C/o. W. J. Burange, Burange house, Navjeevan colony, Dastur nagar road, Amravati-444607, Maharashtra, India Amravati -----</p> <p><b>2)Vaishali M. Deshmukh</b> <b>3)Yugandhara A. Thakare</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Anup W. Burange</b> Address of Applicant :A/p:- C/o. W. J. Burange, Burange house, Navjeevan colony, Dastur nagar road, Amravati-444607, Maharashtra, India Amravati -----</p> <p><b>2)Vaishali M. Deshmukh</b> Address of Applicant :A/p:- C/o. H. M. Deshmukh, in front of Abhinav State Bank Colony, Harsh Bungalow, Z-P road, Camp, Amravati-444602, Maharashtra, India Amravati -----</p> <p><b>3)Yugandhara A. Thakare</b> Address of Applicant :A/p:- C/o. W. J. Burange, Burange house, Navjeevan colony, Dastur nagar road, Amravati-444607, Maharashtra, India Amravati -----</p>
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## (57) Abstract :

The number of constrained devices which are getting connected to internet are increasing day by day, which makes the routing process challenging and vulnerable to different security threats. The resource constrained nature of low power and lossy network (LLNs) does not make it suitable for traditional security measures. Due to which there is high possibility of different routing and topology attacks. To address this issue different solutions and methodologies have been proposed to counter these attacks and to make routing process secure. Trust management systems evolved as efficient mechanism and different techniques, methods of trust have been used. Proposed work is the trust based distributed routing system to provide trustworthy environment for making routing decisions between the nodes.

No. of Pages : 8 No. of Claims : 1

(54) Title of the invention : A PROCESS FOR SYNTHESIS OF CERIUM OXIDE NANOMATERIAL FOR GAS SENSING

(51) International classification :C01F0017206000, C09K0003140000, A61K0033240000, B82Y0030000000, B01J0037080000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Dr. VIKAS BABURAO PATIL**

Address of Applicant :Functional Materials Research Laboratory, School of Physical Sciences, Punyashlok Ahilyadevi Holkar Solapur University, Solapur – 413255, Maharashtra, INDIA solapur -----

**2)Dr. MRUNALINI FADNAVIS****3)Mr. TANAJI MAHADEV NIMBALKAR**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Dr. VIKAS BABURAO PATIL**

Address of Applicant :Functional Materials Research Laboratory, School of Physical Sciences, Punyashlok Ahilyadevi Holkar Solapur University, Solapur – 413255, Maharashtra, INDIA solapur -----

**2)Dr. MRUNALINI FADNAVIS**

Address of Applicant :Punyashlok Ahilyadevi Holkar Solapur University, Solapur- 413255, Maharashtra, India solapur -----

**3)Mr. TANAJI MAHADEV NIMBALKAR**

Address of Applicant :Functional Materials Research Laboratory, School of Physical Sciences, Punyashlok Ahilyadevi Holkar Solapur University, Solapur – 413255, Maharashtra, INDIA solapur -----

## (57) Abstract :

A process for synthesis of cerium oxide ( $\text{CeO}_2$ ) nanomaterial for gas sensing comprising the step of: preparing cerium nitrate hexahydrate solution in water and stirring the said solution at a temperature not less than  $90^\circ\text{C}$  for a time less than 4 hour in order to obtain solid particles; wherein the said nanomaterial is prepared without washing, centrifugation and drying step. Figure 1

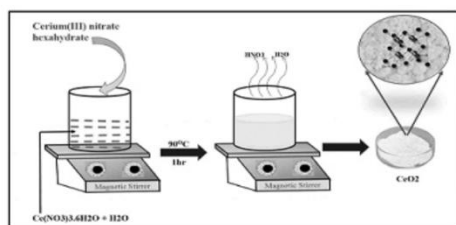


Figure 1

No. of Pages : 26 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202221045587 A

(19) INDIA

(22) Date of filing of Application :10/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A NOVEL N-SUBSTITUTED-1,3,4-THIADIAZOLE ACETAMIDE DERIVATIVES AS POTENTIAL ANTICANCER AGENTS

(51) International classification :B01J0019000000, C07D0417120000, C07D0417140000, C07D0271100000, C30B0029600000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Sachin G Lokapure**

Address of Applicant :Plot No. 41, Serve No. 104, MIDC Shah Lulla Mahanagar, Trutiya 3rd, Savali, Tal, Miraj, Maharashtra 416410 -----

**2)Safiya Rafik Shaikh**

**3)Akshay Ramchandra Yadav**

**4)Pravin Pandurang Honmane**

**5)Akshay Ashok Thorat**

**6)Bhagyashree Antu Mote**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Sachin G Lokapure**

Address of Applicant :Plot No. 41, Serve No. 104, MIDC Shah Lulla Mahanagar, Trutiya 3rd, Savali, Tal, Miraj, Maharashtra 416410 -----

**2)Safiya Rafik Shaikh**

Address of Applicant :Adarsh College of Pharmacy, Vita Vita -----

**3)Akshay Ramchandra Yadav**

Address of Applicant :Rajarambapu College of Pharmacy, Kasegaon Kasegaon -----

**4)Pravin Pandurang Honmane**

Address of Applicant :Adarsh College of Pharmacy, Vita Vita -----

**5)Akshay Ashok Thorat**

Address of Applicant :Late. Adv. Dadasaheb Chavan Memorial Institute of Pharmacy, Malwadi (Masur) Satara Masur -----

**6)Bhagyashree Antu Mote**

Address of Applicant :Sinhgad Institute of Pharmaceutical Sciences, Kusgaon Lonavala, Pune Lonavala -----

(57) Abstract :

Abstract The present invention relates generally to a Series of substituted thiadiazole derivatives were designed and synthesized by conventional method and microwave as a green chemistry method. Crystal structure of the gamma-secretase component Nicastrin (PDBCode-4R12) for anti-cancer activity were docked. Synthesized compounds were confirmed through spectral characterization using IR, NMR, MASS and XRD spectroscopy. Result indicated that these compounds showed promising anti-cancer activity.

No. of Pages : 19 No. of Claims : 2

(54) Title of the invention : FIRST AND THIRD ORDER DERIVATIVE SPECTROPHOTOMETRIC METHOD FOR DETERMINATION OF 5-(2-MERCAPTOPHENYL)-2-{N-(4-METHOXYBENZYLIDENE)-4 AMINOPHENY}-1,3,4-THIADIAZOLE IN BULK DRUGS

(51) International classification :G01N0021310000, G06T0007110000, G01N0021350000, C12Q0001020000, B32B0027200000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

1)Shri Shankaracharya Technical Campus

Address of Applicant :Shri Shankaracharya Technical Campus, Junwani, Bhilai, Durg, Chhattisgarh - 490020 Durg -----

2)Dr. Ajit Kumar Pandey

3)Dr. Yogesh Vaishnav

4)Mr. Arpan Kumar Tripathi

5)Mr. Govind Sharma

6)Mr. Deepak Biswas

7)Mr. Revendra Parganiha

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

1)Dr. Ajit Kumar Pandey

Address of Applicant :Associate Professor, Shri Shankaracharya Technical Campus, Faculty of Pharmaceutical Sciences, Junwani, Bhilai, Durg, Chhattisgarh - 490020 Durg -----

2)Dr. Yogesh Vaishnav

Address of Applicant :Professor, Shri Shankaracharya Technical Campus, Faculty of Pharmaceutical Sciences, Junwani, Bhilai, Durg, Chhattisgarh - 490020 Durg -----

3)Mr. Arpan Kumar Tripathi

Address of Applicant :Associate Professor, Shri Shankaracharya Technical Campus, Faculty of Pharmaceutical Sciences, Junwani, Bhilai, Durg, Chhattisgarh - 490020 Durg -----

4)Mr. Govind Sharma

Address of Applicant :Associate Professor, Shri Shankaracharya Technical Campus, Faculty of Pharmaceutical Sciences, Junwani, Bhilai, Durg, Chhattisgarh - 490020 Durg -----

5)Mr. Deepak Biswas

Address of Applicant :Associate Professor, Shri Shankaracharya Technical Campus, Faculty of Pharmaceutical Sciences, Junwani, Bhilai, Durg, Chhattisgarh - 490020 Durg -----

6)Mr. Revendra Parganiha

Address of Applicant :Associate Professor, Shri Shankaracharya Technical Campus, Faculty of Pharmaceutical Sciences, Junwani, Bhilai, Durg, Chhattisgarh - 490020 Durg -----

## (57) Abstract :

The present invention relates to the simple, rapid and accurate first and third order derivative spectrophotometric methods have been developed for determination of thiadiazole derivative 5-(2-Mercaptophenyl)-2-{N-(4-methoxybenzylidene)-4-aminophenyl}-1,3,4-thiadiazole (7f) in bulk drugs. Linear relations using first (D1) and third (D3) order derivative methods were obtained at 266 and 236.5 nm respectively. The calibration curve were constructed in the range of 25 - 50 µg/ml for D1 (0.998) and 5 - 30 µg/ml for D3 (0.999). All the validation parameters were determined to demonstrate its suitability for routine quality control laboratories. Both the developed methods were successfully applied to bulk drug and the results were compared statistically with each other.

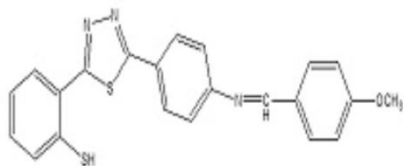


Figure 1

No. of Pages : 25 No. of Claims : 7

(54) Title of the invention : DESIGN &amp; DEVELOPMENT OF FIRE FIGHTING ROBOT

(51) International classification :B25J0005000000, B25J0011000000, G09B0019000000, G06N0003000000, G09B0005020000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Dr. D. Y. Patil Institute of Technology, Pimpri, Pune**

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune -----

**Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)Dr. Kishor Waghulde**

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune 411 018 Pune -----

**2)Prof. K. D. Sarode**

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune 411 018 Pune -----

**3)Prof. M. C. Ingale**

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune 411 018 Pune -----

**4)Sufyan shaikh**

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune 411 018 Pune -----

**5)Hemant shahi**

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune 411 018 Pune -----

**6)Navneet singh**

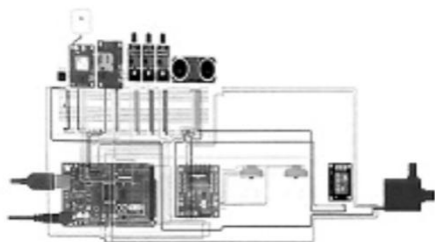
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune 411 018 Pune -----

**7)Harshal patil**

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune 411 018 Pune -----

## (57) Abstract :

The demand of IoT imbedded smart project has been increasing day by day. With help of these sensors any simple objects can be made smart in a way. The Smart Fire Fighter below uses the principle of robotics that allows it to be expanded into a more robust device that can be used to fight real fires in residential or commercial settings. It will continue to work on its own, navigates, search, and extinguishes the fire without the user's assistance or feedback. We have made many critical decisions on fire extinguishers mechanical parts, sensor, motor and design for our fire extinguish vehicle. Lastly, we wanted our fire extinguish robot to not only to achieve these requirements, but also able to perform the task accurately and quickly.



No. of Pages : 13 No. of Claims : 3

(54) Title of the invention : OCEAN WAVE POWER GENERATOR USING POINT ABSORBER.

(51) International classification : F03B0013180000, F03B0013140000, F03B0013200000, H02K0035020000, A61F0009008000  
 (86) International Application No : NA  
 Filing Date : NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number : NA  
 Filing Date : NA  
 (62) Divisional to Application Number : NA  
 Filing Date : NA

(71) Name of Applicant :  
**1) BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI**  
 Address of Applicant : BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. -----  
 --  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72) Name of Inventor :  
**1) CHETAN MAHESH TRIMBAKE**  
 Address of Applicant : BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. -----  
**2) PRIYAM PRAFUL SURVE**  
 Address of Applicant : BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. -----  
**3) PRATIK GANESH UTEKAR**  
 Address of Applicant : BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. -----  
**4) ROHIT SANTOSH YADAV**  
 Address of Applicant : BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. -----  
**5) DR. SANJAY R. PAWAR**  
 Address of Applicant : BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. -----  
**6) PADMINI K. SAWANT**  
 Address of Applicant : BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. -----  
**7) PRAMOD R. SURYAVANSHI**  
 Address of Applicant : BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. -----  
**8) PRATHAMESH D. PATIL**  
 Address of Applicant : BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. -----  
**9) DR. SANDHYA D. JADHAV**  
 Address of Applicant : BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. -----  
**10) SUREKHA D. KHETREE**  
 Address of Applicant : BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. -----  
**11) DILIP B. RADKAR**  
 Address of Applicant : BHARATI VIDYAPEETH COLLEGE OF ENGINEERING, NAVI MUMBAI SECTOR 7, CBD, BELAPUR, NEAR KHARGHAR RAILWAY STATION, NAVI MUMBAI - 400614, MAHARASHTRA, INDIA. -----

## (57) Abstract :

Many sources of renewable energy, including solar, wind, and ocean wave, offer significant advantages such as no fuel costs and no emissions from generation. However, in most cases these renewable power sources are variable and non-dispatchable. The utility grid is already able to accommodate the variability of the load and some additional variability introduced by sources such as wind. However, at high penetration levels, the variability of renewable power sources can severely impact the utility reserve requirements. Among available technologies for energy production from renewable sources, ocean wave energy and tidal power could give a significant contribution to develop a more sustainable energy system. Tidal power is one of the best renewable energy sources in coastal area and becoming popular around the world due to its own facilities. Ocean wave energy can play a vital role for producing electricity as new source of renewable energy to the off-grid power connection in isolated areas. Absorption of wave energy may be considered as a phenomenon of interference between incident and radiated waves generated by an oscillating object; a wave-energy converter (WEC) that displaces water. If a WEC is very, small in comparison with one wavelength, it is classified as a point absorber (PA); otherwise, as a 'quasi-point absorber'. The latter may be a dipole-mode radiator, for instance an immersed body oscillating in the surge mode or pitch mode, while a PA is so small that it should preferably be a source-mode radiator, for instance a heaving semi-submerged buoy. The power take off capacity, the WEC's maximum swept volume and preferably also its full physical volume should be reasonably matched to the wave climate.

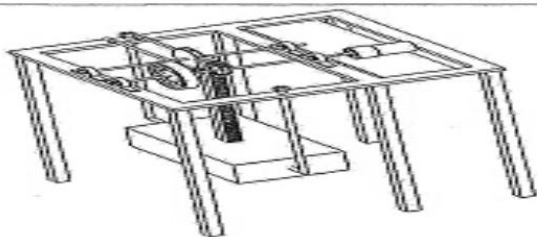


FIG. 01

No. of Pages : 8 No. of Claims : 3

(54) Title of the invention : PLC BASED AUTOMATION OF ELECTRICAL MACHINES

(51) International classification :G05B0019050000, G05B0019409000, C02F0103300000, G03B0035180000, E04G0021000000

(86) International Application No	:NA
Filing Date	:NA

(87) International Publication No : NA

(61) Patent of Addition	:NA
to Application Number	:NA
Filing Date	

(62) Divisional to  
Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :**

**1)Dr. D. Y. Patil Institute of Technology, Pimpri, Pune**

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant  
Tukaram Nagar, Pimpri, Pune Pune -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Mr. Nipin K K**

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant  
Tukaram Nagar, Pimpri, Pune 411 018 Pune -----

**2)Ganesh Babanrao Gawade**

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant  
Tukaram Nagar, Pimpri, Pune 411 018 Pune -----

### 3)Abhishek Vijay Divekar

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant  
Tukaram Nagar. Pimpri. Pune 411 018 Pune -----

**4)Harshal Sanjay Chavan**

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant  
Tukaram Nagar, Pimpri, Pune 411 018 Pune -----

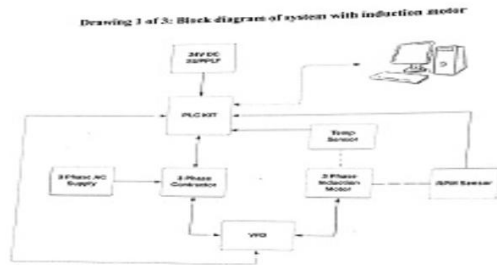
**5) Akash Baban Wagh**

Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant  
Tukaram Nagar, Pimpri, Pune 411 018 Pune -----

---

(57) Abstract :

Over the years, technology within engineering has carried out a variety of innovations that answer and solve social, economic and environmental problems. The concept of electrical panels has a vital role to play in the functioning of the industrial and commercial institutions. Employing the requirements of the sector and calculated selection of the components. It happens to be the most convenient technology for large industries with large machinery and electrical equipment and happens to be the one of the safest and best technology for various applications in this sector. Programmable logic controller (PLC) control panels or also known as PLC Automation Panel are one of the most important and efficient kinds of control panels which are generally used in a variety of electronic and electrical circuit fittings. PLC control panels which are manufactured are highly capable of giving higher output at less power consumption and HMI integrated with solid PLC logic and flawless PLC hardware programming. This project aims to design an electrical control panel to supply and remotely control the operations of electrical equipment in the machine lab. It is an advanced combination of Electric hardware and power electronics. It involved many equipments working on thermal expansion, electromagnetic properties etc. The need to create suitable design and implement techniques for efficient human and machine communication for machine labs can be fulfilled by the PLC control panel. The future scope of expansion also needs to be considered in the process. The proposed work is aimed to meet the objectives arising out of gap analysis and designing customized systems.



No. of Pages : 16 No. of Claims : 4



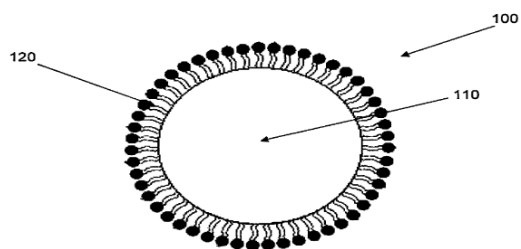
(54) Title of the invention : LIPOPHILICALLY DISPERSED PHENOLIC POLYMER PARTICLES

(51) International classification	:A61K0008810000, A61K0008730000, A61K0008020000, C08J0009140000, C08L0067020000	(71)Name of Applicant : <b>1)NANOPHASE TECHNOLOGIES CORPORATION</b> Address of Applicant :1319 Marquette Drive Romeoville, IL 60446 -----
(31) Priority Document No	:16/570944	Name of Applicant : NA
(32) Priority Date	:13/09/2019	Address of Applicant : NA
(33) Name of priority country	:-----	(72)Name of Inventor :
(86) International Application No	:PCT/US2020/049742	<b>1)SARKAS, Harry, W.</b>
Filing Date	:08/09/2020	Address of Applicant :C/o Nanophase Technologies Corporation 1319 Marquette Drive Romeoville, IL 60446 -----
(87) International Publication No	:WO 2021/050436	<b>2)BOFFA, Christopher, C.</b>
(61) Patent of Addition to Application Number	:NA	Address of Applicant :C/o Nanophase Technologies Corporation 1319 Marquette Drive Romeoville, IL 60446 -----
Filing Date	:NA	<b>3)CURETON, Kevin</b>
(62) Divisional to Application Number	:NA	Address of Applicant :C/o Nanophase Technologies Corporation 1319 Marquette Drive Romeoville, IL 60446 -----
Filing Date	:NA	

(57) Abstract :

A composition comprises phenolic polymer particles and a surfactant, on the phenolic polymer particles. The composition is lipophilic. A dispersion comprises the phenolic polymer particles, the surfactant, and a carrier vehicle. The carrier vehicle may be a cosmetically-acceptable fluid or a wax that is lipophilic.

FIG. 1



No. of Pages : 28 No. of Claims : 32

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202227021651 A

(19) INDIA

(22) Date of filing of Application :11/04/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : OXYTOCIN READY TO INFUSE DOSAGE FORM

(51) International classification	:A61K0009000000, A61K0047120000, A61K0009080000, A61J0001100000, A61K0031435000	(71)Name of Applicant : <b>1)SUN PHARMACEUTICAL INDUSTRIES LIMITED</b> Address of Applicant :Sun House 201 B/1, Western Express Highway, Goregaon (E) Mumbai, Maharashtra 400063 ----- - ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b> (72)Name of Inventor : <b>1)KUMAR, Samarth</b> Address of Applicant :Sun Pharmaceutical Industries Limited Nima Compound, Near Pratham Enclave, Tandalja Road Baroda, Gujarat 390012 ----- <b>2)GARG, Neeraj Kumar</b> Address of Applicant :Sun Pharmaceutical Industries Limited Nima Compound, Near Pratham Enclave, Tandalja Road Baroda, Gujarat 390012 ----- <b>3)KHOPADE, Ajay Jaysingh</b> Address of Applicant :Sun Pharmaceutical Industries Limited Nima Compound, Near Pratham Enclave, Tandalja Road Baroda, Gujarat 390012 ----- <b>4)BHOWMICK, Subhas Balaram</b> Address of Applicant :Sun Pharmaceutical Industries Limited Nima Compound, Near Pratham Enclave, Tandalja Road Baroda, Gujarat 390012 -----
(31) Priority Document No	:202121004764	
(32) Priority Date	:03/02/2021	
(33) Name of priority country	:-----	
(86) International Application No	:PCT/IB2022/050956	
Filing Date	:03/02/2022	
(87) International Publication No	:WO 2022/167978	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure relates to a ready-to-use or a ready to administer parenteral dosage form of oxytocin or a pharmaceutically acceptable salt thereof comprising a ready-to-infuse, stable aqueous solution of oxytocin or a pharmaceutically acceptable salt thereof. The solution can be administered to a patient in need thereof without manipulations in terms of its concentration and is stable for a prolonged period of time.

No. of Pages : 40 No. of Claims : 30

(54) Title of the invention : NEGATIVE ELECTRODE, ELECTROCHEMICAL APPARATUS CONTAINING SAME, AND ELECTRONIC DEVICE

<p>(51) International classification :H01M0010052500, H01M0004134000, H01M0004020000, H01M0004040000, H01M0004380000</p> <p>(86) International Application No :PCT/CN2020/070130 Filing Date :02/01/2020</p> <p>(87) International Publication No :WO 2021/134755</p> <p>(61) Patent of Addition to :NA Application Number :NA Filing Date :NA</p> <p>(62) Divisional to :NA Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)NINGDE AMPEREX TECHNOLOGY LIMITED</b> Address of Applicant :No. 1 Xingang Road Zhangwan Town, Jiaocheng District Ningde, Fujian 352100 -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)WANG, Chao</b> Address of Applicant :No. 1 Xingang Road Zhangwan Town, Jiaocheng District Ningde, Fujian 352100 -----</p> <p><b>2)LIAO, Qunchao</b> Address of Applicant :No. 1 Xingang Road Zhangwan Town, Jiaocheng District Ningde, Fujian 352100 -----</p> <p><b>3)CUI, Hang</b> Address of Applicant :No. 1 Xingang Road Zhangwan Town, Jiaocheng District Ningde, Fujian 352100 -----</p> <p><b>4)XIE, Yuansen</b> Address of Applicant :No. 1 Xingang Road Zhangwan Town, Jiaocheng District Ningde, Fujian 352100 -----</p>
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## (57) Abstract :

A negative electrode, an electrochemical apparatus containing the negative electrode, and an electronic device. The negative electrode comprises: a negative electrode current collector and a negative electrode active material layer, and the negative electrode active material layer contains a silicon-based material. By a weight ratio R of the total weight of the negative electrode active material layer and an absolute intensity s of the negative electrode current collector, the silicon-based material satisfies the following formula:  $K=s/(1.4 \times R + 0.1)$ , wherein K is a relational coefficient, and the relational coefficient is greater than or equal to 4000 N/m. By means of using the negative electrode, the electrochemical apparatus can effectively ameliorate XY expansion and deformation of the negative electrode active material layer, thus improving the cycle performance and safety performance of the electrochemical apparatus.

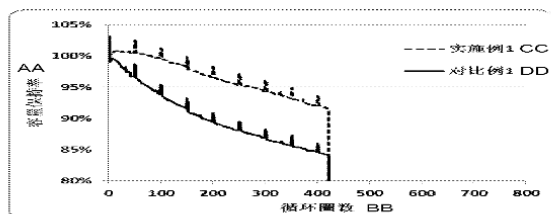


图 1

AA Capacitance retention rate  
BB Number of cycles  
CC Example 1  
DD Comparative example 1

No. of Pages : 24 No. of Claims : 11

(54) Title of the invention : PRESSURE DIE-CASTING INJECTOR ASSEMBLY COMPRISING LINK MECHANISM

(51) International classification :F02M0057020000, B22D0017320000, F02M0059360000, F15B0015240000, B29C0045760000

(86) International	:PCT/IN2020/050185
Application No	
Filing Date	:28/02/2020

(87) International Publication No. : WO 2021/117050

(61) Patent of Addition to :NA

Application Number :NA  
Filing Date

(62) Divisional to  
Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :**

**1)PATWARDHAN, Mangesh**

Address of Applicant :A11, Rajvihar, Balajinagar, Survey  
No.20/21, Dhankawadi Pune 411043 -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)PATWARDHAN, Mangesh**

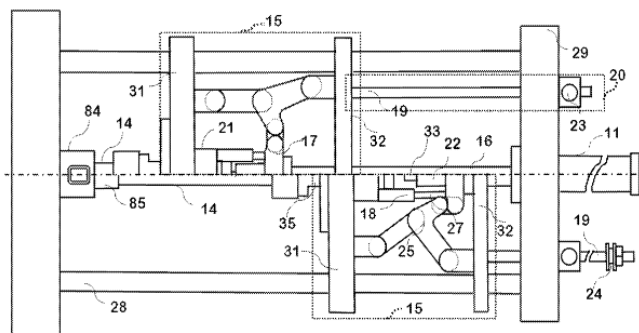
Address of Applicant :A11, Rajvihar, Balajinagar, Survey  
No.20/21, Dhankawadi Pune 411043 -----

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(57) Abstract :

An injector mechanism for Pressure Die Casting machine, comprising a Link mechanism 15 with its high mechanical advantage employed exclusively for intensification phase of injector stroke. By virtue of high mechanical advantage shot cylinder swept volume and hydraulic accumulator capacity reduced by 50%, which ensures high degree of utilization of hydraulic energy produced by the system. Heavy moving mass of the mechanism increases the shot motion momentum resulting in most tolerant cavity filling process. There is new feature, varying length Slip Stroke happening in between filling stroke and intensification stroke. The length of Slip Stroke varies responding to the metal quantity variation, followed with consistent intensification stroke length, cutting down flashing tendency. There is new added process control, allowing the Die Caster to limit the intensification stroke length, which is advantageous for the process optimization.

FIG. 1



No. of Pages : 20 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/08/2021

(21) Application No.202141037032 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : A HUMAN AMNION-CHORION BASED WOUND DRESSING MATERIAL AND METHOD THEREOF

(51) International classification	:A61L0015420000, A61L0015440000, A61L0015460000, A61L0015220000, A61L0015280000	(71)Name of Applicant : <b>1)LIFECCELL INTERNATIONAL PVT. LTD</b> Address of Applicant :26, Vandalur-Kelambakkam Main Road, Keelakottaiyur, Chennai – 600127, Tamil Nadu, India. ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b>
(86) International Application No	:NA	(72)Name of Inventor : <b>1)DR. CHIRAYU PADHIAR</b> Address of Applicant :LifeCell International Pvt. Ltd, 26, Vandalur-Kelambakkam Main Road, Keelakottaiyur, Chennai - 600127, Tamil Nadu, India. -----
Filing Date	:NA	<b>2)MAYUR ABHAYA</b> Address of Applicant :LifeCell International Pvt. Ltd, 26, Vandalur-Kelambakkam Main Road, Keelakottaiyur, Chennai - 600127, Tamil Nadu, India. -----
(87) International Publication No	: NA	<b>3)MUTHURAMAN MUTHUCHAMY</b> Address of Applicant :LifeCell International Pvt. Ltd, 26, Vandalur-Kelambakkam Main Road, Keelakottaiyur, Chennai - 600127, Tamil Nadu, India. -----
(61) Patent of Addition to Application Number	:NA	<b>4)VISHNU PRIYA MOHAN</b> Address of Applicant :LifeCell International Pvt. Ltd, 26, Vandalur-Kelambakkam Main Road, Keelakottaiyur, Chennai - 600127, Tamil Nadu, India. -----
Filing Date	:NA	<b>5)VIGNESH GANESAN</b> Address of Applicant :LifeCell International Pvt. Ltd, 26, Vandalur-Kelambakkam Main Road, Keelakottaiyur, Chennai - 600127, Tamil Nadu, India. -----
(62) Divisional to Application Number	:NA	<b>6)GANESH KUMAR SARVESAN</b> Address of Applicant :LifeCell International Pvt. Ltd, 26, Vandalur-Kelambakkam Main Road, Keelakottaiyur, Chennai - 600127, Tamil Nadu, India. -----
Filing Date	:NA	

(57) Abstract :

The present invention relates to the field of acute and chronic wound management. It particularly relates to intact dehydrated human amnion chorion membrane (dAmCh) impregnated with polyhexamethylene (PHMB) wound dressing material which offers excellent wound healing properties. FIGURE 1.

No. of Pages : 18 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141042501 A

(19) INDIA

(22) Date of filing of Application :20/09/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : Evacuated Tube Infrastructure for Rapid Transportation

<p>(51) International classification :B61B0013100000, E01B0025300000, B61B0013080000, B32B0015010000, B61C0011060000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IIT Madras)</b> Address of Applicant :The Dean Industrial Consultancy &amp; Sponsored Research [IC&amp;SR], Indian Institute of Technology Madras, Sardar Patel Road, IIT P.O, Chennai Tamil Nadu India 600 036 -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Satyanarayanan R. Chakravarthy</b> Address of Applicant :B28-2B Delhi Avenue, IIT Madras Campus Chennai Tamil Nadu India 600036 -----</p> <p><b>2)Thiruchengode M. Muruganandam</b> Address of Applicant :C1-08-20 14th Cross Road, IIT Madras Campus Chennai Tamilnadu India 600036 -----</p> <p><b>3)Vibhor Jain</b> Address of Applicant :B1 Gali no. 1, Rajeev Nagar, Near Yash Computer Vidisha Madhya Pradesh India 464001 -----</p> <p><b>4)Rajaraman S</b> Address of Applicant :Plot 176 A .Flat B-4, RRT Flats Alapakkam Main Road,Porur Chennai Tamil Nadu India 600116 -----</p> <p><b>5)Anurag Patil</b> Address of Applicant :Gandharva Park, A-6 RH-93, Shahunagar , Chinchwad Pune Maharashtra India 411019 -----</p> <p><b>6)Dhalpe Abhishek Jayant</b> Address of Applicant :Shrikant Dresses, near Indapur Chawk Cinema Road Baramati Maharashtra India 413102 -----</p> <p><b>7)Vemireddy Sri Rishitha</b> Address of Applicant :11-33-967 Vengal rao nagar Kavali Andhra Pradesh India 524201 -----</p> <p><b>8)Kishan Thakkar</b> Address of Applicant :2, Gokul Duplex Navrangpura Ahmedabad Gujarat India 380014 -----</p> <p><b>9)Neel Balar</b> Address of Applicant :10/198 Mandy Bazar, Near Jain Temple Guntakal Andhra Pradesh India 515801 -----</p>
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(57) Abstract :

ABSTRACT VACUUM TRANSPORTATION SYSTEM The present invention relates to a vacuum transportation system (100) comprising a tube (204), a platform (110), and a track (112). The tube (204) may comprise a skin (102) and a framework (202). The framework (202) may comprise formers (104), flanges (106), and longerons (108). The formers (104) may be separated from each other by a first predefined distance and positioned beneath the skin (102) in a longitudinal direction of the framework (202). The flanges (106) may be separated from each other by a second predefined distance and positioned outside the skin (102) in the longitudinal direction. The longerons (108) may connect consecutive formers with each other. The platform (110) may pass through and over a bottom area of the tube (204). The platform (110) may rest over pylons (114) placed longitudinally. The track (112) may be placed longitudinally on the platform (110) for enabling movement of objects inside the tube (204). Fig. 1 is the representative figure

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141050378 A

(19) INDIA

(22) Date of filing of Application :02/11/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : A PROCESS FOR PREPARING BENZOXAZINONE COMPOUNDS

(51) International classification	:C07D0265220000, C07D0413140000, C07D0265360000, A01N0043840000, C07D0265180000	(71)Name of Applicant : <b>1)TAGROS CHEMICALS INDIA PVT. LTD</b> Address of Applicant :Tagros House, 4th Floor, No.4 (Old No.10), Club House Road, Anna Salai, Chennai, Tamil Nadu 600002, India ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b>
(86) International Application No	:NA	(72)Name of Inventor :
Filing Date	:NA	<b>1)RAJAIAH, R. Srikrishnan</b> Address of Applicant :Tagros House, 4th Floor, No.4 (Old No.10), Club House Road, Anna Salai, Chennai, Tamil Nadu 600002, India -----
(87) International Publication No	: NA	<b>2)Dinesh MURUGAN</b> Address of Applicant :Tagros House, 4th Floor, No.4 (Old No.10), Club House Road, Anna Salai, Chennai, Tamil Nadu 600002, India. -----
(61) Patent of Addition to Application Number	:NA	<b>3)R. Kuppuswamy</b> Address of Applicant :Tagros House, 4th Floor, No.4 (Old No.10), Club House Road, Anna Salai, Chennai, Tamil Nadu 600002, India -----
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure provides a process for preparing a compound of Formula I, the process comprising: a. mixing a compound of Formula II with a compound of Formula III in a mole ratio range of 1:1 to 1.3:1 to obtain a first mixture; b. adding a solvent to the first mixture to obtain a second mixture followed by cooling the second mixture; c. reacting a scavenger with the second mixture to obtain a reaction mass; and d. heating the reaction mass followed by addition of a reagent to obtain the compound of Formula I, wherein X is selected from Cl, Br, I, or CN; and the scavenger in step c and the reagent in step d are added in single lot.

No. of Pages : 37 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :21/06/2022

(21) Application No.202241035440 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : CERAMIC COMPOSITES BASED PORTABLE ELECTROMAGNETIC RELAY SWITCH

<p>(51) International classification :C04B0035622000, H01F0001340000, C04B0035640000, C04B0035624000, C04B0035626000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)VIT UNIVERSITY</b> Address of Applicant :VIT University, Near Katpadi Road, Vellore, Tamil Nadu, India - 632014 Vellore -----</p> <p>Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr. Madhuri W</b> Address of Applicant :Centre for Functional Materials, Ceramic Composite Laboratory, Technology Tower 505, VIT, Vellore - 632014, Tamil Nadu, India Vellore -----</p> <p><b>2)Dr. Kaleemulla. S</b> Address of Applicant :Centre for Functional Materials, Thin films laboratory, TT407, VIT, Vellore - 632014, Tamil Nadu, India Vellore -----</p> <p><b>3)Dr. K. V. Siva Kumar</b> Address of Applicant :Independent Researcher, 1-4-880/2/34/35, F402, Surya Heights Bank of Baroda Colony, Gandhi Nagar, Near Devi Chowk, Road No. 12, Hyderabad 500 080, TS Hyderabad -----</p> <p><b>4)Avanish Babu T</b> Address of Applicant :School of Advance Sciences, Ceramic Composite laboratory, VIT, Vellore - 632014, Tamil Nadu, India Vellore -----</p> <p><b>5)Vaishnavi Khade</b> Address of Applicant :School of Advanced Sciences, Department of Physics, VIT, Vellore - 632014, Tamil Nadu, India Vellore -----</p> <p><b>6)Heena Sinnarkar</b> Address of Applicant :School of Advanced Sciences, Department of Physics, VIT, Vellore - 632014, Tamil Nadu, India Vellore -----</p> <p><b>7)Chinmay Chandan Parhi</b> Address of Applicant :School of Advanced Sciences, Department of Physics, VIT, Vellore - 632014, Tamil Nadu, India Vellore -----</p> <p><b>8)Sharanya H</b> Address of Applicant :School of Advanced Sciences, Department of Physics, VIT, Vellore - 632014, Tamil Nadu, India Vellore -----</p> <p><b>9)Sahana C S</b> Address of Applicant :School of Advanced Sciences, Department of Physics, VIT, Vellore - 632014, Tamil Nadu, India Vellore -----</p> <p><b>10)Abhijeet Nayak</b> Address of Applicant :School of Advanced Sciences, Department of Physics, VIT, Vellore - 632014, Tamil Nadu, India Vellore -----</p>
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(57) Abstract :

A microwave sintered magneto electric ceramic composites based portable magnetic electric (ME) relay switch. Ceramic composite of (1-x)Y<sub>3</sub>Fe<sub>5</sub>O<sub>12</sub>+(x)Ba<sub>0.8</sub>Pb<sub>0.2</sub>TiO<sub>3</sub> with x = 0.25, 0.50 & 0.75 is synthesized by double sintering technique using microwave furnace wherein the ceramic solid solution of yttrium iron garnet (YIG) and barium lead titanate (BPT) results in a magnetoelectric (ME) material. The green powders of YIG (Y<sub>3</sub>Fe<sub>5</sub>O<sub>12</sub>) and BPT (Ba<sub>0.8</sub>Pb<sub>0.2</sub>TiO<sub>3</sub>) are mixed according to stoichiometry and pressed into to rods of 8mm12mm3mm (IDODH) at 0.1 torr pressure and the green composites are sintered at 980°C for 15 minutes to form microwave sintered magneto electric ceramic composite based portable magnetic electric (ME) relay switch.

No. of Pages : 19 No. of Claims : 5



(54) Title of the invention : MULTI FUNCTIONAL SPACE-SAVING FURNITURE WITH WOODEN LADDER

(51) International classification :B60P0003340000, B60S0005060000, G06Q0090000000, H01R0013410000, E01C0001040000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)HARSHAN RAGAVANDAR.R**

Address of Applicant :243/2, AMMAN NAGAR, FAIRLANDS, SALEM, TAMILNADU, INDIA-636016. -----

**2)PRADEESH .E .L****3)SWAGATH .S****4)SARAN .S****5)DANUS .M****6)KAVIN CHANDAR .S****7)GOKUL .S**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)AJAY RAJ .R .S**

Address of Applicant :43/LAKSHMI ILLAM, NEW JEEVA NAGAR, TIRUPUR, TAMIL NADU, INDIA 641 606. -----

(57) Abstract :

ABSTRACT: In most metropolises of the world, people's average living area is getting smaller and smaller. More and more young people tend to move to large cities for more opportunities and an active lifestyle. However, this phenomenon decreases the average floor area gradually. These are common problems in metropolises nowadays. Transformable space-saving furniture is one of the options to solve these problems. In this patent, the innovative designs, the hard wares, the application and future development, cost, and price of transformable space-saving furniture are proposed. This concept will help people to use more floor space in city life.

No. of Pages : 25 No. of Claims : 5

(54) Title of the invention : Smart Pulse Diagnostic Kit

(51) International classification :A61B0005000000, G16H0050200000, G16H0080000000, A61B0005024000, G06Q0050220000

(86) International Application No :PCT// /  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)P Victor Paul**

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Indian Institute of Information Technology Kottayam, Pala, Kottayam - 686635, Kerala, India. -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)P Victor Paul**

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Indian Institute of Information Technology Kottayam, Pala, Kottayam - 686635, Kerala, India. -----

(57) Abstract :

Nadi Pariksha (Pulse Diagnosis) is an ancient Ayurveda technique to diagnose, investigate and evaluate the overall health of a human including physical (goodness of each organ), emotional, and psychological evaluations. Pulse diagnosis allows one to retrieve detailed information about the internal functioning of the body and its organs through signals present in the radial pulse. As the effectiveness of Ayurveda is highly dependent on the expertise of the physician, availability and prone to human errors. Thus, the Smart Pulse Diagnostic Kit automates the Nadi Pariksha principles with the Artificial Intelligence (AI) model to analyse the pattern for identification of correlations between studied patterns and diseases for diagnosis. One of the primary objectives of the invention is to design a pulse sensor electronic infrastructure using state-of-art methods in the industry to detect the morphology and characteristics of the human pulse at all the nine different pulse points of a human body. The designed infrastructure can extract 10-15 critical attributes from the pulse with the help of an Ayurveda domain expert. AI models are applied to the extracted attributes to recognize the occurrence of patterns associated with the different diseases/disorders for diagnosis. Based on the dominant pulse, the direction in which the pulse motion is felt, and other observed characteristics, the proposed kit can be able to identify/predict over 350 different disease and disorder conditions. The outcome of the research could have a significant impact on the field of Ayurveda medical diagnosis. Given the condition that more people seeking health services, the availability of experts in rural places, appointments, and affordable consultation costs may not work well together with the increasing medical service demand. Moreover, the Automation of the Ayurveda pulse diagnosis improves the delivery of the service in a better and timely to all the needed people in a more accurate and low-cost fashion. The anticipated users of the proposed kit are of different levels like common people, doctors, practitioners, and researchers. Accordingly, the outcome complexity is also designed based on the intended category of the user. The level of insight varies from general recommendations like specific exercises to more precise and micro-level observation for medical experts' consultation.

No. of Pages : 11 No. of Claims : 6

(54) Title of the invention : THE DEVELOPMENT AND TESTING OF A FLOATING TABLETS CONTAINING DICLOFENAC SODIUM

(51) International classification :A61K0031196000, A61K0009000000, C12Q0001685100,  
G01N0013000000, A61K0009160000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Jaffer Sadik Mohammed**  
Address of Applicant :Associate professor, Sri Indu Institute of pharmacy, Sheriguda (v) Ibrahimpatnam(M) R.R. Hyderabad, Telangana 501510, India -----  
**2)Dr. Mohammed Jafar**  
**3)Dr. Sabahuddin Siddique**  
**4)Ms. Pragati Baghel**  
**5)Dr. Vijay Kumar Yadav**  
**6)Dr. Sweety Lanjhiyana**  
**7)Dr. S.K. Lanjhiyana**  
**8)Dr. Vivekanand Ankush Kashid**  
**9)Ms. Makwana Rajeshreebaben Pravinkumar**  
**10)Dr. Rahul Shivajirao Solunke**  
**11)Mr. Vaibhav Kailas Kashid**  
**12)Ms. Rajshri Santosh Kharat**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr. Jaffer Sadik Mohammed**  
Address of Applicant :Associate professor, Sri Indu Institute of pharmacy, Sheriguda (v) Ibrahimpatnam(M) R.R. Hyderabad, Telangana 501510, India -----  
**2)Dr. Mohammed Jafar**  
Address of Applicant :Assistant Professor, Department of Pharmaceutics, College of Clinical Pharmacy, Imam Abdulrahman Bin Faisal University, Dammam, Kingdom of Saudi Arabia. -----  
**3)Dr. Sabahuddin Siddique**  
Address of Applicant :Principal, Bhabha Pharmacy Research Institute, Bhabha University, Bhopal, Madhya Pradesh, India, 462026 -----  
**4)Ms. Pragati Baghel**  
Address of Applicant :Assistant Professor, Chhatrapati Shivaji Institute of Pharmacy, Kolihapuri, Durg, post-pisea gao, pin code: 491001, Chhattisgarh -----  
**5)Dr. Vijay Kumar Yadav**  
Address of Applicant :Assistant Professor, Department of Pharmacy Dr.Bhimrao Ambedkar University Chhalesar Campus, Agra 282006, Uttar Pradesh, India -----  
**6)Dr. Sweety Lanjhiyana**  
Address of Applicant :Professor, School of Pharmacy, Chouksey Engineering College, Bilaspur 495001, Chhattisgarh, India -----  
**7)Dr. S.K. Lanjhiyana**  
Address of Applicant :Asst. Professor, SLT Institute of Pharmaceutical Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur, 495009, Chhattisgarh, India -----  
**8)Dr. Vivekanand Ankush Kashid**  
Address of Applicant :Principal, Dr. Kolpe Institute of Pharmacy, Kolpewadi, Tal: Kopargaon, Dist: Ahmednagar, Maharashtra – 423602, India -----  
**9)Ms. Makwana Rajeshreebaben Pravinkumar**  
Address of Applicant :Research Scholar, Faculty of Pharmacy, Dharmsinh Desai University, Nadiad, Gujarat, India Pin - 387001 -----  
**10)Dr. Rahul Shivajirao Solunke**  
Address of Applicant :HOD & Associate Professor, Department of Pharmaceutics, Maharashtra College of Pharmacy, Main Road, Nilanga, Tal: Nilanga, Dist: Latur – 413521, Maharashtra, India -----  
**11)Mr. Vaibhav Kailas Kashid**  
Address of Applicant :Assistant Professor, Dr. Kolpe Institute of Pharmacy, Kolpewadi, Tal: Kopargaon, Dist: Ahmednagar, Maharashtra – 423602, India -----  
**12)Ms. Rajshri Santosh Kharat**  
Address of Applicant :Lecturer, Dr. Kolpe Institute of Pharmacy, Kolpewadi, Tal: Kopargaon, Dist: Ahmednagar, Maharashtra – 423602, India -----

(57) Abstract :  
ABSTRACT THE DEVELOPMENT AND TESTING OF A FLOATING TABLETS CONTAINING DICLOFENAC SODIUM A method for developing and testing of a floating tablet containing diclofenac sodium, the method includes a pre-formulation activity are to provide a rational basis for the formulation approaches, to maximize the chances of success in formulating an acceptable product and to ultimately provide a basis for optimizing drug product quality and performance. Melting point of drug sample is determined by using melting point apparatus. Taking and placing in a thin walled capillary tube, wherein the tube was approximately 9-11 cm in length with 1mm in diameter and closed at one end. Quantitative Solubility Quantitative solubility analysis of drugs were done by 7 ml each solvent and drug in gm(s) into the solvent till saturation of solvent. Determining of  $\lambda_{max}$  & prepare standard curve. Preparation of 0.1 N HCL 8.5 ml of concentrated hydrochloric acid was diluted with distilled water and the volume was made upto 1000 ml with distilled water. Obtaining the stock solution of concentration 1mg/ml, from this 1 ml was taken and diluted to 100ml using 0.1N HCl to obtain working stock solution of concentration. FIG.1

No. of Pages : 16 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241041043 A

(19) INDIA

(22) Date of filing of Application :18/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : METAL RETRACTOR WITH IRRIGATION AND SUCTION TIP

(51) International classification :A61M0001000000, A61B0017020000, A61B0001015000, A61C0008000000, A61B0017320300  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)TAGORE DENTAL COLLEGE AND HOSPITAL**

Address of Applicant :TAGORE DENTAL COLLEGE AND HOSPITAL MELAKOTTAIYUR, RATHINAMANGALAM CHENNAI CHENNAI TAMIL NADU INDIA 600127 CHENNAI -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)DR. RAHIM RIAZ**

Address of Applicant :DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY, TAGORE DENTAL COLLEGE AND HOSPITAL MELAKOTTAIYUR, RATHINAMANGALAM CHENNAI CHENNAI TAMIL NADU INDIA 600127 CHENNAI -----

(57) Abstract :

**TITLE: METAL RETRACTOR WITH IRRIGATION AND SUCTION TIP APPLICANT: TAGORE DENTAL COLLEGE AND HOSPITAL ABSTRACT** The present invention discloses a Metal retractor with irrigation channel and suction channel. The retractor of the present invention comprises of a bent metal strip retractor[1] having horizontal length and vertical length tapered towards working end, characterized in that • embedding a copper irrigation channel [3] having horizontal length and vertical length with connector end and working end, on the horizontal length and vertical length of the retractor[1], in which the connector end is adapted to couple with disposable irrigating solution tubes and the working end adapted to perform irrigation; • embedding a suction channel [2] having horizontal length and vertical length with connector end and working end adjacent to the copper irrigation channel [3] on the horizontal length and vertical length of the retractor[1], in which the connector end is adapted to couple with disposable suction tube which in turn connected with suction motor and the working end of the suction channel [2] adapted to perform continuous suctioning of fluids and is slightly lower than the working end of the copper irrigation channel [3] forming non-parallel level[4] thereby preventing thermal necrosis of tissues and underlying bones.

No. of Pages : 13 No. of Claims : 9

(54) Title of the invention : Time-critical IoT applications employing Energy Efficient Computation Offloading with DVFS and Deep Reinforcement Learning

(51) International classification :H04L0029080000, H04L0029060000, G06F0001329600, G06F0009500000, G06F0001324000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)G NavyaSree**  
 Address of Applicant :Assistant professor Ramachandra College of Engineering, Vatluru, Eluru Pin: 534006 State: Andhra Pradesh Country: India -----  
**2)Dr.M Jithender Reddy**  
**3)Dr Bhadrappa Haralayya**  
**4)Mrs. D.Surekha**  
**5)Mr. Jahan Malik**  
**6)Dr.Manoranjan Dash**  
**7)Dr.Preeti Y Shadangi**  
**8)Dr. Moumita Pal**  
**9)Dr. Swati Chowdhuri**  
**10)Dr. Biswarup Neogi**  
**11)Dr. Harikumar Pallathadka**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)G NavyaSree**  
 Address of Applicant :Assistant professor Ramachandra College of Engineering, Vatluru, Eluru Pin: 534006 State: Andhra Pradesh Country: India -----  
**2)Dr.M Jithender Reddy**  
 Address of Applicant :Assistant professor Vasavi College of Engineering, hyderabad Pin: 500010 State: Telangana Country: India -----  
**3)Dr Bhadrappa Haralayya**  
 Address of Applicant :Professor and HOD Department of MBA Lingaraj Appa Engineering College Bidar Pin: 585403, State: Karnataka Country: India -----  
**4)Mrs. D.Surekha**  
 Address of Applicant :Assistant professor CSE Department, Chalapathi Institute of Engineering and Technology, Chalapathi Nagar, Lam, Guntur, Andhra Pradesh Pin:522034 State: Andhra Pradesh -----  
**5)Mr. Jahan Malik**  
 Address of Applicant :Student Vellore Institute of technology, Kelambakkam-vandalur,Rajan nagar Pin: 600127 -----  
**6)Dr.Manoranjan Dash**  
 Address of Applicant :Associate Professor Siksha O Anusandhan University Bhubaneswar Pin: 751003 State: Odisha Country: India -----  
**7)Dr.Preeti Y Shadangi**  
 Address of Applicant :Assistant Professor Siksha O Anusandhan University Ghatikia Kalinga nagar bhubaneswar Pin: 751003 State: Odisha Country: India -----  
**8)Dr. Moumita Pal**  
 Address of Applicant :Associate Professor JIS College of Engineering Pin: 741233 State: West Bengal Country: India -----  
**9)Dr. Swati Chowdhuri**  
 Address of Applicant :Associate Professor Institute of Engineering and Management Salt Lake sector V, Kolkata Pin: 700091 State: West Bengal Country: India -----  
**10)Dr. Biswarup Neogi**  
 Address of Applicant :Prof. & HoD JIS College of Engineering, Block A, PhIII, Kalyani. Pin:741235 State: West Bengal Country: India -----  
**11)Dr. Harikumar Pallathadka**  
 Address of Applicant :Director and Professor Manipur International University, Ghari, Imphal, Imphal West, Pin: 795140 State: Manipur Country: India -----

(57) Abstract :

Time-critical IoT applications employing Energy Efficient Computation Offloading with DVFS and Deep Reinforcement Learning Abstract: Internet of Things (IoT) is a technology that allows ordinary physical things to gather, process, and share data with other physical devices and systems over the internet. It provides pervasively connected infrastructures to support novel apps and services that can automate otherwise intensely arduous manual labour. Edge computing (EC) complements the strong centralised cloud servers by delivering powerful compute capability close to the data source, lowering connection latency, and guaranteeing data privacy. The energy consumption problem has continued to garner great attention from the IoT community in adopting various ways to reduce energy consumption while still satisfying the computing demand. In this research, we present an application-deadline-aware data offloading technique employing deep reinforcement learning and Dynamic Voltage and Frequency Scaling (DVFS) in an edge computing environment to reduce the energy consumption of IoT devices. The suggested technique learns the appropriate data distribution policies and local computation DVFS frequency scaling by interacting with the system environment and learning the behaviour of the device, network, and edge servers. The suggested technique was tested on numerous edge computing environments with different IoT devices. Experimental results show that this technique can reduce energy usage while satisfying the IoT application and services scheduling and computational targets. The proposed approach has great energy savings when compared with the native Linux governors.

No. of Pages : 11 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241041073 A

(19) INDIA

(22) Date of filing of Application :18/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : Machine Learning based Facial Emotion Recognition and Detection using Python

(51) International classification :G06K0009000000, G06N0020000000, G10L0025630000, G06K0009620000, G06N0005000000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

1)Dr. B. Booba

Address of Applicant :Professor Department of Information Technology Vels Institute of Science Technology and Advanced Studies Palavaram, Chennai Tamil Nadu, India -----

2)C.Kalpana

3)V.R.Niveditha

4)G.Mothilal Nehru

5)M. John Britto

6)G Sridevi

7)R.Arivukkodi

8)Najeeb Ahmed G

9)Dr. V. Nalini

10)Dr.S.Kamalakkannan

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Dr. B. Booba

Address of Applicant :Professor Department of Information Technology Vels Institute of Science Technology and Advanced Studies Palavaram, Chennai Tamil Nadu, India -----

2)C.Kalpana

Address of Applicant :Research Scholar Vels Institute of Science, Technology & Advanced Studies (VISTAS) VelanNagar P.V.VaithiyalingamRoad Pallavaram Chennai-600117 Tamil Nadu, India -----

3)V.R.Niveditha

Address of Applicant :Sathyabama Institute of science and technology , chennai-119 -----

4)G.Mothilal Nehru

Address of Applicant :Assistant professor Department of information technology VISTAS. Chennai -----

5)M. John Britto

Address of Applicant :Assistant Professor VISTAS Chennai -----

6)G Sridevi

Address of Applicant :Assistant Professor(Meenakshi Academy of Higher Education and Research Faculty of Humanities and Science) 1-B, Indra Arcade part 2, 82/17, Valluvar salai, arumbakkam, Chennai -600106 -----

7)R.Arivukkodi

Address of Applicant :Assistant professor (Meenakshi Academy of Higher Education and Research, Faculty of Humanities and Science) Plot no 28, Thamirabarani st Palaniappa nagar, Valasaravakkam, chennai -87 -----

8)Najeeb Ahmed G

Address of Applicant :Research scholar VISTAS , Chennai -----

9)Dr. V. Nalini

Address of Applicant :Assistant Professor, School of Education, VISTAS , Pallavaram, Chennai - 117. -----

10)Dr.S.Kamalakkannan

Address of Applicant :Associate Professor Department of Information Technology School of Computing Sciences VISTAS (Vels Institute of Science, Technology & Advanced Studies) Chennai -----

(57) Abstract :

Machine Learning based Facial Emotion Recognition and Detection using Python Abstract: Emotion is one of the very few terms in the English language that do not have a definite explanation and it is understood. It is abstract. Yet, practically every decision we have ever made in our life is guided by emotion. Marketing research has demonstrated that forecasting feelings correctly can be a big source of growth for firms and that's what we will be working on today - Reading Emotions. In the field of data and machine learning, this concept falls under the umbrella of cognitive systems. Let us try to decode the science behind Emotion Recognition Algorithms, and construct one for ourselves. What exactly is a cognitive emotion detection algorithm trying to accomplish? The objective is to imitate the human thought process based on training data (in the form of photographs and videos of humans) and try to segment the emotions present in this data. To do our analysis in this chapter we will be focussing on pre-recorded photos and videos that demonstrate an emotion, but the same can also be implemented on a live stream of the video feed for real-time analytics.

No. of Pages : 11 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241041081 A

(19) INDIA

(22) Date of filing of Application :18/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : PILOT SCALE PROCESS FOR THE LIQUID ORGANIC HYDROGEN CARRIER (LOHC) APPLICATION OF BIPHENYL

(51) International classification	:C01B0003000000, B01J0035100000, C07C0029141000, F04B0039000000, E21B0007000000	(71)Name of Applicant : <b>1)RAJALAKSHMI ENGINEERING COLLEGE</b> Address of Applicant :Rajalakshminagar, Thandalam, Chennai - 602 105, Tamil Nadu, India. Chennai -----
(86) International Application No	:PCT//	<b>Name of Applicant : NA</b>
Filing Date	:01/01/1900	<b>Address of Applicant : NA</b>
(87) International Publication No	: NA	(72)Name of Inventor :
(61) Patent of Addition to Application Number	:NA	<b>1)DR. K. L. VINCENT JOSEPH</b>
Filing Date	:NA	Address of Applicant :Department of Chemical Engineering, Rajalakshmi Engineering College, Rajalakshmi Nagar, Thandalam, Chennai - 602 105, Tamil Nadu, India, Chennai -----
(62) Divisional to Application Number	:NA	<b>2)DR. N. T. MARY ROSANA</b>
Filing Date	:NA	Address of Applicant :Department of Chemical Engineering, Rajalakshmi Engineering College, Rajalakshmi Nagar, Thandalam, Chennai - 602 105, Tamil Nadu, India, Chennai -----

(57) Abstract :

The present invention relates to a LOHC process developed for biphenyl is based on the chemical principle of hydrogenation and dehydrogenation. For the hydrogenation/dehydrogenation process, a stainless-steel reactor is used. The hydrogenation process of the present invention is carried out with mild pressure of hydrogen and highly efficient Osmium catalyst. The hydrogenation process was achieved using hydrogen and osmium catalyst Since hydrogen is stored in the molecule as covalent hydrogen, the material is safe for the storage and transportation. The spent fuel can be added back to the hydrogenation material and the process can be repeated for several cycles.

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :19/07/2022

(21) Application No.202241041111 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : Manufacturing of High-Performance Marine grade steel with improved mechanical behaviour

(51) International classification :C22C0038020000, C22C0038040000, C21D0008000000, C22C0038080000, C21C0007100000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Abhishek Nalluri**  
Address of Applicant :Door no:54-1-19/1, isukathota, opposite IOCL petrol bunk, main road -----  
-----  
**2)Jai Kumar Sagari**  
**3)Dr.Vanthala Varaha Siva Prasad**  
**4)Romala Rajesh**  
**5)Boddu Rajnaveen**  
**6)Pilla Chaitanya Sai Kumar**  
**7)Sripatnala Ravi Teja**  
**8)Vannam Sumanth**  
**9)Malapati Tharun Kumar**  
**10)Paidi Rohit**  
**11)Pattigulla saikumar**  
**12)Devapati Maniprasad**  
**13)Konchada sravanthi**  
**14)Satti Jayanth Satya Sai Aditya Reddy**  
**15)Asad Berei Rage**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Abhishek Nalluri**  
Address of Applicant :Door no:54-1-19/1, isukathota, opposite IOCL petrol bunk, main road -----  
-----  
**2)Jai Kumar Sagari**  
Address of Applicant :Assistant Professor,Department of Mechanical Engineering, GITAM Deemed to be University, 530045, vizag -----  
**3)Dr.Vanthala Varaha Siva Prasad**  
Address of Applicant :Professor, Department of Marine engineering, Andhra University, 530003, -----  
-----  
**4)Romala Rajesh**  
Address of Applicant :16/404/4, Arilova, Durga Bazaar, Vishakapatnam-530040, -----  
**5)Boddu Rajnaveen**  
Address of Applicant :S/o B. Nagarjuna, Department of Basic Engineering and Applied Science, Dr. NTR College of Agriculture Engineering,Acharya N. G. Ranga Agriculture University, Bapatla, Andhra Pradesh, 522101 -----  
**6)Pilla Chaitanya Sai Kumar**  
Address of Applicant :Department of Marine engineering, Andhra University, Visakhapatnam- 530003, Andhra Pradesh -----  
**7)Sripatnala Ravi Teja**  
Address of Applicant :Department of Marine engineering, Andhra University, Visakhapatnam- 530003, Andhra Pradesh -----  
**8)Vannam Sumanth**  
Address of Applicant :Department of Marine engineering, Andhra University, Visakhapatnam- 530003, Andhra Pradesh -----  
**9)Malapati Tharun Kumar**  
Address of Applicant :Department of Marine engineering, Andhra University, Visakhapatnam- 530003, Andhra Pradesh -----  
**10)Paidi Rohit**  
Address of Applicant :Department of Marine engineering, Andhra University, Visakhapatnam- 530003, Andhra Pradesh -----  
**11)Pattigulla saikumar**  
Address of Applicant :Department of Marine engineering, Andhra University, Visakhapatnam- 530003, Andhra Pradesh -----  
**12)Devapati Maniprasad**  
Address of Applicant :Department of Marine engineering, Andhra University, Visakhapatnam- 530003, Andhra Pradesh -----  
**13)Konchada sravanthi**  
Address of Applicant :Department of Marine engineering, Andhra University, Visakhapatnam- 530003, Andhra Pradesh -----  
**14)Satti Jayanth Satya Sai Aditya Reddy**  
Address of Applicant :Department of Marine engineering, Andhra University, Visakhapatnam- 530003, Andhra Pradesh -----  
**15)Asad Berei Rage**  
Address of Applicant :S/O:Berei Rage, House No: 8-50-10, old CBI down, Visakhapatnam- 530017, Andhra Pradesh -----

(57) Abstract :

The invention relates to a marine steel material and a method for manufacturing it, and it falls under the category of materials and manufacturing. The problems of coarse grains and mixed crystals in existing marine steel materials, as well as long forging times in marine steel manufacturing, have been solved. To improve the mechanical properties of the steel material, the content of Cr in the marine steel material is controlled to range from 0.15 wt% to 0.24 wt%. The marine steel material is manufactured in the following steps: primary smelting in an electric furnace, refining, VD vacuum treatment, forging, and heat treatment processing, where the terminal temperature is controlled between 750 and 800oC during the forging step. The material is produced in a single fire, and the manufacturing method is applied to the production of marine steel material, allowing the production period to be greatly reduced while obtaining steel material with uniform fine grains and good mechanical properties

No. of Pages : 25 No. of Claims : 5



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :19/07/2022

(21) Application No.202241041163 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : METHOD AND SYSTEM FOR PERFORMING FACE DETECTION USING MACHINE LEARNING TECHNIQUES

<p>(51) International classification :G06K0009000000, G06K0009620000, G06K0009460000, G06T0011000000, G06N0003080000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)DR. V. VIJAY KUMAR (Professor)</b> Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, DEAN RESEARCH &amp; DEVELOPMENT; CHAIRPERSON BOARD OF STUDIES ANURAG UNIVERSITY HYDERABAD—500088; TELANGANA STATE, INDIA Email. ----- ----- <b>2)DR V VENKATA KRISHNA (Professor)</b> <b>3)A SWARNA (Research Scholar)</b> <b>4)M VIJAYA SHANTHI (Research Scholar)</b> Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : <b>1)DR. V. VIJAY KUMAR (Professor)</b> Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, DEAN RESEARCH &amp; DEVELOPMENT; CHAIRPERSON BOARD OF STUDIES ANURAG UNIVERSITY HYDERABAD—500088; TELANGANA STATE, INDIA Email. ----- ----- <b>2)DR V VENKATA KRISHNA (Professor)</b> Address of Applicant :DEPARTMENT OF INFORMATION TECHNOLOGY, VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS), HYDERABAD, TELANGANA STATE, INDIA-500075 Email. ----- <b>3)A SWARNA (Research Scholar)</b> Address of Applicant :JNTUH, HYDERABAD, TELANGANA STATE, INDIA-500085, ASST. PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, VIDYA JYOTHI INSTITUTE OF TECHNOLOGY, (AUTONOMOUS) HYDERABAD, TELANGANA STATE, INDIA-500075. Email. ----- <b>4)M VIJAYA SHANTHI (Research Scholar)</b> Address of Applicant :JNTUH, HYDERABAD, TELANGANA STATE, INDIA-500085 e-mail: -----</p>
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(57) Abstract :

METHOD AND SYSTEM FOR PERFORMING FACE DETECTION USING MACHINE LEARNING TECHNIQUES ABSTRACT The present invention provides an approach for performing face detection using plurality of ML techniques. It receives one or more images of a subject and filters the received one or more images of the subject. The filtered images are then compared with a plurality of existing facial data models with facial features, and are processed with one or more ML models. The detected subject facial image region of the subject is analyzed with the filtered images. Subsequently, the detected candidate facial image region is processed using a sliding window approach with image size to generate candidate facial windows within the detected candidate image region, wherein the image size is between the minimum input size and the maximum input size of the hardware ML module and analyzes each of the set of candidate facial windows to determine whether each of the set of candidate facial windows includes a human face.

No. of Pages : 23 No. of Claims : 5

(54) Title of the invention : An Auto Fault Notification system for a hydrogen fuel assembly for a drone System

(51) International classification :G06N0003080000, G06N0003040000, G06N0003120000, G01M0013045000, G06T0007000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

## 1)Mr. Inamul Hasan

Address of Applicant :Assistant professor, Department of Aeronautical engineering, ACS College of Engineering, Rajarajeswari Group of Institutions, Kambipura, Mysore Road, Bengaluru, Karnataka 560074 Bengaluru -----

## 2)Dr. Anil Kumar Bodukuri

## 3)Dr. Ufaith Hussain Qadiri

## 4)Dr. Selvakumaran T

## 5)Dr. Sandip Ghosh

## 6)Dr. Arun Prakash J

## 7)Dr. P.V.Arul Kumar

## 8)Dr. Rajkumar E

## 9)Mr. K Prakash

## 10)Dr. Harish Kumar Banga

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

## 1)Mr. Inamul Hasan

Address of Applicant :Assistant professor, Department of Aeronautical engineering, ACS College of Engineering, Rajarajeswari Group of Institutions, Kambipura, Mysore Road, Bengaluru, Karnataka 560074 Bengaluru -----

## 2)Dr. Anil Kumar Bodukuri

Address of Applicant :Asst. Professor (C), Department of Mechanical Engineering, KU College of engineering and Technology, Kakatiya University Campus, 506009 Warangal -----

## 3)Dr. Ufaith Hussain Qadiri

Address of Applicant :Associate Professor, Department of Mechanical Engineering, Malla Reddy Engineering college, Maisammaguda, Gundlapochampally village, Medchal Mandal, Medchal- Malkajgiri District, Telangana State- 500100 Medchal -----

## 4)Dr. Selvakumaran T

Address of Applicant :Associate Professor, Department of Aerospace Engineering, SRM Institute of Science and Technology, Kattankulathur, Chennai – 603203 Kattankulathur -----

## 5)Dr. Sandip Ghosh

Address of Applicant :Professor, Department of Mechanical Engineering, JIS College of Engineering, Barrackpore - Kalyani Expy, Block A5, Block A, Kalyani, West Bengal 741235 Kalyani -----

## 6)Dr. Arun Prakash J

Address of Applicant :Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology, Valley Campus, Pollachi Highway, Coimbatore -641032 Coimbatore -----

## 7)Dr. P.V.Arul Kumar

Address of Applicant :Professor and Principal, Department of Mechanical Engineering, Bharath Niketan Engineering College Aundipatty – 625 536, Theni District Tamilnadu, India Aundipatty -----

## 8)Dr. Rajkumar E

Address of Applicant :Associate Professor (Grade II), School of Mechanical Engineering, VIT University, Vellore - 632014 Vellore -----

## 9)Mr. K Prakash

Address of Applicant :Assistant professor, Department of Mechanical Engineering, Arasu Engineering College, Kumbakonam, Tamil Nadu 612501 Kumbakonam -----

## 10)Dr. Harish Kumar Banga

Address of Applicant :Assistant Professor, Department of Fashion and Lifestyle, Accessory Design, National Institute of Fashion Technology, Mumbai 410210 Mumbai -----

## (57) Abstract :

Real-time defect identification of a liquid rocket engine is the goal of a real-time fault diagnostic approach that employs an adaptive genetic algorithm to optimize a back propagation (BP) neural network. This method is designed to accomplish real-time fault detection (LRE). The authors of this research use an adaptive genetic algorithm to improve a BP neural network, provide real-time predictions about sensor data, compare the projected value to the actual data obtained, and use a threshold judgment mechanism to decide whether or not the engine is failing. The defect detection approach that has been suggested is simulated and validated with the use of data from a certain kind of rocket engine that uses liquid hydrogen and liquid oxygen. The findings of the experiment indicate that this technology is capable of performing an accurate diagnosis of this rocket engine using liquid hydrogen and liquid oxygen in real-time. The results obtained from a single BP neural network model and a BP neural network model optimized by a traditional genetic algorithm (GA) are compared with those obtained from the method that was proposed, which shows that the proposed method has higher system sensitivity and robustness. Additionally, the method has engineering application value.

No. of Pages : 22 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :19/07/2022

(21) Application No.202241041260 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : System for developing the trend of smart education by IoT

(51) International classification :G06Q0050200000, G09B0007000000, G09B0005000000, H04W0088020000, A63H0033260000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Madan Mohan Laddunuri**  
Address of Applicant :School of Allied Health Sciences, Malla Reddy University (MRU), Hyderabad, India Hyderabad -----  
**2)Ms. Preeti Gupta**  
**3)Shailesh Saxena**  
**4)Dr. Melanie Lourens**  
**5)Pradnya Chavarkar**  
**6)Dr. Gouri Sharma**  
**7)Edidiong Etim UKPONG**  
**8)Dr. Arun Kant Painoli**  
**9)Dr. Anju Rathee Ahlawat**  
**10)Amit B. Kasar**  
**11)Dr. Deo karan Ram**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Madan Mohan Laddunuri**  
Address of Applicant :School of Allied Health Sciences, Malla Reddy University (MRU), Hyderabad, India Hyderabad -----  
**2)Ms. Preeti Gupta**  
Address of Applicant :Assistant Professor, Computer Science and Engineering, Krishna Engineering College, Ghaziabad, Uttar Pradesh Ghaziabad -----  
**3)Shailesh Saxena**  
Address of Applicant :Assistant Professor, Department of CSE, SRMS College of Engineering and Technology, Bareilly (U.P) Bareilly -----  
**4)Dr. Melanie Lourens**  
Address of Applicant :Department of Human Resources Management, Durban University of Technology, South Africa -----  
**5)Pradnya Chavarkar**  
Address of Applicant :Lecturer, Computer Engineering, A.I. Abdul Razzak Kalsekar Polytechnic, Panvel, MSBTE, Maharashtra Panvel -----  
**6)Dr. Gouri Sharma**  
Address of Applicant :Assistant Professor, School of Management, JECRC University Jaipur, India Jaipur -----  
**7)Edidiong Etim UKPONG**  
Address of Applicant :Dr./ Researcher/ Architect, Directorate of Physical Planning, University of Uyo, Uyo, Akwa Ibom State, Nigeria -----  
**8)Dr. Arun Kant Painoli**  
Address of Applicant :Dean, School of Management Studies, Baddi University of Emerging Sciences and Technology, Baddi, Himachal Pradesh Baddi -----  
**9)Dr. Anju Rathee Ahlawat**  
Address of Applicant :Assistant Professor, Department of Applied Sciences Maharaja Surajmal Institute of Technology, C-4, Janakpuri, New Delhi Janakpuri -----  
**10)Amit B. Kasar**  
Address of Applicant :Assistant Professor, Engineering Sciences, International Institute of Information Technology, Pune SPPU, Pune, Maharashtra Pune -----  
**11)Dr. Deo karan Ram**  
Address of Applicant :Associate Professor, Petroleum and Chemical Engineering, Nims University Rajasthan, Jaipur, Rajasthan, India Jaipur -----

(57) Abstract :

Students may request a wide range of educational resources from an intelligent education application, and this issue must be addressed in one implementation of this invention's technical problem. One implementation of the present invention may be able to address this issue. For example, video clips, still images, live broadcasts, and problem banks can be provided to students in this way. This has resulted in the disclosure of a smart education system that adheres to one embodiment. An Internet of Things-enabled smart education terminal is used to connect to a server that hosts a variety of learning content items, including video clips, images, and a live broadcast.

No. of Pages : 18 No. of Claims : 8

(54) Title of the invention : A DEEP LEARNING BASED HUMAN ACTION RECOGNITION SYSTEM AND A METHOD THEREOF

<p>(51) International classification :G06K0009000000, G06N0003080000, G06K0009620000, G06N0003040000, G16H0050200000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)SRM UNIVERSITY</b> Address of Applicant :Amaravati, Mangalagiri, Andhra Pradesh-522502, India Guntur -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)VAZHORA MALAYIL, Manikandan</b> Address of Applicant :Department of CSE, SRM University-AP, Neerukonda, Mangalagiri mandal, Guntur, Andhra Pradesh-522502, India Guntur -----</p> <p><b>2)RAAVI, Sai Sreeya</b> Address of Applicant :Department of CSE, SRM University-AP, Neerukonda, Mangalagiri mandal, Guntur, Andhra Pradesh-522502, India Guntur -----</p> <p><b>3)BARUKULA, Snehitha Naga Sai</b> Address of Applicant :Department of CSE, SRM University-AP, Neerukonda, Mangalagiri mandal, Guntur, Andhra Pradesh-522502, India Guntur -----</p>
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(57) Abstract :

**ABSTRACT A DEEP LEARNING BASED HUMAN ACTION RECOGNITION SYSTEM AND A METHOD THEREOF** The present disclosure relates to a system(100) for recognizing human actions detected from a static image based on a deep learning neural network (DLNN). The system(100) comprises a repository (102) to store a large dataset containing static images with specific actions and a set of classification rules, an input device (104) to receive a plurality of static images, a collection module (106) collects data from input device(104) or heterogeneous sources and apply a plurality of filters to the static image, a processing module (108) processes the data for removing noise in the dataset and flatten the input image for reducing dimensions and a network module (110) configured to apply DLNN model (112) on the static image. The network module (110) comprises a crawler and extractor (110a) that crawls through the repository (102) and extract action features from the static image and a result generator unit (114) that classifies the extracted action features.

No. of Pages : 30 No. of Claims : 10

(54) Title of the invention : Design of Smart Home Automation using Cloud Networking system

(51) International classification :G05B0015020000, H04L0012280000, G06F0003160000, G10L0015220000, G10L0015180000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Dr.G.R.Anil**

Address of Applicant :Assistant Professor, CSE, Vardhaman College of Engineering, Kacharum, Shamshabad-501218, Hyderabad Shamshabad

**2)Mrs.D. Dhanalakshmi****3)Mrs.Maadugundu Jyothi****4)Mrs. Parul Sharma****5)Mrs. Ritu Sharma****6)Dr. Amar B. Deshmukh****7)Dr.R.Senthamil Selvan**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Dr.G.R.Anil**

Address of Applicant :Assistant Professor, CSE, Vardhaman College of Engineering, Kacharum, Shamshabad-501218, Hyderabad Shamshabad --

**2)Mrs.D. Dhanalakshmi**

Address of Applicant :Assistant Professor, Vardhaman College of Engineering, Kacharum, Shamshabad-501218, Hyderabad Shamshabad --

**3)Mrs.Maadugundu Jyothi**

Address of Applicant :Assistant Professor, Computer Science &amp; Engineering, Kgreddy College of Engineering and Technology, Moinabad, Hyderabad-501504 Moinabad -----

**4)Mrs. Parul Sharma**

Address of Applicant :House Number 765, Napier Town, Jabalpur 482001 Jabalpur -----

**5)Mrs. Ritu Sharma**

Address of Applicant :House Number 120/1, Sangam Colony, Jabalpur, M.P.482002 Jabalpur -----

**6)Dr. Amar B. Deshmukh**

Address of Applicant :Flat No. A-307, Sarthak Beaulieu Co-operative Housing Society Ltd., Pisoli-Kondhwa Road, Wagh Nagar, Pisoli, Pune-411060. Pune -----

**7)Dr.R.Senthamil Selvan**

Address of Applicant :Associate Professor, Sri Venkatesa Perumal College of Engineering and Technology, Puttur-517583 Puttur -----

## (57) Abstract :

A system for interactive use of a smart home is described here. It is based on a conversational dialogue engine that supports many threads and several modes of communication. The system offers a user interface that is based on natural language for the control of home gadgets, appliances, or functions. The user's input may be received by the smart home automation agent through sensing devices such as a smartphone, a tablet computer, or a laptop computer. Users may interact with the system locally, inside the household, or remotely, from outside the home. The system for the smart home is able to take information in from sensors as well as any other equipment with which it is interfaced. The system makes use of interaction guide rules in order to process its response to input from the user as well as in order to drive the conversational exchanges that are the outcome of such input. The system is capable of learning the preferences and routines of its user via its adaptive learning process, which is based on information from both the user and the sensors.

No. of Pages : 22 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241041442 A

(19) INDIA

(22) Date of filing of Application :20/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : Detection and mitigation of OS level malware in mobile using malware Detection system

<p>(51) International classification :G06F0021560000, H04L0029060000, A61K0008360000, G06F0021140000, C11D0003040000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr. Velliangiri Sarveshwaran</b> Address of Applicant :SRM Institute of Science and Technology, Kattankulathur Campus,Chennai ----- <b>2)Dr. J. Sasikala</b> <b>3)Dr. IwinThanakumar Joseph S</b> <b>4)Dr.G Bindu</b> Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : <b>1)Dr. Velliangiri Sarveshwaran</b> Address of Applicant :SRM Institute of Science and Technology, Kattankulathur Campus,Chennai ----- <b>2)Dr. J. Sasikala</b> Address of Applicant :Annamalai University, Annamalainagar - 608002 ----- <b>3)Dr. IwinThanakumar Joseph S</b> Address of Applicant :KoneruLakshmaiah Education Foundation - ----- <b>4)Dr.G Bindu</b> Address of Applicant :KoneruLakshmaiah Education Foundation - -----</p>
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(57) Abstract :

TITLE - Detection and mitigation of OS level malware in mobile using malware Detection system Abstract In general, malware is any application created with the purpose of destroying the system, as well as obtaining the user's personal data. Plus, the main feature causes damage to your computer. So we must work hard to protect you from this infection. Malicious programs, it is said, can be categorized. This very classification can determine the intensity of a particular application. The first option - it is spam. The least dangerous, though bad viruses (malware) can only occur. Usually a large ad is displayed and targets your CPU tasks in an irregular manner. Sometimes it can steal your personal data. The second type of virus is a worm. This is a very weak partition. As a rule, it gets into a computer for the purpose of self-reproduction. Plus, as in the previous case, they are CPU intensive. The result is bargain PC. It is critical, but still not unpleasant. Here an innovation was proposed to identify the malware in mobile using a smart malware detection system.

No. of Pages : 9 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :20/07/2022

(21) Application No.202241041443 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : An IoT based system to analyze the real-time collapsing probability of structures

(51) International classification :G09B0023020000, G09B0019020000, G06N0005040000, G09B0023060000, G06F0017180000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr.S.P. Siddique Ibrahim**  
Address of Applicant :Assistant Professor, School of Computer Science and Engineering, VIT-AP University, Amaravathi, Near Vijayawada -----  
**2)Dr Yashvant Rao**  
**3)Dr. Pallavi Singh**  
**4)R.Ragul**  
**5)Mrs. Nivethitha T**  
**6)Dr. Neha Verma**  
**7)Mr: .S.GANESH**  
**8)Dr M Ravi**  
**9)Mr.J Logeshwaran**  
**10)Dr.R.PRABA**  
**11)Dr :K.Vijayakumari**  
**12)Dr. V.Kannan**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr.S.P. Siddique Ibrahim**  
Address of Applicant :Assistant Professor, School of Computer Science and Engineering, VIT-AP University, Amaravathi, Near Vijayawada -----  
**2)Dr Yashvant Rao**  
Address of Applicant :Nodal Officer cum Lab Manager, District Virology Lab, New Sadar Hospital Sahibganj, Jharkhand -816109 -----  
**3)Dr. Pallavi Singh**  
Address of Applicant :Associate Professor, Biotechnology, Graphic Era Deemed to be University, Dehradun -----  
**4)R.Ragul**  
Address of Applicant :Research Scholar, Department of Electrical and Electronics Engineering , Vels Institute of Science, Technology & Advanced Studies (VISTAS), Chennai, Tamil Nadu, India. -----  
**5)Mrs. Nivethitha T**  
Address of Applicant :Assistant professor, ECE, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE -----  
**6)Dr. Neha Verma**  
Address of Applicant :Sr. Assistant Professor , IT, Vivekananda Institute of Professional studies , Delhi -----  
**7)Mr: .S.GANESH**  
Address of Applicant :Assistant Professor , Computer Science and Engineering , Study World College of Engineering, Coimbatore -----  
**8)Dr M Ravi**  
Address of Applicant :Assistant Professor, Computer Science, Govt. First Grade College, Raichur-584101, India -----  
**9)Mr.J Logeshwaran**  
Address of Applicant :Research Scholar, Department of Electronics and Communication Engineering, Sri Eshwar College of Engineering, Coimbatore -----  
**10)Dr.R.PRABA**  
Address of Applicant :Assistant Professor , Information Technology , Dr.N.G.P. Arts and Science College, Coimbatore -----  
**11)Dr :K.Vijayakumari**  
Address of Applicant :Assistant Professor , Computer Science , Trinity College For Women, Namakkal -----  
**12)Dr. V.Kannan**  
Address of Applicant :Managing director, CLDC Research and Development No.997, Mettupalayam Road, Near X-Cut Signal,R.S.Puram, Coimbatore-641002 -----

(57) Abstract :

TITLE - An IoT based system to analyze the real-time collapsing probability of structures Abstract A strategy in mathematics is to start with a few statements, and then build more mathematics from these statements. Initially reports are known as print. From relatively small theories, precise logic is used to prove other concepts, called theories or propositions. An area of mathematics known as probability is different. Probability can be reduced to three axes. Probability theory is a mathematical scientific study of mass random events. The random event is a phenomenon in which the same experience (experiment, experiment) is reproduced over and over again, each time proceeding slightly differently. Patterns of random events appear only when they are observed repeatedly. This study is such a random phenomenon that a large, almost unlimited number of cases can be observed. Such random events are called mass. Individual observations of random events result in unpredictable results, but with repeated observations, some patterns are detected. These forms and subjects of study are probability theories.

No. of Pages : 10 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241041444 A

(19) INDIA

(22) Date of filing of Application :20/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : IoT based patient monitoring System for stroke affected people using deep learning approach

(51) International classification :A61B0005000000, G06N0003080000, A61K0033000000, A61N0002060000, G16H0050500000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr. Velliangiri Sarveshwaran**

Address of Applicant :SRM Institute of Science and Technology, Kattankulathur Campus,Chennai -----

**2)Dr. J. Sasikala**

**3)Dr.G Bindu**

**4)Dr. IwinThanakumar Joseph S**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Velliangiri Sarveshwaran**

Address of Applicant :SRM Institute of Science and Technology, Kattankulathur Campus,Chennai -----

**2)Dr. J. Sasikala**

Address of Applicant :Annamalai University, Annamalainagar - 608002 -----

**3)Dr.G Bindu**

Address of Applicant :KoneruLakshmaiah Education Foundation - -----

**4)Dr. IwinThanakumar Joseph S**

Address of Applicant :KoneruLakshmaiah Education Foundation - -----

(57) Abstract :

TITLE - IoT based patient monitoring System for stroke affected people using deep learning approach Abstract Paralysis means loss of function of one half of our body, face, leg, and arm. How this condition occurs is when the blood flow to one half or part of our brain is blocked or that part of the brain loses its function. As a result, the patient becomes bed-ridden due to loss of function in arms and legs. Some will lose the ability to speak. Therefore, early detection and treatment of this disease can save the brain and save the patient from permanent disability. When a stroke occurs, the blood vessels leading to the brain become blocked, or the blood vessels burst and bleed, the heart malfunctions, and the bad blood draining from the brain is blocked, the brain loses its normal blood supply and brain cells become inactive or die. It causes paralysis. Strokes are often caused by blockages in blood vessels. If we recognize this disease at an early stage and remove the blood vessel blockage, we can save the brain from complete destruction. Here an innovation model was proposed to monitor the patients with the help of IoT based deep learning approach.

No. of Pages : 8 No. of Claims : 10



(54) Title of the invention : SYSTEM AND METHOD FOR E-COMMERCE LEVEL OPTIMIZATION OF A MULTI-STOP ROUTE

<p>(51) International classification :G01C0021340000, G01C0021360000, H04L0029080000, G06Q0010040000, G06Q0030020000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)SRM Institute of Science and Technology</b> Address of Applicant :Kattankulathur, Chennai-603203, Tamil Nadu, India Chennai -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)MANICKAM, Vijayalakshmi</b> Address of Applicant :Department of Computing Technologies, SRM Institute of Science and Technology, Kattankulathur 603203, Tamil Nadu, India Chennai -----</p> <p><b>2)HARICHANDAN, Tanmaya</b> Address of Applicant :Plot No-154A, Gali No-18, Ashok Vihar Phase 2, Gurgaon - 122022, Haryana, India Gurugram -----</p> <p><b>3)VINAYAK, Yash</b> Address of Applicant :56- Indira Nagar Colony, Dehradun - 248146, Uttarakhand, India Dehradun -----</p>
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(57) Abstract :

ABSTRACT SYSTEM AND METHOD FOR E-COMMERCE LEVEL OPTIMIZATION OF A MULTI-STOP ROUTE Described herein is a navigation system for e-commerce level optimization of a multi-stop route. The system includes a data processor (108) to receive input route coordinates of a route from a client application running on a mobile device (102) of a user, wherein the route coordinates defining one more target stops lying in a sequence between a start location and an end location of the route based on a machine learning model (204). The system further includes a route optimizer (110) to process the input route coordinates received from the data processor (108) to generate an optimized multi-stop route having route coordinates arranged giving preference to travel time optimization based on heuristics based evolutionary model (206). Then, the route optimizer (110) communicates the optimized multi-stop route with the data processor (108) for transmitting them to the client application running on the mobile device (102) of the user.

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :20/07/2022

(21) Application No.202241041648 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : Asthma-related dyselectrolytemia in stable and acute exacerbation chronic obstructive pulmonary disease COPD patients.

(51) International classification :A61K0045060000, G16H0050300000, A61P0011000000,  
G16H0050800000, A61K0031120000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr.Shanmugarathinam Alagarsamy**  
Address of Applicant :Assistant Professor Department of Pharmaceutical Technology University College of Engineering Bharathidasan Institute of Technology Campus Anna University, Tiruchirappalli Pin: 620024 State: Tamilnadu Country: India -----  
**2)Dr T S Muthukumar**  
**3)Dr.K.V.Leela.**  
**4)Dr .Gupta Shubham Lalbabuprasad**  
**5)Dr Ashwini Kshirsagar**  
**6)Mr. Deepadarshan Urs**  
**7)Mrs. K.Vijaipriya**  
**8)Dr. Shivam Mahajan**  
**9)Dr.Manoj Kumar Katual**  
**10)Dr. Gurfateh Singh**  
**11)Dr. Harikumar Pallathadka**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr.Shanmugarathinam Alagarsamy**  
Address of Applicant :Assistant Professor Department of Pharmaceutical Technology University College of Engineering Bharathidasan Institute of Technology Campus Anna University, Tiruchirappalli Pin: 620024 State: Tamilnadu Country: India -----  
**2)Dr T S Muthukumar**  
Address of Applicant :Principal Revathi Institute of Physiotherapy 2/718 Poolakattupalayam Avinashi Tiruppur District Pin 641654 State Tamilnadu Country India -----  
**3)Dr.K.V.Leela.**  
Address of Applicant :Professor and Head. SRM Medical College Hospital and Research centre. Pin: 603 203 State: Tamilnadu Country:India -----  
**4)Dr .Gupta Shubham Lalbabuprasad**  
Address of Applicant :MBBS Intern D Y Patil Medical College, (Institution Deemed to be University)Kolhapur ; Address : Vidyanagar, Kasba Bawda, Kolhapur, Maharashtra 416006 Pin: 416006 State: Maharashtra Country: India -----  
**5)Dr Ashwini Kshirsagar**  
Address of Applicant :Assistant Professor Alamuri Ratanmala Institute of Engineering and Technology, Saggao, Shahapur, Thane, Maharashtra. Pin: 421601 State: Maharashtra Country: India -----  
**6)Mr. Deepadarshan Urs**  
Address of Applicant :Research Scholar Department of Studies and Research in Biochemistry, Mangalore University, Jnana Kaveri Post graduate campus, Chikka Aluvara, Kodagu Pin: 571232 State: Karnataka Country: India -----  
**7)Mrs. K.Vijaipriya**  
Address of Applicant :Assistant Professor, Department of ECE, Sri Sai Ranganathan Engineering College, Coimbatore. Pin: 641109 State: Tamilnadu Country: India -----  
**8)Dr. Shivam Mahajan**  
Address of Applicant :Doctor Hno 78 Sunder Nagar Dhangu Road, Pathankot Pin: 145001 State: PUNJAB Country: INDIA -----  
**9)Dr.Manoj Kumar Katual**  
Address of Applicant :Rayat Bahra Institute of Pharmacy. Vpo -Bohan Education city Hoshiarpur Punjab India Pin: 146001 State: Punjab Country: India -----  
**10)Dr. Gurfateh Singh**  
Address of Applicant :University school of Pharmacy. Chandigarh University Gharuan Mohali Punjab India. Pin:140413 State: Punjab Country: India -----  
**11)Dr. Harikumar Pallathadka**  
Address of Applicant :Director and Professor Manipur International University, Ghari, Imphal, Imphal West, Pin: 795140 State: Manipur Country: India -----

(57) Abstract :  
Asthma-related dyselectrolytemia in stable and acute exacerbation chronic obstructive pulmonary disease COPD patients. Abstract: The Global Initiative for Chronic Obstructive Lung Disease (GOLD) recently defined COPD as A common preventable and treatable disease characterised by persistent airflow limitation that is typically progressive and associated with an increased chronic inflammatory response of the airways and lungs to noxious particles or gases. Despite the fact that COPD patients typically exhibit the symptoms of acute respiratory infections (productive cough, dyspnoea, etc.), there may be a number of metabolic derangements as a result of the illness process or the medicine supplied, such as dyselectrolytaemia. This study compares the levels of Sodium, Potassium, and Magnesium in patients with Stable COPD and COPD Exacerbation (AECOPD). Bronchial asthma and COPD (chronic obstructive pulmonary disease) are obstructive lung diseases that affect millions of individuals worldwide. Asthma is a significant global health issue affecting an estimated 300 million people. COPD is one of the primary causes of chronic morbidity and mortality, as well as one of the world's most significant public health issues. COPD is the fourth leading cause of death worldwide, and additional increases in its prevalence and mortality are anticipated. Although asthma and COPD share numerous similarities, they also have a number of differences. There are distinctions in their aetiology, symptoms, type of airway inflammation, inflammatory cells, mediators, consequences of inflammation, therapeutic responsiveness, and course. This article aims to illustrate similarities and differences between severe asthma and COPD. Today, asthma and COPD are not completely curable, are not recognised and treated adequately, and therapy is continuing under development. But in the future, a greater understanding of pathology, appropriate identification and treatment, and possibly new drugs, will result in a vastly improved quality of life and decreased morbidity and mortality among these individuals.

No. of Pages : 9 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241041650 A

(19) INDIA

(22) Date of filing of Application :20/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : FISH GROWTH TRAJECTORY TRACKING USING MACHINE LEARNING IN PRECISIONAQUACULTURE

(51) International classification :G05B0013040000, G06N0020000000, A23K0050800000, G06Q0050020000, C12M0001360000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr. G.CHELLADURAI**

Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF ZOOLOGY G.VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), THOOTHUKUDI, TAMIL NADU 628502 -----

**2)Dr.S.KALAIMANI**

**3)Dr. K. SHENKANI**

**4)Dr. X. VENCI CANDIDA**

**5)Dr. J. JOHN PETER PAUL**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. G.CHELLADURAI**

Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF ZOOLOGY G.VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), THOOTHUKUDI, TAMIL NADU 628502 -----

**2)Dr.S.KALAIMANI**

Address of Applicant :ASSISTANT PROFESSOR, PG AND RESEARCH DEPARTMENT OF ZOOLOGY, J.K.K.NATARAJA COLLEGE OF ARTS AND SCIENCE, KOMARAPALAYAM, TAMILNADU-638183. -----

**3)Dr. K. SHENKANI**

Address of Applicant :ASSISTANT PROFESSOR, PG AND RESEARCH DEPARTMENT OF ZOOLOGY, J.K.K.NATARAJA COLLEGE OF ARTS AND SCIENCE, KOMARAPALAYAM, TAMILNADU-638183. -----

**4)Dr. X. VENCI CANDIDA**

Address of Applicant :ASSISTANT PROFESSOR OF ZOOLOGY, HOLY CROSS COLLEGE (AUTONOMOUS), NAGERCOIL, TAMILNADU-629004 -----

**5)Dr. J. JOHN PETER PAUL**

Address of Applicant :ASSISTANT PROFESSOR OF BOTANY, ST. XAVIER'S COLLEGE (AUTONOMOUS), PALAYAMKOTTAI, TAMIL NADU-627002 -----

(57) Abstract :

ABSTRACT Fish growth trajectory tracking using Machine learning in precision aquaculture The present disclosure relates to fish growth trajectory tracking using Q-learning module under a representative Nile tilapia bioenergetic growth model (*Oreochromis niloticus*). Fish growth rate is difficult to estimate at it constantly changes due to complex environmental conditions. Classic model-based control approaches are error prone nonlinear couplings and interactions between various factors like temperature, dissolved oxygen making the model uncertain for the fish growth system. To solve this problem reinforcement learning control module that is the so-called Q-learning module is introduced that do not require the growth model's knowledge and the complex aquaculture condition and extrinsic factors not restrained by the Q-learning module. Q-learning algorithm is directed using the growth trajectories data to adequately replicate the real aquaculture environment and perform the growth trajectory tracking. Herein, we consider two aquaculture environments such as re-circulating aquaculture systems and open-water cage cultures to identify the control policies that optimize biomass production in these two types of industrial setups.

No. of Pages : 17 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241041651 A

(19) INDIA

(22) Date of filing of Application :20/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : ENHANCEMENT OF NUTRITIONAL VALUE OF FRIED FISH USING AN ARTIFICIAL INTELLIGENCE APPROACH

<p>(51) International classification :G06N0003120000, G06N0003000000, A61K0031202000, G08B0021180000, H04W0012060000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)<b>Name of Applicant :</b> <b>1)Dr. G.CHELLADURAI</b> Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF ZOOLOGY G.VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), THOOTHUKUDI, TAMIL NADU 628502 ----- ----- <b>2)DR. SHAILESH SOLANKI</b> <b>3)DR JYOTI CHAUHAN</b> <b>4)DR. PRATIKSHA SINGH</b> <b>5)DR. SAGAR KUMAR SHARMA</b> <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b> <b>(72)Name of Inventor :</b> <b>1)Dr. G.CHELLADURAI</b> Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF ZOOLOGY G.VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), THOOTHUKUDI, TAMIL NADU 628502 ----- ----- <b>2)DR. SHAILESH SOLANKI</b> Address of Applicant :ASSOCIATE PROFESSOR SCHOOL OF SCIENCES NOIDA INTERNATIONAL UNIVERSITY , GREATER NOIDA , UTTARPRADESH , 203201 ----- <b>3)DR JYOTI CHAUHAN</b> Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF AGRICULTURE, NOIDA INTERNATIONAL UNIVERSITY , GREATER NOIDA , UTTARPRADESH , 203201 ----- <b>4)DR. PRATIKSHA SINGH</b> Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF AGRICULTURE, SCHOOL OF SCIENCE, NOIDA INTERNATIONAL UNIVERSITY, UTTAR PRADESH- 20320 ----- <b>5)DR. SAGAR KUMAR SHARMA</b> Address of Applicant :ASSISTANT PROFESSOR, LATE MCM AGRICULTURE COLLEGE, LALSOT( Affiliated to SKN AGRICULTURAL UNIVERSITY, JOBNER, RAJASTHAN - 303329 --- -----</p>
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(57) Abstract :

ABSTRACT ENHANCEMENT OF NUTRITIONAL VALUE OF FRIED FISH USING AN ARTIFICIAL INTELLIGENCE APPROACH The present invention is a device for enhancing the nutritional value of fried fish using artificial intelligence, comprising a microcontroller, a stainless steel probe coupled with a temperature sensor, and an oil level detecting sensor. The present invention also comprising of an artificial intelligence-based application that can be installed in a mobile device for determining polyunsaturated fatty acid (PUFA)/saturated fatty acids (SFA) and the index of atherogenicity (IA) profile of the fried fish. The data received from the microcontroller is processed using an ANN model-based meta-heuristic with stochastic optimization formalisms, genetic algorithm (GA), and particle swarm optimization (PSO) and determines the polyunsaturated fatty acid (PUFA)/saturated fatty acids (SFA) and index of atherogenicity (IA) profile of fish fry. If the determined data matches ideal PUFA/SFA and IA values prestored in the application database, the application sends the information to the device and alerts the user using a buzzer installed on the device. Fig 1 for the reference.

No. of Pages : 17 No. of Claims : 4

(54) Title of the invention : System and Method for Music Genre Classification using Machine Learning

(51) International classification :G06K0009620000, G06N0003080000, G06N0005000000, G06N0020200000, G06Q0010080000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Mr. JEFFERY HO KIN POU**

Address of Applicant :School of Computer Science and Engineering, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----

**2)Mr. H KESHAV RAO****3)Mr. GEETANSH BHAMBHANI****4)Mr. JOEL JOSEPH****5)Mr. SURIYA PRAKASH J****6)REVA University**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Mr. JEFFERY HO KIN POU**

Address of Applicant :School of Computer Science and Engineering, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----

**2)Mr. H KESHAV RAO**

Address of Applicant :School of Computer Science and Engineering, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----

**3)Mr. GEETANSH BHAMBHANI**

Address of Applicant :School of Computer Science and Engineering, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----

**4)Mr. JOEL JOSEPH**

Address of Applicant : School of Computer Science and Engineering, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----

**5)Mr. SURIYA PRAKASH J**

Address of Applicant :School of Computer Science and Engineering, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----

**6)REVA University**

Address of Applicant :Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

## (57) Abstract :

ABSTRACT: A 'music genre' is a classification system that distinguishes parts of a music line or the entire music into some music form or music style. We are able to categorize music into various genres in several ways, like religious music and pop music, secular music and classical music. The amount of data available to us is increasing rapidly, making it infeasible for manual curation. In this work, we apply simple and basic machine learning algorithms namely Logistic Regression, K-Nearest Neighbor, Random Forest, Support Vector Machine and Artificial Neural Network, along with dimensionality reduction techniques namely, PCA, KPCA and LDA, on the GTZAN dataset. Further, we compare their accuracies and analyze and identify the model that gives the highest accuracy.

No. of Pages : 10 No. of Claims : 6

(54) Title of the invention : A device for mandibular bodily molar protraction and a method thereof

(51) International classification :A61C0007280000, A61C0001080000, A61C0008000000, A61B0005000000, A61C0009000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)JSS Academy of Higher Education and Research**

Address of Applicant :Bannimantap Road, Sri Shivarathreeshwara Nagara, Bannimantap A Layout, Bannimantap, Mysuru – 570 015, Karnataka, India. -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Hurkadle Jyothikiran**

Address of Applicant :Department of Orthodontics and Dentofacial Orthopedics, JSS Dental College and Hospital, JSS Academy of Higher Education and Research, Mysore, 570 015, Karnataka, India. Mysore -----

**2)Shankarappa Suma**

Address of Applicant :Department of Orthodontics and Dentofacial Orthopedics, JSS Dental College and Hospital, JSS Academy of Higher Education and Research, Mysore, 570 015, Karnataka, India. Mysore -----

**3)Pradeep Subbaiah**

Address of Applicant :Department of Orthodontics and Dentofacial Orthopaedics, JSS Dental College and Hospital, JSS Academy of Higher Education and Research, Mysuru – 570 015, Karnataka, India. Mysore -----

**(57) Abstract :**

Generally speaking, 'edentulous space' refers to that site or spot of oral cavity where the tooth or teeth are missing permanently. The gap/ space created by the missing first mandibular molar (1 or 14) is a common issue faced by many dental practitioners. Irrespective of the reason(s) for the gap formation, it can be closed by protracting the second and/or third molar tooth. At present, various temporary anchorage devices are used. But, they suffer with disadvantages such as loosening or breakage of implants leading to revisit the dental doctor, and moreover they are very invasive in nature causing tremendous discomfort to the subjects. Accordingly, the present disclosure provides a simple and economical device (100) that has an arch wire (110) with at least one double helix (120a or 120b) for bodily molar protraction of second (2 or 15) and/or third molars (3 or 16).

No. of Pages : 24 No. of Claims : 10

(54) Title of the invention : SYSTEMS AND METHODS FOR SPAWNING PROXY DATA TO TRAIN PROXY MODELS USING MACHINE LEARNING

<p>(51) International classification :G06F0021620000, H04L0029080000, H04L0029060000, G06N0020000000, G06F0016953500</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)GITAM Deemed to be University</b> Address of Applicant :GITAM Deemed to be University, Visakhapatnam, Andhra Pradesh 530045, India. Visakhapatnam -- -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Surendra Talari</b> Address of Applicant :Assistant Professor, Dept. of Mathematics, GIS, GITAM Deemed to be University, Visakhapatnam -45, Andhra Pradesh, India Visakhapatnam -----</p> <p><b>2)N V S S prabhakar</b> Address of Applicant :Research Scholar, Department of Mathematics, GIS, GITAM Deemed to be University, Visakhapatnam-45, Andhra Pradesh, India Visakhapatnam ----- -----</p> <p><b>3)CH. Neelima</b> Address of Applicant :Research Scholar, Department of Mathematics, GIS, GITAM Deemed to be University, Visakhapatnam-45, Andhra Pradesh, India Visakhapatnam ----- -----</p>
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(57) Abstract :

Exemplary embodiments of the present disclosure are directed towards a system for spawning proxy data to train proxy models using machine learning comprising: private data servers configured to access local private data, each private data server comprises one or more modeling engines, wherein the one or more private data servers connected to one or more non-private computing devices through a network, private data servers configured to execute software instructions by a processor, modeling engines configured to spawn private data distributions from the local private data, private data distributions represent the local private data in aggregate used to create the trained actual model, and spawn a set of proxy data according to the private data distributions. Fig.1

No. of Pages : 34 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :21/07/2022

(21) Application No.202241041881 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : PREDICTION OF COMPRESSIVE STRENGTH OF BACTERIAL CONCRETE USING ARTIFICIAL INTELLIGENCE (AI) TECHNIQUES

<p>(51) International classification :G06N0020000000, G16H0050200000, G16H0050500000, G10L0021020800, G06N0003000000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Mr. Hemanth Kumar Yerrabolu</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, Dadi Institute of Engineering and Technology, NH-16, Anakapalle, Anakapalle District-531002, Andhra Pradesh. Anakapalle -----</p> <p><b>2)Om Prakash Singh</b> <b>3)Mrs. S. Solai Mathi</b> <b>4)Prof. Saurav Kar</b> <b>5)Mr. G. Jegadeesh</b> <b>6)Vishal Akula</b> <b>7)Dr. Teegala Siva Sankar Reddy</b> <b>8)Kadali Srinivasa Rao</b> <b>9)Dr. T.V.S. Vara Lakshmi</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Mr. Hemanth Kumar Yerrabolu</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, Dadi Institute of Engineering and Technology, NH-16, Anakapalle, Anakapalle District-531002, Andhra Pradesh. Anakapalle -----</p> <p><b>2)Om Prakash Singh</b> Address of Applicant :Assistant Professor, Jaipur National University, Jaipur – Agra Bypass, Near New RTO office, Jagatpura, Jaipur, Rajasthan - 302017 Jaipur -----</p> <p><b>3)Mrs. S. Solai Mathi</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu. Coimbatore -----</p> <p><b>4)Prof. Saurav Kar</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, Heritage Institute of Technology, Kolkata - 700107, West Bengal Kolkata -----</p> <p><b>5)Mr. G. Jegadeesh</b> Address of Applicant :Centre for Rural Technology, The Gandhigram Rural Institute Deemed to be University, Gandhigram, Dindigul, Tamil Nadu - 624 302. Dindigul -----</p> <p><b>6)Vishal Akula</b> Address of Applicant :Assistant Professor, Civil Engineering Department Nalla Malla Reddy Engineering college, 7-01, Divya Nagar, Kachivani Singaram, Ghatkesar, Hyderabad, Telangana- 500 088 Hyderabad -----</p> <p><b>7)Dr. Teegala Siva Sankar Reddy</b> Address of Applicant :Professor, Civil Engineering Department Lords Institute of Engineering &amp; Technology Hyderabad, Telangana Hyderabad -----</p> <p><b>8)Kadali Srinivasa Rao</b> Address of Applicant :Assistant Professor, Department of Civil Engineering Kommuri Pratap Reddy Institute of Technology, Ghanpur, Ghatkesar (M), Hyderabad, Telangana. Hyderabad -- -----</p> <p><b>9)Dr. T.V.S. Vara Lakshmi</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, Dr.Y.S.R.A.N.U. College of Engineering &amp; Technology, Acharya Nagarjuna University, Nagarjuna Nagar, Guntur Dist, Andhra Pradesh 522510, India Guntur -----</p>
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(57) Abstract :

PREDICTION OF COMPRESSIVE STRENGTH OF BACTERIAL CONCRETE USING ARTIFICIAL INTELLIGENCE (AI) TECHNIQUES The present invention relates to prediction of compressive strength of bacterial concrete using artificial intelligence (AI) techniques. The method includes developing M5P, RF, RT and REP based models and using WEKA software to predict the values of the compressive strength of bacterial concrete. According to one embodiment RF based model performs better than M5P, RT and REP based models. Figure of abstract: FIG.1

No. of Pages : 14 No. of Claims : 4



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241041916 A

(19) INDIA

(22) Date of filing of Application :21/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN ELECTRONIC JACQUARD MACHINE LOOMING

(51) International classification :D03C0003200000, D03C0003320000, D03C0003240000, D03C0003120000, D03C0003000000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)SONA COLLEGE OF TECHNOLOGY**

Address of Applicant :Sona College of Technology, TPT Road, Salem - 636 005 Salem -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. SURESH P**

Address of Applicant :Department of Mechatronics Engineering, Sona College of Technology, TPT Road, Salem - 636 005, Tamil Nadu Salem -----

**2)NISHANTH S**

Address of Applicant :Department of Mechatronics Engineering, Sona College of Technology, TPT Road, Salem - 636 005, Tamil Nadu Salem -----

(57) Abstract :

**ABSTRACT** The present invention relates to an electronic jacquard machine looming. The electronic jacquard machine comprising of two rows of servo motors with a pulley attached to each of the servo shafts. Eight servo motors in each row which are placed one above the other. This arrangement is made to optimize space usage. There is a pulley wheel attached to each servo motors output shaft where the hook is connected to the pulley wheel with a thread tied to the pulley wheel. Each servo motor controls the movement of one hook. The hooks are selectable as per the design pattern of the cloth. The hooks can be lifted front and back by changing the direction of rotation of servo motor which rotates the pulley wheel. This machine is a modular type that can handle up to 16 hooks. Based on the number of hook requirements the modules can be multiplied.

No. of Pages : 12 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241041938 A

(19) INDIA

(22) Date of filing of Application :22/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : An AI Based System to Startle and Monitor Riders' Safety Gear and Method Thereof

(51) International classification :A42B0003040000, A42B0003300000, H04N0021218700, G08B0025010000, A42B0003120000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)R. Vijaya**

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Nehru Institute of Technology, Coimbatore - 641105, Tamil Nadu, India. Coimbatore -----

**2)Dr. K. Purnachand**

**3)Dr. S. Sathish Kumar**

**4)Dr. N. Rama Jyothi**

**5)Shimna P. K.**

**6)Lekshmy S.**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)R. Vijaya**

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Nehru Institute of Technology, Coimbatore - 641105, Tamil Nadu, India. Coimbatore -----

**2)Dr. K. Purnachand**

Address of Applicant :Professor, Department of Computer Science and Engineering (Data Science), B V Raju Institute of Technology, Narsapur - 502313, Medak District, Telangana, India. Narsapur -----

**3)Dr. S. Sathish Kumar**

Address of Applicant :Professor, Department of Information Science and Engineering, RNS Institute of Technology, Bangalore – 560098, Karnataka, India. Bengaluru -----

**4)Dr. N. Rama Jyothi**

Address of Applicant :Assistant Professor, Department of Chemistry, School of Engineering and Technology, Sri Padmavati Mahila University, Tirupati – 517502, Chithoor, Andhra Pradesh, India. Tirupati -----

**5)Shimna P. K.**

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Vimal Jyothi Engineering College, Chemperi - 670632, Kerala, India. Chemperi -----

**6)Lekshmy S.**

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Vimal Jyothi Engineering College, Chemperi - 670632, Kerala, India. Chemperi -----

(57) Abstract :

Present invention relates to a system for assuring whether the rider is wearing a protective helmet. More particularly, the present invention relates to a system wherein the rider confirms wearing helmet as well as reminds the rider to wear the helmet. A system for assuring a bike rider wearing a helmet, said system comprising: an Infrared camera, which detects Live Stream Video or captures image of the rider; a microcontroller for transmitting information from the camera; and a notification module for notifying the rider for wearing the helmet; wherein the Live Stream Video captured by the camera is matched with saved images of helmets in a database, and accordingly transmits information to the microcontroller, which further communicates to the notification module for notifying the rider for helmet.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042182 A

(19) INDIA

(22) Date of filing of Application :22/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SYSTEM AND METHOD FOR ELECTRICAL ENERGY CONSERVATION

(51) International classification :B60P0003340000, F24F0011460000, H05B0041392000, G06Q0050060000, G05B0015020000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Shadab Ahmad**

Address of Applicant :Lecturer, Department of Electrical and Computer Engineering, College of Engineering, Samara University, Samara, Ethiopia (Africa), Afar, Ethiopia - 0132 -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Shadab Ahmad**

Address of Applicant :Lecturer, Department of Electrical and Computer Engineering, College of Engineering, Samara University, Samara, Ethiopia (Africa), Afar, Ethiopia - 0132 -----

(57) Abstract :

In this invention, we present energy reduction approaches for grid stations. Energy can neither be generated nor destroyed, but it may be changed from one form to another, according to the rule of energy conservation. Energy auditing isn't a precise science, but there are ways to improve accuracy. First, I covered energy and demand balance. This balancing is a crucial stage in energy usage analysis since it verifies some of the assumptions used to evaluate savings potential. The control room and living quarters of 220/132/33 KV Grid Station Complex were audited. There was 1 control room and 12 living quarters with 48 fluorescent tube lighting, 51 incandescent lamps, 63 high-pressure mercury vapour lamps, 11 computers, and 3 air conditioners. The control room and residences have inefficient electric fixtures. The control room and living quarters may be audited. Using a clamp metre, I obtained half-hourly measurements of current drawn by different apparatus.

No. of Pages : 10 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042183 A

(19) INDIA

(22) Date of filing of Application :22/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE-BASED FEEDBACK SYSTEM FOR EDUCATION INSTITUTIONS

(51) International classification :G06Q0050200000, G06N0020000000, G09B0005020000, G06F0016210000, G09B0019160000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr. Susheel George Joseph**

Address of Applicant :Associate Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kottayam, Kerala, India - 686104 -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. Susheel George Joseph**

Address of Applicant :Associate Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kottayam, Kerala, India - 686104 -----

(57) Abstract :

The invention presents a student feedback system analysis approach for increasing academic teaching quality. The system combines ML and textual feedback. This method analyses student comments, opinions, and evaluations about instructor performance. Textual feedback gives helpful insights into teaching quality and improves teaching style. This research aims to evaluate machine learning approaches. SVM offers the greatest accuracy but takes longer to train for big datasets and is used for regression and classification to categorise text. The dataset comprises teaching and learning data. This study classifies student feedback based on positive, negative, and neutral textual remarks. The technology captures the input and keeps it in an approved database. The instructor is given ratings and graphs to help visualise the input. This technique increases student learning by giving instructors meaningful feedback.

No. of Pages : 11 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :22/07/2022

(21) Application No.202241042210 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : Respiratory Medicine Medical Spraying System

(51) International classification :A61M0031000000, A61M0011000000, A01M0011000000,  
A61M0005303000, A47B0067020000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)J.Anita Lett**  
Address of Applicant :Assistant Professor, Department of Physics, Sathyabama Institute of Science and Technology, Kamaraj Nagar, Semmancheri, Chennai – 600119, Tamil Nadu Chennai -----  
**2)Dr.Suresh Sagadevan**  
**3)Dr. Harishchander Anandaram**  
**4)N. Prasana Venkatesan**  
**5)Dr.Saravanan.S**  
**6)Mr. S. Venkataramanan**  
**7)Mr. Sumanth Ratna. Kandavalli**  
**8)Mr. M. Umashankar**  
**9)Dr. Kuldeep Vinodkumar Joshi**  
**10)Dr. Ravi Sharma**  
**11)Mr. L. Karthick**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)J.Anita Lett**  
Address of Applicant :Assistant Professor, Department of Physics, Sathyabama Institute of Science and Technology, Kamaraj Nagar, Semmancheri, Chennai – 600119, Tamil Nadu Chennai -----  
**2)Dr.Suresh Sagadevan**  
Address of Applicant :Associate Professor, Nanotechnology and Catalysis Research Centre, University of Malaya, Kuala Lumpur -----  
**3)Dr. Harishchander Anandaram**  
Address of Applicant :Assistant Professor, Centre for Excellence in Computational Engineering and Networking, Amrita Vishwa Vidyapeetham, Coimbatore Coimbatore -----  
**4)N. Prasana Venkatesan**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway. Coimbatore - 641 032, Tamilnadu Coimbatore -----  
**5)Dr.Saravanan.S**  
Address of Applicant :Associate Professor, Department of Chemical Engineering, VSB Engineering College, Karur - 639111 Karur -----  
**6)Mr. S. Venkataramanan**  
Address of Applicant :23b, Ramasamy Street, Dheeksidar Nagar, Hasthinapuram, Chennai 600064 Chennai ---  
**7)Mr. Sumanth Ratna. Kandavalli**  
Address of Applicant :Department of Mechanical & Aerospace Engineering, Tandon School of Engineering, New York University, Brooklyn, 6 Metro Tech Center, NY, 11201. (H) 50 Farmers Avenue, Bethpage, NY 11714, United States of America -----  
**8)Mr. M. Umashankar**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Narasu's Sarathy Institute of Technology, Poosaripatty, Kadayampatty Taluk, Salem, Tamilnadu Salem -----  
**9)Dr. Kuldeep Vinodkumar Joshi**  
Address of Applicant :Associate Professor, Department of Chemistry, Indus University, Rancharda, Via Thaltej, Ahmedabad – 382115, Gujarat Ahmedabad -----  
**10)Dr. Ravi Sharma**  
Address of Applicant :Researcher, Department of Chemistry, Jai Narain Vyas University, Jodhpur, Rajasthan - 342001 Jodhpur -----  
**11)Mr. L. Karthick**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore - 641032, Tamilnadu Coimbatore -----

(57) Abstract :

[08] The utility model describes a medical sprayer used in the field of respiratory medicine, comprising a drug delivery tube, a movable inner sleeve, at one end of which the drug delivery tube is connected to a telescopic tube; One end of the spray head is connected to the drug storage tank; the bottom of the medicine storage container is connected to the air blast device; the medicine storage container is connected to the double gauge medicine bottle connecting tube; the outer ring of the drug delivery tube near one end of the spray head rotates and connects to the first ring; A nut is placed on the outer ring of one end of the drug delivery tube next to the drug storage container; the medicine supply tube is provided with an external thread corresponding to the nut; the side of the nut next to the first ring is rotatably connected to the second ring; Two support plates are located between two rings; one end of each base plate is pivotally attached to the first ring via the support rod and the other end is pivotally fixed to the second ring via the other support rod; The distance can be adjusted according to the patient's mouth opening; The drug delivery tube can be rotated directly in the mouth to reposition the injection if necessary. The utility model refers to the technical field of respiratory medicine, in particular a type of medical sprayer for respiratory medicine. Accompanied Drawing [FIG. 1] [FIG. 2] [FIG. 3]

No. of Pages : 19 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042219 A

(19) INDIA

(22) Date of filing of Application :23/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SYSTEM AND METHOD FOR A TIMER BASED REMOTE AUTOMATED IRRIGATION CONTROLLER

<p>(51) International classification :A01G0025160000, G05B0019042000, H04N0021475000, H04N0021840000, B60R0025102000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)RKN DESIGNS &amp; SOLUTIONS PRIVATE LIMITED</b> Address of Applicant :40/9, VIJAY AVENUE, SALAI ROAD, SRIRANGAM, TRICHY, TAMIL NADU ----- ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)RAMYA VIJAY</b> Address of Applicant :ASK -II, 301, SASTRA DEEMED UNIVERSITY, THANJAVUR, TAMIL NADU THANJAVUR -- ----- <b>2)VIJAY RAMASAMY</b> Address of Applicant :RKN DESIGNS &amp; SOLUTIONS, 40/9, VIJAY AVENUE, SALAI ROAD, SRIRANGAM, TRICHY, TAMIL NADU TRICHY ----- <b>3)KAUSHIK L</b> Address of Applicant :SASTRA DEEMED UNIVERSITY, THANJAVUR, TAMIL NADU THANJAVUR ----- ----- -</p>
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(57) Abstract :

ABSTRACT SYSTEM AND METHOD FOR A TIMER BASED REMOTE AUTOMATED IRRIGATION CONTROLLER The various embodiments of the present invention provide a system and a method for a timer based remote automated irrigation controllers. The embodiments also provide a system and method to enable real-time remote scheduling, monitoring and control of an automated irrigation system. The present invention works based on a timer and it is configured to be controlled remotely depending on user preference. The present invention does not require a separate power supply to run the controller and the motor. The present invention also includes low/high voltage protection to the motor, where the motor is any type of motor that is utilized for irrigation purposes. The present invention is configured to be controlled remotely through a GSM based communication method.

No. of Pages : 20 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042225 A

(19) INDIA

(22) Date of filing of Application :23/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SATHYA SAI ORAL SURGICAL MULTITOOL

<p>(51) International classification :A61B0090000000, A61C0003000000, B25F0001000000, A61B0090500000, A61C0001080000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)SRI BALAJI VIDYAPEETH</b> Address of Applicant :SRI BALAJI VIDYAPEETH PONDICHERRY-CUDDALORE MAIN ROAD, PILLAIYARKUPPAM PUDUCHERRY PUDUCHERRY PUDUCHERRY INDIA 607403 PUDUCHERRY ----- ----</p> <p><b>2)INDIRA GANDHI INSTITUTE OF DENTAL SCIENCES</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)DR. SAILESH KUMAR. R</b> Address of Applicant :DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY, INDIRA GANDHI INSTITUTE OF DENTAL SCIENCES SRI BALAJI VIDYAPEETH PILLIYARKUPPAM, PUDUCHERRY PUDUCHERRY PUDUCHERRY INDIA 607403 PUDUCHERRY ----- ----</p> <p><b>2)DR. SATHYANARAYANAN.R</b> Address of Applicant :DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY, INDIRA GANDHI INSTITUTE OF DENTAL SCIENCES SRI BALAJI VIDYAPEETH PILLIYARKUPPAM, PUDUCHERRY PUDUCHERRY PUDUCHERRY INDIA 607403 PUDUCHERRY ----- ----</p>
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(57) Abstract :

TITLE: SATHYA SAI ORAL SURGICAL MULTITOOL APPLICANT: SRI BALAJI VIDYAPEETH AND INDIRA GANDHI INSTITUTE OF DENTAL SCIENCES ABSTRACT The present invention discloses a Sathya Sai Oral Surgical Multitool for use in oral procedures. The Sathya Sai Oral Surgical Multitool of the present invention comprises of two elongated oval shaped members[1] connected by a rectangular separator[2] at medial position thereby providing left chamber and right chamber laterally, characterized in that • Securing atleast two dental tools on the left chamber and right chamber by means of circular connector port[3] and fixing pin[4] positioned on ends of the oval shaped members[1] thereby allowing the dental tool to slide over on lateral aspect and stacked up inside the oval shaped members[1] through the pins[4] as fulcrum.

No. of Pages : 22 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :23/07/2022

(21) Application No.202241042226 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : To Design and Analysis of Garbage Monitoring System using Internet of Things (IoT)

<p>(51) International classification :G01R0019250000, A61K0038080000, G06N0007020000, G05B0019048000, C02F0001360000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Daniel Lawrence I</b> Address of Applicant :2/83, Kottagaimeedu, Arumbanur (Post), Madurai-625104. ----- <b>2)Y.Mecnil Jenifer</b> <b>3)C.A.Daphine Desona Clemency</b> <b>4)S. Nithya</b> <b>5)V. Gowri Manohari</b> <b>6)Vinothini E</b> <b>7)Dr.A.Rehash Rushmi Pavitra</b> Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : <b>1)Daniel Lawrence I</b> Address of Applicant :2/83, Kottagaimeedu, Arumbanur (Post), Madurai-625104. ----- <b>2)Y.Mecnil Jenifer</b> Address of Applicant :Assistant Professor, Sathyabama Institute of Science and Technology, Chennai -600119. Chennai ----- <b>3)C.A.Daphine Desona Clemency</b> Address of Applicant :Assistant Professor, Sathyabama Institute of Science and Technology, Chennai -600119. Chennai ----- <b>4)S. Nithya</b> Address of Applicant :Assistant Professor, Sathyabama Institute of Science and Technology, Chennai -600119. Chennai ----- <b>5)V. Gowri Manohari</b> Address of Applicant :Assistant Professor, Sathyabama Institute of Science and Technology, Chennai -600119. Chennai ----- <b>6)Vinothini E</b> Address of Applicant :Assistant Professor, Sathyabama Institute of Science and Technology, Chennai, Tamilnadu, India - 600119. Chennai -- ----- <b>7)Dr.A.Rehash Rushmi Pavitra</b> Address of Applicant :Assistant professor, Sri Sairam Engineering College, West Tambaram, Chennai, Tamil Nadu 602109. Chennai ----- -----</p>
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(57) Abstract :

To Design and Analysis of Garbage Monitoring System using Internet of Things (IoT) Abstract In present moment time handling is a crucial problem which can't be maintained over monitoring and analysing of each and every aspect with rigid schedule. Therefore in recent days remote based automatic systems are being recommended over manual system to initiate activity of life simple and easy in all condition. These are all arising later the establishment of Internet of Things (IoT). Alternatively, with relevance to regular increase in growth of population, garbage management becomes most dangerous concern of current world which leads to create disgusting smell and form an unhygienic environment that happen primarily the countries with maximum population rate. To overcome this situation, proposed research focus to design and analysis of garbage monitoring system which can implemented based on IoT. In addition, proposed system composed of arduino microcontroller, ultrasonic sensor node, GSM module, power supply and Wi-Fi modem. Hence, this type of garbage monitoring system is used to reduce the human worker thereby an overall system will be connected via internet.

No. of Pages : 13 No. of Claims : 3



(54) Title of the invention : A METHOD FOR TREATING MICROBIAL GROWTH USING BICARBONATE WITH THIOCYANATE

(51) International classification :C12N0001200000, C02F0003340000, A23K0020220000, A61K0033000000, C12N0001000000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to :NA  
 Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application :NA  
 Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Gomathi Periyasamy**  
 Address of Applicant :Professor, School of Pharmacy, Guru Nanak Institutions Technical Campus (GNITC), Ibrahimpatnam, Hyderabad, Rangareddy (Dist), Telangana - 501506 -----  
**2)Mrs. Segu Prathyusha**  
**3)Ms. Rajala Srikala**  
**4)Dr. Sudha Vengurlekar**  
**5)Dr. Ujjwala Supe**  
**6)Dr. Chanda Verma**  
**7)Dr. James Mathew**  
**8)Dr. Kamal Singh Rathore**  
**9)Dr. Swarupananda Mukherjee**  
**10)Mr. Vikas Sampat Varpe**  
**11)Dr. Amit Kumar Jain**  
**12)Dr. Naveen Kumar Choudhary**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Dr. Gomathi Periyasamy**  
 Address of Applicant :Professor, School of Pharmacy, Guru Nanak Institutions Technical Campus (GNITC), Ibrahimpatnam, Hyderabad, Rangareddy (Dist), Telangana - 501506 -----  
**2)Mrs. Segu Prathyusha**  
 Address of Applicant :Assistant Professor, School of Pharmacy, Guru Nanak Institutions Technical Campus (GNITC), Ibrahimpatnam, Hyderabad, Rangareddy (Dist), Telangana - 501506 -----  
**3)Ms. Rajala Srikala**  
 Address of Applicant :Assistant Professor, School of Pharmacy, Guru Nanak Institutions Technical Campus (GNITC), Ibrahimpatnam, Hyderabad, Rangareddy (Dist), Telangana - 501506 -----  
**4)Dr. Sudha Vengurlekar**  
 Address of Applicant :Professor, Sri Aurobindo Institute of Pharmacy Indore, India -----  
**5)Dr. Ujjwala Supe**  
 Address of Applicant :Assistant professor, Department Of Biotechnology, St. Thomas College, Ruabandha, Bhilai, Durg, Chhattisgarh, India Pin- 490006 -----  
**6)Dr. Chanda Verma**  
 Address of Applicant :Associate Professor St. Thomas College, Ruabandha, Bhilai, Durg, Chhattisgarh, India Pin- 490006 -----  
**7)Dr. James Mathew**  
 Address of Applicant :Associate Professor and Head Deptt of Chemistry St. Thomas College, Ruabandha, Bhilai, Durg, Chhattisgarh, India Pin- 490006 -----  
**8)Dr. Kamal Singh Rathore**  
 Address of Applicant :Associate Professor, Bhupal Nobles' College of Pharmacy, Udaipur-Rajasthan 313001 --  
**9)Dr. Swarupananda Mukherjee**  
 Address of Applicant :Assistant Professor NSHM Knowledge Campus, Kolkata - Group of Institutions, 124, B.L. Saha Road, Kolkata 700053, West Bengal, India -----  
**10)Mr. Vikas Sampat Varpe**  
 Address of Applicant :Research Scholar, Maulana Azad Arts commerce and Sciences College, Aurangabad, pin- 431001,Maharashtra, India -----  
**11)Dr. Amit Kumar Jain**  
 Address of Applicant :Professor & Dean Faculty of Pharmacy (B R Nahata College of Pharmacy), Mandsaur University, 458001 Mandsaur, India -----  
**12)Dr. Naveen Kumar Choudhary**  
 Address of Applicant :Faculty of Pharmacy, Mandsaur University, Mandsaur, Pin – 458001 Madhya Pradesh, India -----

(57) Abstract :  
 ABSTRACT A METHOD FOR TREATING MICROBIAL GROWTH USING BICARBONATE WITH THIOCYANATE A method for treating microbial growth using bicarbonate with thiocyanate. The method includes testing the pure cultures of alkaliphilic heterotrophic and chemolithoautotrophic sulfur-oxidizing bacteria for the ability to utilize CNS- as a nitrogen or energy source by using a mineral base medium containing 0.6 M total Na+ as sodium carbonates and sodium chloride (pH 10) (38) in all growth experiments. Adding a 21 g of sodium carbonate, 9 g of sodium bicarbonate, 5 g of NaCl, 1 g of K2HPO4, and 0.5 g of KNO3. A trace elements solution and Mg salts is added after sterilization. KCNS, sodium thiosulfate, and sodium acetate is also supplied after sterilization. Growing thiocyanate-oxidizing autotrophic strains in thiocyanate-limited continuous cultures by using 1.5-liter laboratory fermentors equipped with pH and pO2 probes. Controlling the pH at 10.0, and the dissolved oxygen content was 50% of air saturation. FIG.1

No. of Pages : 15 No. of Claims : 1

(54) Title of the invention : A Novel Model for State and National Ethnicity Identification using Handwriting Analysis

<p>(51) International classification :G06K0009620000, G06K0009000000, G06K0009320000, G06K0009460000, G06K0009500000</p> <p>(86) International Application No :PCT// / Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Dr. Shivakumara Palaiahnakote</b>  Address of Applicant :Associate Professor Faculty of Computer Science and Information Technology (FSKTM) B-2-18, Annex Building, University of Malaya (UM), Kuala Lumpur-50603, Malaysia -----</p> <p><b>2)Dr. Shivanand Sharanappa Gornale</b>  Name of Applicant : NA  Address of Applicant : NA</p> <p>(72)Name of Inventor :  <b>1)Dr. Shivanand Sharanappa Gornale</b>  Address of Applicant :Professor Department of Computer Science, School of Mathematics and Computing Sciences, Rani Channamma University, Belagavi 591156 Karnataka India-Karnataka -----</p> <p><b>2)Dr. Shivakumara Palaiahnakote</b>  Address of Applicant :Associate Professor Faculty of Computer Science and Information Technology (FSKTM) B-2-18, Annex Building, University of Malaya (UM), Kuala Lumpur-50603, Malaysia -----</p>
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(57) Abstract :

Identifying crime for forensic investigating teams when crimes involve people of different nationals is challenging. This paper proposes a new method for ethnicity (nationality) identification based on Cloud of Line Distribution (COLD) features of handwriting components. The proposed method, at first, explores tangent angle for the contour pixels in each row and the mean of intensity values of each row in an image for segmenting text lines. For segmented text lines, we use tangent angle and direction of base lines to remove rule lines in the image. We use polygonal approximation for finding dominant points for contours of edge components. Then the proposed method connects the nearest dominant points of every dominant point, which results in line segments of dominant point pairs. For each line segment, the proposed method estimates angle and length, which gives a point in polar domain. For all the line segments, the proposed method generates dense points in polar domain, which results in COLD distribution. As character component shapes change, according to nationals, the shape of the distribution changes. This observation is extracted based on distance from pixels of distribution to Principal Axis of the distribution. Then the features are subjected to an SVM classifier for identifying nationals. Experiments are conducted on a complex dataset, which show the proposed method is effective and outperforms the existing method.

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042277 A

(19) INDIA

(22) Date of filing of Application :23/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : EFFECTIVENESS OF LEADERSHIP AND ORGANIZATIONAL PERFORMANCE-A  
COMPARATIVE ANALYSIS OF SELECT PUBLIC AND PRIVATE ORGANIZATIONS

(51) International classification :G06Q0010060000, G06Q0030020000, G06Q0010100000, G06F0021520000, C02F0103420000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr. Mamta Hegde**

Address of Applicant :Assistant Professor, Amity Global Business School, 372, Santoshpuram, 3rd Block, Koramangala, Bangalore, Karnataka, Pin Code: 560034 Bangalore -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Mamta Hegde**

Address of Applicant :Assistant Professor, Amity Global Business School, 372, Santoshpuram, 3rd Block, Koramangala, Bangalore, Karnataka, Pin Code: 560034 Bangalore -----

(57) Abstract :

The present invention relates to a comparative analyzing method (100) for finding the effectiveness of leadership and organizational performance of public and private organizations. The method (100) comprises a processing unit and a display unit. The processing unit to generate questionnaire surveys for the public and private organizations includes two parts- part A and part B; collect the answers to the questionnaire surveys by public and private organizations; comprehend the leadership abilities in both private and public sector organizations; identify the factors influencing leadership effectiveness in sample organizations; analyze private and public sector organizations in relation to factors concomitant with followership; compare the leadership effectiveness between select public and private sector organizations in relation to financial, sales performances; generate an analyzed result that help leaders understand leadership qualities to be adopted for leadership effectiveness and subordinate management. The display unit is configured to graphically display the generated result. [Figure 1]

No. of Pages : 12 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042300 A

(19) INDIA

(22) Date of filing of Application :23/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A novel High Silica glass composition and method thereof

(51) International classification :C03C0004000000, C03C0003060000, C03C0015000000, H01S0003067000, G03H0001020000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Chargarlamudi Kavitha**  
Address of Applicant :Assistant Professor, Department of Chemistry, V R Siddhartha Engineering College, Vijayawada, Andhra Pradesh, India, Pincode: 520010 Vijayawada -----  
**2)Dr. K. Suresh**  
**3)Dr. Madhu A**  
**4)Dr. Y. Anantha Lakshmi**  
**5)Dr. S. Shanmugan**  
**6)Mr. A. Mallikarjuna**  
**7)Dr. G.Sujatha**  
**8)Mr. Venkata Charan Kantumuchu**  
**9)Dr. Srinivas Ganganagunta**  
**10)Dr. C.S. Dwaraka Viswanath**  
**11)Dr. D. V. Lokeswar Reddy**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr. Chargarlamudi Kavitha**  
Address of Applicant :Assistant Professor, Department of Chemistry, V R Siddhartha Engineering College, Vijayawada, Andhra Pradesh, India, Pincode: 520010 Vijayawada -----  
**2)Dr. K. Suresh**  
Address of Applicant :Assistant Professor, Department of S & H, Sri Venkateswara Engineering College, Tirupati, Tirupati Dt., Andhra Pradesh, India, Pincode: 517507 Tirupati -----  
**3)Dr. Madhu A**  
Address of Applicant :Assistant Professor, Department of Physics, Dayananada Sagar College of Engineering, Bangalore, Karnataka, India, Pincode: 560078 Bangalore -----  
**4)Dr. Y. Anantha Lakshmi**  
Address of Applicant :Assistant Professor, Department of Physics, G. Pulla Reddy Degree and PG College, Hyderabad, Telangana, India, Pincode: 500028 Hyderabad -----  
**5)Dr. S. Shanmugan**  
Address of Applicant :Research Centre for Solar Energy, Assistant Professor, Department of Physics, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Guntur, Andhra Pradesh, India, Pincode: 522502 Vaddeswaram -----  
**6)Mr. A. Mallikarjuna**  
Address of Applicant :Associate Professor, Department of Physics, Audisankara College of Engineering & Technology, Gudur, Tirupati Dt., Andhra Pradesh, India, Pincode: 524101 Gudur -----  
**7)Dr. G.Sujatha**  
Address of Applicant :Professor, Department of Chemistry, Audisankara College of Engineering & Technology, Gudur, Tirupati Dt., Andhra Pradesh, India, Pincode: 524101 Gudur -----  
**8)Mr. Venkata Charan Kantumuchu**  
Address of Applicant :Manufacturing Department, Bradley University, Peoria, Illinois, United States, Postal Code: 61625 -----  
**9)Dr. Srinivas Ganganagunta**  
Address of Applicant :Senior Faculty in Physics, Engineering Department, University of Technology and Applied Sciences-IBRA, IBRA, North Al Sharqia Region, Oman, Postal Code: 400 -----  
**10)Dr. C.S. Dwaraka Viswanath**  
Address of Applicant :Associate Professor & Head of the Department, Department of Science and Humanities, Mother Theresa Institute of Engineering and Technology, Palamaner, Chittoor Dt. Andhra Pradesh, India, Pincode: 517408 Palamaner -----  
**11)Dr. D. V. Lokeswar Reddy**  
Address of Applicant :Assistant Professor, Humanities and Social Sciences Department, JNTU College of Engineering, Pulivendula, Kadapa, Andhra Pradesh, India, Pincode: 516390 Kadapa -----

(57) Abstract :

The present invention consists of two parts: a method for producing high silicate glass that has a low concentration of the iron and is capable of achieving a high UV transmittance while retaining the advantages of Vycor glass, such as the fact that mass production at a low cost is feasible and that complex formation with a variety of photo functional ions can be achieved; and high silicate glass that has a high UV transmittance. The method for producing high silicate glass that has a low concentration of iron and The method is characterized by including the steps of heating borosilicate glass that contains a heavy metal or rare-earth element (preferably a high-valence heavy metal or rare-earth element) in order to phase-separate the borosilicate glass; subjecting the phase-separated borosilicate glass to acid treatment in order to elute a metal, and sintering the acid-treated borosilicate glass.

No. of Pages : 21 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042315 A

(19) INDIA

(22) Date of filing of Application :23/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A PROCESS FOR PREPARING BIODIESEL (METHYL ESTER)

(51) International classification :C10L0001020000, C10L0010120000, C11C0003100000, C10L0001080000, C11C0003000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)AHMED, Mohammed Idris**

Address of Applicant :H.No. 6-54/15, Plot No. 96, Bank Colony, Back Side Collectrate Office, Pothreddipalle, P P.R.Pally Chowrasta, Medak, Telangana - 502295, India. -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)AHMED, Mohammed Idris**

Address of Applicant :H.No. 6-54/15, Plot No. 96, Bank Colony, Back Side Collectrate Office, Pothreddipalle, P P.R.Pally Chowrasta, Medak, Telangana - 502295, India. -----

(57) Abstract :

A PROCESS FOR PREPARING BIODIESEL (METHYL ESTER) Abstract The present invention discloses a method for preparing biodiesel (Methyl Ester) from any kind of oil, vegetable or non-vegetable oil or used cooking oil. Further, it relates to a method for preparing Fig-1 biodiesel (Methyl Ester) with 100% purity which can be directly used as a fuel in cars, trucks, buses industrial & domestic purpose without any need to blend with any petroleum diesel. The present invention also discloses the biodiesel having improved cold flow properties, flash point and 57 cetane number with reduced exhaust emission where CO<sub>2</sub> emits approx. 2.96 % v/v and CO emits approx. 0.2 ppm% v/v.

No. of Pages : 46 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042318 A

(19) INDIA

(22) Date of filing of Application :24/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : ULTIMATE GREEN ENERGY SOLUTION

(51) International classification :H02J0007350000, F03D0009000000, H02J0003380000, F03G0003000000, F03D0009250000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)NALLAMILLI SRI VENKATA SRINIVASA REDDY**

Address of Applicant :S/O Nallamilli Satyanarayana Reddy 2-17 Mogalipalem, Bandanapudi Sivaru, Kajuluru Mandalam -----  
-----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)NALLAMILLI SRI VENKATA SRINIVASA REDDY**

Address of Applicant :S/O Nallamilli Satyanarayana Reddy 2-17 Mogalipalem, Bandanapudi Sivaru, Kajuluru Mandalam -----  
-----

(57) Abstract :

ABSTRACT OF THE INVENTION: Green energy is the necessity of the current world. Solar, Wind and Hydro are the renewable energy sources which are bounded by place, season and time. Nowadays it is necessary to utilize these resources continuously and to make the power supply available as long as possible. Gravity battery is the concept gaining importance to store power whenever excess power is available and use it back when there is demand to power. It simply works by lifting mass (weight blocks or Hydro) to a certain height using motors or pumps when the excess power is available and regenerating the power while moving back the mass by gravity. Now the current objective of this invention is an effective usage of gravity.

No. of Pages : 24 No. of Claims : 25

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042334 A

(19) INDIA

(22) Date of filing of Application :25/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : Piled Embankment Reinforcement Systems

(51) International classification :E02D0003100000, E02D0005220000, E02D0033000000, E02D0005300000, E02D0007000000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology**

Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad - 500090, Telangana State, India  
Nizampet -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Suresh Kommu**

Address of Applicant :Sr. Assistant Professor, Department of Civil Engineering, VNR VJIET, Hyderabad, India. -----

**2)Raikanti Amulya**

Address of Applicant :Masters Student, Department of Civil Engineering, VNR VJIET, Hyderabad, India. -----

(57) Abstract :

piled embankment reinforced systems comprising embankment, reinforcement, peat, clay, sand, pile, interface; wherein the piles are cylindrical along with the pile cap of square shape; wherein the typical spacing between the piles is 1.5 to 4.5m; the spacing is 3m center to center of the piles, which are modeled as the non-porous material with a unit weight of 25 kg/mAA; wherein the diameter of the pile is 0.3m, and the size of the pile cap is 0.5m. The interface is taken on both sides of the pile with an extra 0.5m at the bottom of the pile because the soil will be disturbed more than the pile length.

No. of Pages : 25 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :25/07/2022

(21) Application No.202241042442 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : MARKETING STRATEGIES FOR ENTERING A MICRO SERVICES ENTERPRISE IN THE B2B MARKET

(51) International classification :G06Q0030020000, G06Q0050000000, G09B0019000000,  
G06Q0010060000, B42D0015000000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr. K. Pushpa**  
Address of Applicant :Assistant Professor, Department of Business Administration, Valliammal College for women, E-9, Anna nagar east, Chennai - 102 Chennai -----  
**2)Mr. Ramraj G**  
**3)Dr. J. Vimal Priyan**  
**4)Mr. S. Selvanathan**  
**5)Mr. Kanagavel. N**  
**6)Dr. T. Jebasheela**  
**7)Mr.R. Ganeshkumar**  
**8)Mrs. R. Thangarani**  
**9)Mr. C. Kalaiselvan**  
**10)Dr.B.Sheeba Pearlina**  
**11)Mr. Krishnamoorthy K**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr. K. Pushpa**  
Address of Applicant :Assistant Professor, Department of Business Administration, Valliammal College for women, E-9, Anna nagar east, Chennai - 102 Chennai -----  
**2)Mr. Ramraj G**  
Address of Applicant :Assistant Professor of Commerce (SF), Department of Commerce (CA) SF, VHN Senthikumara Nadar College (Autonomous), Virudhunagar - Pin: 626001 Virudhunagar -----  
**3)Dr. J. Vimal Priyan**  
Address of Applicant :Head, Department of Commerce (CA) SF, VHN Senthikumara Nadar College (Autonomous), Virudhunagar - Pin: 626001 Virudhunagar -----  
**4)Mr. S. Selvanathan**  
Address of Applicant :Assistant Professor of Commerce (SF), Department of Commerce SF, VHN Senthikumara Nadar College (Autonomous), Virudhunagar - Pin: 626001 Virudhunagar -----  
**5)Mr. Kanagavel. N**  
Address of Applicant :Assistant Professor of Commerce (SF), Department of Commerce (CA) SF, VHN Senthikumara Nadar College (Autonomous), Virudhunagar - Pin: 626001 Virudhunagar -----  
**6)Dr. T. Jebasheela**  
Address of Applicant :Assistant Professor of Commerce (SF), Department of Commerce (CA) SF, VHN Senthikumara Nadar College (Autonomous), Virudhunagar - Pin: 626001 Virudhunagar -----  
**7)Mr.R. Ganeshkumar**  
Address of Applicant :Assistant Professor of Commerce (SF), Department of Commerce (CA) SF, VHN Senthikumara Nadar College (Autonomous), Virudhunagar - Pin: 626001 Virudhunagar -----  
**8)Mrs. R. Thangarani**  
Address of Applicant :Assistant Professor of Commerce (SF), Department of Commerce (CA) SF, VHN Senthikumara Nadar College (Autonomous), Virudhunagar - Pin: 626001 Virudhunagar -----  
**9)Mr. C. Kalaiselvan**  
Address of Applicant :Assistant Professor of Commerce (SF), Department of Commerce (CA) SF, VHN Senthikumara Nadar College (Autonomous), Virudhunagar - Pin: 626001 Virudhunagar -----  
**10)Dr.B.Sheeba Pearlina**  
Address of Applicant :Assistant Professor, Department of Commerce, Pasumpon Muthuramalinga Thevar College, Melaneelithanallur, Sankarankovil, Pin: 627953 Tirunelveli -----  
**11)Mr. Krishnamoorthy K**  
Address of Applicant :Assistant Professor, Department of Management Studies, KIT- Kalaingarunandhi Institute of Technology, Kannampalayam, Coimbatore – 641402 Kannampalayam -----

(57) Abstract :

[013] The present study on the effectiveness of eMarketing in MSMEs is mainly focused on how MSMEs use this eMarketing and how they benefit from eMarketing in a real-world scenario. The study also analyzes the factors influencing MSMEs to embrace this important change in the era of eMarketing. To learn about the impact of this new eMarketing method, the researcher examines the selected specific tools such as email, website, e-catalogue, portals, blog, social media, etc. to understand the priorities of MSMEs in their selection tools for your marketing purposes. The results are measured in terms of their benefit to your business goals. Achieving this can be a daunting task, as the subject of study is the seemingly endless progress in the field of Internet technology. Throughout the study, the researcher emphasizes the importance of e-marketing for MSMEs in terms of its effectiveness and the results of using e-marketing tools to achieve the business goals of these companies. The research focuses on establishing some common reasons for using MSME eMarketing. From the results of the study, it can be clearly understood that eMarketing can be vital to the flourishing of an MSME business and what tools and resources are available for them to better use them to achieve business goals. Accompanied Drawing [FIG. 1]

No. of Pages : 29 No. of Claims : 3



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042472 A

(19) INDIA

(22) Date of filing of Application :25/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SYSTEM AND METHOD FOR RECORDING CALLS AND MASKING CONTACT INFORMATION IN REAL-TIME

(51) International classification :H04M0001725000, H04W0004100000, H04W0004160000, H04M0003420000, H04M0003510000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date

(62) Divisional to :NA  
Application Number :NA  
Filing Date

(71)Name of Applicant :

**1)Mr. Srikanth Pillarisetty**

Address of Applicant :12-10-336/2/2, Ramalayam Street, Sitaphalmandi, Secunderabad-500061, Telanagana, India.  
Hyderabad -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Mr. Srikanth Pillarisetty**

Address of Applicant :12-10-336/2/2, Ramalayam Street, Sitaphalmandi, Secunderabad-500061, Telanagana, India.  
Hyderabad -----

(57) Abstract :

Exemplary embodiments of the present disclosure directed towards a system for recording calls and masking a user contact information in real-time, comprising: first communication device configured to enable agent to initiate calls to second communication device of user through communication establishment module, communication establishment module configured to initiate the calls automatically in the background to a DID (direct inward dialing), telecom server configured to control the DID (direct inward dialing), the DID (direct inward dialing) configured to answer the calls, the communication establishment module configured to initiate the calls automatically to the second communication device of the user by keeping the DID (direct inward dialing) telecom server call on hold, the communication establishment module further configured to merge the DID (direct inward dialing) telecom server call and the user call automatically in the background, and provides call recordings and data analytics to the agent on the first communication device. FIG. 1

No. of Pages : 28 No. of Claims : 10

(54) Title of the invention : SYSTEM AND METHOD FOR PREPARING ONE OR MORE FLATBREAD VARIETIES AUTOMATICALLY

(51) International classification :A21C0001140000, A21C0005000000, A21B0005000000, A21C0001020000, A21C0011000000

(86) International Application No :PCT// /  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)FOOD TECHNICS PRIVATE LIMITED**

Address of Applicant :NO.489, 1ST MAIN, 7TH CROSS, MARUTHINAGAR, KOGILUROAD, YELAHANKA BANGALORE, Karnataka, India - 560064 BANGALORE -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)KARTHIK J**

Address of Applicant :NO.489,1STMAIN, 7THCROSS, MARUTHINAGAR, KOGILUROAD.BANGALORE,Karnataka,India-560064 Bangalore -----

(57) Abstract :

AUTOMATICALLY The embodiments herein relates to a system (100) for preparing one or more flatbread varieties automatically. The system includes a first section including a kneading bowl (102) and an extruder screw rod (104) to prepare and extrude a dough, that is cut by a dough cutter (106) to produce dough balls, and one or more wedge press heating plates (110A-N) that receives and presses the dough balls to produce flattened dough, and a second section or a third section that are electrically connected with the first section. The second section includes one or more electric roasting heating plates (112A-N) to receive, rotate and roast both sides of the flattened dough to prepare roasted flatbreads. The third section includes a slat chain conveyor system (204) with gas burners that receive, and roast the flattened dough evenly on both sides to prepare roasted flatbreads by moving through conveyors. FIG. 1

No. of Pages : 41 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042498 A

(19) INDIA

(22) Date of filing of Application :25/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : An Efficient Detection for Brain Tumor Cells by BTDJPEGRC model

(51) International classification :G06T0007000000, G06Q0010100000, G06T0011000000, C12N0005090000, G01B0011240000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE**

Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR CHENNAI -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr.G.Ayyappan**

Address of Applicant :Associate Professor, Department of Information Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road,Ponmar, Chennai-600127. CHENNAI -----

**2)Dr. R. Venkatesh Babu**

Address of Applicant :Pro Vice Chancellor, Bharath Institute of Higher Education and Research, 173,Agaram Road, Selaiyur, Chennai-600073, Tamil Nadu, India. CHENNAI -----

--

**3)Dr.A.Kumaravel**

Address of Applicant :Professor, Department of Information Technology, Bharath Institute of Higher Education and Research, 173,Agaram Road, Selaiyur, Chennai-600073, Tamil Nadu, India. CHENNAI -----

**4)Dr.T.Nalini**

Address of Applicant :Professor, Department of Computer Science and Engineering, Dr.M.G.R. Educational and Research Institute, Periyar E.V.R. High Road, Vishwas Nagar, Maduravoyal, Chennai, Tamil Nadu 600095 CHENNAI -----

**5)Dr. V. Loganathan**

Address of Applicant :Associate Professor, Department of CSE, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai-602 105, Tamil Nadu, India. CHENNAI -----

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(57) Abstract :

Tumors are excess cells that grow in an uncontrolled way and are one of the most common causes of cancer. Many different types of brain tumor exist. This research work finds that Random Committee using JPEG Coefficient Filter model is producing an optimal results. This model produces 92.97% of accuracy level, 0.93 of precision value, 0.93 of recall value, 0.97 of ROCAUC value, 0.89 of PRC value and this model produces vary lowest deviations for brain tumor images. This work recommends that the Random Committee by implementing one of the image enhancement techniques like JPEG Coefficient Filter for showing an efficient outcomes.

No. of Pages : 6 No. of Claims : 5

(54) Title of the invention : ANALYSIS OF ALUMINIUM INCAPACITATED ZnO SQUEAKY FILMS FOR ANTIBACTERIAL ACTIVITY

(51) International classification :C01G0009020000, B01J0035000000, H01L0031180000, C23C0016400000, B82Y0030000000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Mrs. B. Deepthi**  
 Address of Applicant :Associate professor, Sri Indu Institute of pharmacy, Sheriguda (v) Ibrahimpatnam(M) R.R. Hyderabad Telangana- 501510, India -----  
**2)Ms. Anamika Singh**  
**3)Mr. Hemshankar Sahu**  
**4)Dr. M. G. Roymon**  
**5)Mr.Sanjay Trambak Pekhale**  
**6)Mr.Laxman Santu Chandore**  
**7)Ms. Twinkal Shriwas**  
**8)Ms. Nikita Mishra**  
**9)Dr. V Shanthi**  
**10)Dr. Anubhuti Jha**  
**11)Dr. Suruchi Parkhey**  
**12)Ms. Neha Toppo**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Mrs. B. Deepthi**  
 Address of Applicant :Associate professor, Sri Indu Institute of pharmacy, Sheriguda (v) Ibrahimpatnam(M) R.R. Hyderabad Telangana- 501510, India -----  
**2)Ms. Anamika Singh**  
 Address of Applicant :Asst. Professor, Parul Institute of Pharmacy & Research, Limda, Vadodara, Gujarat 391110, India -----  
**3)Mr. Hemshankar Sahu**  
 Address of Applicant :Research Scholar, St. Thomas College, Ruabandha, Bhilai, Durg, Chhattisgarh, India Pin- 490006 -----  
**4)Dr. M. G. Roymon**  
 Address of Applicant :Principal, St. Thomas College, Ruabandha, Bhilai, Durg, Chhattisgarh, India Pin- 490006 -----  
**5)Mr.Sanjay Trambak Pekhale**  
 Address of Applicant :Associate Professor And HOD, Department of Zoology, G.M.D Arts B.W.Commerce And Science College Sinnar - 422103, Dist. Nashik, Maharashtra -----  
**6)Mr.Laxman Santu Chandore**  
 Address of Applicant :Assistant professor, Dapartment of Zoology, G.M.D.Arts B.W Commerce And Science College Sinnar-422103, Dist, Nashik, Maharashtra -----  
**7)Ms. Twinkal Shriwas**  
 Address of Applicant :Research Scholar, St. Thomas College, Ruabandha, Bhilai, Durg, Chhattisgarh, India Pin- 490006 -----  
**8)Ms. Nikita Mishra**  
 Address of Applicant :Research Scholar, St. Thomas College, Ruabandha, Bhilai, Durg, Chhattisgarh, India Pin- 490006 -----  
**9)Dr. V Shanthi**  
 Address of Applicant :Assistant Professor, Department of Microbiology, St. Thomas College, Ruabandha, Bhilai, Durg, Chhattisgarh, India Pin- 490006 -----  
**10)Dr. Anubhuti Jha**  
 Address of Applicant :Assistant professor, Department of biotechnology, St. Thomas College, Ruabandha, Bhilai, Durg, Chhattisgarh, India Pin- 490006 -----  
**11)Dr. Suruchi Parkhey**  
 Address of Applicant :Assistant Professor P G Department of Botany, St. Thomas College, Ruabandha, Bhilai, Durg, Chhattisgarh, India Pin- 490006 -----  
**12)Ms. Neha Toppo**  
 Address of Applicant :Research Scholar St. Thomas College, Ruabandha, Bhilai, Durg, Chhattisgarh, India Pin- 490006 -----

(57) Abstract :

ANALYSIS OF ALUMINIUM INCAPACITATED ZnO SQUEAKY FILMS FOR ANTIBACTERIAL ACTIVITY A method for analysis of aluminium incapacitated zno squeaky films for antibacterial activity. The method includes depicting the XRD peaks of pure and Al- incapacitated ZnO squeaky films which are post-annealed at 300°C, wherein the hexagonal Wurtzite form of the deposited films is confirmed by the diffraction peaks, which match the 36-1451 JCPDS card. Changing the microstrain and crystallite size with variation in Al content, indicating a potential reduction in crystallite size as evidenced by the broadening of the diffraction pattern. Doping the squeaky film of ZnO in pure form and also squeaky films of ZnO Al with a scan region of 3x3µm. The bandgap for pure ZnO squeaky film is 3.15eV and bandgap for (1, 3, and 5) % Al incorporated ZnO squeaky films are 3.12eV, 3.10eV, and 3.06eV. FIG.1

No. of Pages : 18 No. of Claims : 1

(54) Title of the invention : Automatic brake system for controlling a vehicle using AI and ML model

(51) International classification :B60T0007120000, B60T0017180000, G07F0017240000, B60T0008175500, G06N0003020000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Mr. P.SURESHKUMAR**  
Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF MECHANICAL ENGINEERING, JCT COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE PIN:641105 -----

**2)Mrs.Korla Chandana**  
**3)Mr. Nidheesh Sharma**  
**4)Dr. Sarat Kumar Mishra**  
**5)Dr.Brijesh Kumar**  
**6)Dr. Vinod Babu Marri**  
**7)Mr. M. Naveenkumar**  
**8)Mr. G. Manojkumar**  
**9)Mrs. Sivamani T**  
**10)Mr.Tamil Selvan.S**  
**11)MR. L. KARTHICK**  
Name of Applicant : NA  
Address of Applicant : NA

(72)Name of Inventor :  
**1)Mr. P.SURESHKUMAR**  
Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF MECHANICAL ENGINEERING, JCT COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE PIN:641105 -----

**2)Mrs.Korla Chandana**  
Address of Applicant :Associate professor, Department of Mechanical Engineering, Visakha Institute of Engineering and Technology, Narva, Visakhapatnam Andhra Pradesh - 530044 -----

**3)Mr. Nidheesh Sharma**  
Address of Applicant :Assistant professor Department of Computer Science, Dr K.N. Modi Institute of Engineering and Technology, Modinagar, Ghaziabad, Uttar Pradesh - 201204 -----

**4)Dr. Sarat Kumar Mishra**  
Address of Applicant :Professor Department of Mechanical Engineering College: Balasore College of Engineering & Technology, Sergarah, Balasore, Odisha, 756060 -----

**5)Dr.Brijesh Kumar**  
Address of Applicant :Associate professor, Department of Applied Science and Humanities, Dr.K.N.Modi Institute of Engineering and Technology, Modinagar, Ghaziabad-201204 -----

**6)Dr. Vinod Babu Marri**  
Address of Applicant :Assistant professor, Department of Mechanical Engineering, Anil Neerukonda Institute of Technology and Sciences -----

**7)Mr. M. Naveenkumar**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Arjun College of Technology, Coimbatore - Pollachi Highway, Thamarakulam, Coimbatore - 64120 TamilNadu India -----

**8)Mr. G. Manojkumar**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Arjun College of Technology, Coimbatore - Pollachi Highway, Thamarakulam, Coimbatore - 642120 TamilNadu India -----

**9)Mrs. Sivamani T**  
Address of Applicant :Assistant professor, Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Malumichampatti, Pollachi Main Road, Coimbatore -641050 -----

**10)Mr.Tamil Selvan.S**  
Address of Applicant :Assistant Professor Department of Aeronautical Engineering, Hindusthan Institute of Technology, Malumichampatti, Pollachi Main Road, Coimbatore -641050 -----

**11)MR. L. KARTHICK**  
Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF MECHANICAL ENGINEERING, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY. COIMBATORE - 641 032. TAMILNADU -----

(57) Abstract :  
ABSTRACT AUTOMATIC BRAKE SYSTEM FOR CONTROLLING A VEHICLE USING AI AND ML MODEL A method for automatic brake system for controlling a vehicle using Artificial intelligence and Machine Learning model. The method includes brake actuation system for actuating the 5 automatic brakes to supply the braking effort to the wheels, brake control system for controlling the brake actuation means to supply an automatic component of the service braking effort. The brake control system is arranged, when standstill of the vehicle is detected and before the parking brake is engaged, to cause the brake actuation to supply the automatic component of the service braking effort only to the subset of the plurality of 10 wheels. Collecting the real time inputs are with the help of ultrasonic sensor and yaw rate sensor. The ultrasonic sensor is attached to the front of the vehicle and it detects the occurrence of obstacle in front of the vehicle thereby sending and receiving ultrasonic waves from the sensor. Processing the input values with the help of Artificial Neural Network multilayered algorithm which in turn takes decision based on the weightage values given by 15 the user and applying a distributed brake force to each wheel of the vehicle based upon the decision values from the decision layer. FIG.1

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :25/07/2022

(21) Application No.202241042577 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : INTERNET OF THINGS (IOT) BASED POULTRY MANAGEMENT SYSTEM

(51) International classification :H04L0029080000, A01K0045000000, A01K0031040000, G05D0001020000, G01D0021020000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr. Susheel George Joseph**

Address of Applicant :Associate Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kerala, India - 686104 -----

**2)Roji Thomas**

**3)Soumya Koshy**

**4)Binny S**

**5)Cini Joseph**

**6)Cina Mathew**

**7)Tintu Varghese**

**8)Dhannya. J**

**9)Sunanda Rajagopal**

**10)Aby Rose Varghese**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Susheel George Joseph**

Address of Applicant :Associate Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kerala, India - 686104 -----

**2)Roji Thomas**

Address of Applicant :HoD and Associate Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kerala, India - 686104 -----

**3)Soumya Koshy**

Address of Applicant :Assistant Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kerala, India - 686104 -----

**4)Binny S**

Address of Applicant :Associate Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kerala, India - 686104 -----

**5)Cini Joseph**

Address of Applicant :Assistant Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kerala, India - 686104 -----

**6)Cina Mathew**

Address of Applicant :Assistant Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kerala, India - 686104 -----

**7)Tintu Varghese**

Address of Applicant :Assistant Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kerala, India - 686104 -----

**8)Dhannya. J**

Address of Applicant :Assistant Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kerala, India - 686104 -----

**9)Sunanda Rajagopal**

Address of Applicant :Assistant Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kerala, India - 686104 -----

**10)Aby Rose Varghese**

Address of Applicant :Assistant Professor, Kristu Jyoti College of Management and Technology, Changanasery, Kerala, India - 686104 -----

(57) Abstract :

Automation is crucial to modern living. IoT-based poultry farming is excellent for remote monitoring and maintenance, transforming a normal farm into one with automated characteristics. Regularly monitoring chicken health parameters improves chicken health and development. This paper explains how to build an IoT-based smart poultry farming system. The system utilises Arduino Nano to interface with sensors and ESP8266 to upload data to the cloud. The poultry management system senses temperature, air ammonia, and light intensity. The system monitors and manages these parameters using automated methods. Farmers that employ traditional farming techniques may use their mobile phones to remotely access and operate the poultry farm, minimising manual monitoring and enhancing productivity.

No. of Pages : 8 No. of Claims : 8

(54) Title of the invention : Machine Learning (ML) and Internet of Things (IoT) based Smart Human Activity discovering system for Health Care Applications

(51) International classification :G06N0020000000, H04L0029080000, H04W0004700000, G16H0040200000, G16H0010600000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)CMM. Mansoor**  
 Address of Applicant :Senior Lecturer Department of Information Technology, South Eastern University of Sri Lanka, University park Oluvil - Sri Lanka Pin: 32360 State: Oluvil Country: Sri Lanka -----  
**2)Dr.N.Kumareshan**  
**3)Mr. A. Vinod**  
**4)Ms.M.Fazilath**  
**5)Dr. Karthikeyan R**  
**6)Dr. Anitha K**  
**7)Mr.Srinadh Unnava**  
**8)Basavanna M**  
**9)Keerthi Kumar M**  
**10)Mahanthesha U**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)CMM. Mansoor**  
 Address of Applicant :Senior Lecturer Department of Information Technology, South Eastern University of Sri Lanka, University park Oluvil - Sri Lanka Pin: 32360 State: Oluvil Country: Sri Lanka -----  
**2)Dr.N.Kumareshan**  
 Address of Applicant :Professor, Department of ECE, Sri Eshwar College of Engineering, Kinathukadavu, Coimbatore Pin: 641202 State: Tamilnadu Country: India -----  
**3)Mr. A. Vinod**  
 Address of Applicant :Assistant Professor, Department of ECE, Government College of Engineering Dharmapuri, Dharmapuri, Pin: 636704 State: Tamilnadu Country: India -----  
**4)Ms.M.Fazilath**  
 Address of Applicant :Assistant Professor, Department of Biomedical Engineering, Jaya Sakthi Engineering College, St.Mary's nagar, Thiruninravur. Pin: 602024 State: Tamilnadu Country: India -----  
**5)Dr. Karthikeyan R**  
 Address of Applicant :Professor, Department of ECE, Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai Pin: 600069 State: Tamilnadu Country: India -----  
**6)Dr. Anitha K**  
 Address of Applicant :Professor, Department of ECE, Prathyusha Engineering College, Poonamallee - Tiruvallur Road, Aranvayal Kupam Village, Aranvayal Post, Tiruvallur Taluk Pin: 602025 State: Tamilnadu Country: India -----  
**7)Mr.Srinadh Unnava**  
 Address of Applicant :Assistant Professor, Department of Information Technology, Sasi Institute of Technology & Engineering, Tadepalligudem, West Godavari (District), Pin Code: 534101 State: Andhra Pradesh Country: India -----  
**8)Basavanna M**  
 Address of Applicant :Assistant Professor, Department of ECE, GSSS Institute of Engineering & Technology for Women, KRS Road, Metagalli Industrial Area, Mysuru, Pin : 570016 State : Karnataka Country : India ----  
**9)Keerthi Kumar M**  
 Address of Applicant :Assistant Professor, Department of ECE, GSSS Institute of Engineering & Technology for Women, KRS Road, Metagalli Industrial Area, Mysuru, Pin : 570016 State : Karnataka Country : India ----  
**10)Mahanthesha U**  
 Address of Applicant :Assistant Professor, Department of ECE, GSSS Institute of Engineering & Technology for Women KRS Road, Metagalli Industrial Area, Mysuru, Pin : 570016 State : Karnataka Country : India ----

(57) Abstract :  
 Machine Learning (ML) and Internet of Things (IoT) based Smart Human Activity discovering system for Health Care Applications Abstract: Internet of Things (IoT) has assumed great importance in technical and social domains due to desire of smart living and intelligent solutions for industrial operations, home automation and healthcare. The telecommunication networks provide alltime internet connectivity for the devices in physical systems and hand- held devices. The developments have made it easy to remain engaged on all time, anywhere basis, while users interact with one or more applications. Many smart devices may interact in the background resulting in event-driven intelligent activities raising alerts or recording status summary under a policy. The smart solutions are being shaped for the industry, transport, eHealthcare, eEducation and other daily life activities. IoT activities are autonomous and support dynamic Machine-toMachine (M2M) communication. The challenges of heterogeneity, dynamic variation in signal quality and large volume of data are being addressed through number of techniques. In this paper, we discuss IoT based smart system technologies, security, vulnerabilities and role of intelligent solutions using Machine Learning (ML) and Artificial Intelligence (AI). A crucial factor hindering the ongoing efforts for widespread IoT-adoption, is security. Internet of Things and Machine Learning (ML) have wide applicability in many aspects of life, health care is one of them. With the rapid development and improvement of the internet, the conventional strategies for patient services diminished and supplanted with electronic healthcare systems. The use of IoT technology offers medical professionals and patients the most modern medical device environment. IoT things and Machine-Learning are valuable in various classifications from far off observing of the modern climate to mechanical mechanization. Moreover, medical care applications are principally indicating interest in IoT things in view of cost decrease, easy to understand and improve the personal satisfaction of patients. The latest applications for IoT medical treatment, investigated and still facing problems in the clinical environment, are needed for intellectual, creativity-based answers. In specific, portable, and implantable IoT model devices, investigated for calculating the data transmission. Implantable technologies lead to the natural substitution of the injured part of the human body. The creation of a wearable and implantable healthcare body area network faced several challenges that are illustrated in this study. In this paper, an overview of IoT and Machine Learning based on healthcare care demonstrated in detail, the applications that use in health care by incorporating Machine Learning (ML) for the Internet of Things (IoT) listed with all issues and challenges while using this application or devices for health care and their important usage. Also, algorithms used by Machine Learning in IoT for developing devices are indicated by showing previous work and classified each of them according to the used method.

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042645 A

(19) INDIA

(22) Date of filing of Application :26/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A FORMULATION FOR A SCALP CURATIVE COMPOSITION AND METHOD OF PREPARATION THEREOF

(51) International classification :A61K0036880000, A61K0008670000, A61K0008920000, A23L0019000000, A61K0008970000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)SINDHUJA T R**

Address of Applicant :No-23,S2,2nd floor, Jaganathan Nagar 2nd main road, Arumbakkam Chennai Chennai -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)SINDHUJA T R**

Address of Applicant :No-23,S2,2nd floor, Jaganathan Nagar 2nd main road, Arumbakkam Chennai Chennai -----

(57) Abstract :

The present subject matter is a formulation for a scalp curative composition comprising a banana peel condensed paste, white dammar, olive oil, vitamin E oil, and javadu powder. The banana peel condensed paste is a gummy yellow golden coloured extract of fresh peels of poovam banana (Musa Mysore Aab). The crystalline form of white dammar is powdered and used. In a method of preparation, the fresh banana peels were cut into small pieces and soaked in ethanol and filtered, followed by condensation to form a gummy yellow-golden coloured condensate extract. White dammar powder, olive oil and gummy yellow-golden coloured condensate were mixed thoroughly to get emulsified and smooth consistency. Then excipients (Vitamin E and javadhu powder) were added and thoroughly mixed. After checking for a sticky cream consistency and homogeneity, the product was kept in a glass container and stored in dry and cool place.

No. of Pages : 22 No. of Claims : 10



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :26/07/2022

(21) Application No.202241042688 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : BATTERY MOUNTING SYSTEM FOR ELECTRIC VEHICLE

(51) International classification :H01M0002100000, B60K0001040000, B60L0050600000, H01M0002200000, B60L0001040000

(86) International Application No :PCT// /  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)BILITI ELECTRIC INDIA PRIVATE LIMITED**

Address of Applicant :Flat 306, Laxmi Enclave, Karol Bagh Colony, Padmanabha Nagar, Mehdiapatnam Hyderabad ----- --  
-----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Rahul GAYAM**

Address of Applicant :S Sepulveda Blvd Los Angeles CALIFORNIA USA 90034 California -----

**2)Chandra Sekhar BODDEDA**

Address of Applicant :F. No. 404, Sai Mithra Enclave, Anjaneyarajunagar, Visakhapatnam - 530046 Visakhapatnam -----  
-----

**3)Vivek SARDA**

Address of Applicant :8-1-206/250/A, Pragati Colony, Katedan, Mailardevpally, Hyderabad - 500005 Hyderabad -----  
-----

(57) Abstract :

A battery mounting system (1) for an electric vehicle includes a battery, a mechanical structure (2) to house said battery, a mechanical clamping means (4), and an electrical connector (5). The mechanical clamping means (4) is used for proper positioning and securement of the battery. The battery mounting system (1) and electrical connection is such that, the electric vehicle can operate only after proper positioning and securement of the battery is achieved.

No. of Pages : 40 No. of Claims : 25

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042713 A

(19) INDIA

(22) Date of filing of Application :26/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : MACHINE LEARNED CROP PREDICTION SYSTEM

(51) International classification :G06N0020000000, G01N0033240000, A01G0007000000, G01N0033000000, G01N0033180000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ATME College of Engineering, Mysore**

Address of Applicant :13th Kilometer, Mysore-Kanakapura-Bangalore road, Mysore-570028, Karnataka Mysore -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Bhagyashree S R**

Address of Applicant :Electronics and Communication Engineering Department of ATME College of Engineering, 13th Kilometer, Mysuru – Kanakapura - Bengaluru Road, Mysuru – 570028, Karnataka. Mysore ----

**2)Pavithra A C**

Address of Applicant :Electronics and Communication Engineering Department of ATME College of Engineering, 13th Kilometer, Mysuru – Kanakapura - Bengaluru Road, Mysuru – 570028, Karnataka. Mysore ----

**3)Dhanush H V**

Address of Applicant :Electronics and Communication Engineering Department of ATME College of Engineering, 13th Kilometer, Mysuru – Kanakapura - Bengaluru Road, Mysuru – 570028, Karnataka Mysore ----

**4)Chethan P**

Address of Applicant :Electronics and Communication Engineering Department of ATME College of Engineering, 13th Kilometer, Mysuru – Kanakapura - Bengaluru Road, Mysuru – 570028, Karnataka Mysore ----

**5)Mahadevdeepak P**

Address of Applicant :Electronics and Communication Engineering Department of ATME College of Engineering, 13th Kilometer, Mysuru – Kanakapura - Bengaluru Road, Mysuru – 570028, Karnataka Mysore ----

**6)Nikhith Urs**

Address of Applicant :Electronics and Communication Engineering Department of ATME College of Engineering, 13th Kilometer, Mysuru – Kanakapura - Bengaluru Road, Mysuru – 570028, Karnataka Mysore ----

(57) Abstract :

**MACHINE LEARNED CROP PREDICTION SYSTEM** The present invention relates to a machine learned crop prediction system that facilitates crop suggestions based on soil quality wherein the system 100 comprises one or more transducer(s) 101 for measuring health of soil encompassing an agricultural area, a processor 102 for processing a data received from the one or more transducer(s) 101 and a user interface 103 for displaying the data, wherein the user interface 103 further applies a machine learning protocol on the data to advise one or more crop(s) suitable to be grown on the agricultural area. The one or more transducer(s) 101 are chosen to be optical transducers and the health is measured in terms of quantitative value of Nitrogen, Potassium, Phosphorus, Organic carbon and Sulphur. Ref. Figure 1

No. of Pages : 18 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241042878 A

(19) INDIA

(22) Date of filing of Application :27/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : Automation of the Sanitary System

(51) International classification :B32B0005020000, H04M0003420000, G06F0030300000, A01N0001020000, G06Q0010100000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr. G B Krishnappa**

Address of Applicant :Dean (R&D), Vidyavardhaka College of Engineering, Gokulam 3rd Stage, Mysuru - 570 002 -----

**2)Vidyavardhaka College of Engineering**

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Mr. Mahadeshwara A N**

Address of Applicant :Vidyavardhaka College of Engineering, No, 206, Gokulam 3rd Stage, Mysuru - 570002 Mysuru -----

**2)Mr. Sumukha B R**

Address of Applicant :Vidyavardhaka College of Engineering, No, 206, Gokulam 3rd Stage, Mysuru - 570002 Mysuru -----

**3)Prof. Jayanna S S**

Address of Applicant :Vidyavardhaka College of Engineering, No, 206, Gokulam 3rd Stage, Mysuru - 570002 Mysuru -----

**4)Dr. N Sandhya Rani**

Address of Applicant :Vidyavardhaka College of Engineering, No, 206, Gokulam 3rd Stage, Mysuru - 570002 Mysuru -----

(57) Abstract :

This is the era where we have exponential increase in the evolution of new technology that amazes mankind. Today the end-users have access to technology anytime and anywhere around the globe which makes the world a better place to live. The combination of different technologies can solve, improve and optimise any process which in turn benefits the society. The Washroom system is an everlasting loop until the end of one's span of life. Embedding technology to make the washroom system to automate it to the benefit of the general public is the main intention and also to add the privacy and to eradicate their dependency on others. This work includes the design and development of AFU (Automated Flushing Unit) using ATMega328p microcontroller.

No. of Pages : 25 No. of Claims : 6

(54) Title of the invention : AUTOMATED GUIDED VEHICLE

(51) International classification :G05D0001020000, G06Q0010080000, B60L0053300000, B60L0053000000, B66F0009060000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE**

Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR chennai -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Prof.VIJAYA RAJ.T**

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road, Ponmar, Chennai-600127 chennai -----

**2)Prof.SURULIVEL RAJAN.T**

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road, Ponmar, Chennai-600127 chennai -----

**3)THARUN.H**

Address of Applicant :Department of Mechanical Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road, Ponmar, Chennai-600127 chennai -----

**4)SANTHOSH.V**

Address of Applicant :Department of Mechanical Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road, Ponmar, Chennai-600127 chennai -----

**5)KASIM MUSHARAF.Y**

Address of Applicant :Department of Mechanical Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road, Ponmar, Chennai-600127 chennai -----

**(57) Abstract :**

Automated guided vehicle systems (AGVS) are widely used for transporting material in manufacturing and warehousing applications. These systems offer many advantages over other forms of material transport. However, the design of these systems is complex due to the interrelated decisions that must be made and the large number of system design alternatives that are available. In particular, the design of the AGVS control system can be quite challenging, and it can dramatically affect the system cost and performance. In this manner the right idea of an AGV can be introduced that, it is a driverless vehicle wherein the necessary material is gotten by the mechanization itself and afterward circulated to the allotted goal in the distribution centre. Therefore this makes circulation easy, inside as far as possible and furthermore with legitimate precision not creating any harm. Along these lines right now, is extremely vital for any assembling or a substantial stacked plant to utilize this trend setting innovation so as to build efficiency.

No. of Pages : 3 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241043045 A

(19) INDIA

(22) Date of filing of Application :27/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SYSTEM AND A METHOD FOR AN ESSAY GRADING SYSTEM

(51) International classification :G06F0040253000, G09B0019000000, H04L0029080000, G06F0001160000, G09B0007020000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)SRM UNIVERSITY**

Address of Applicant :Amaravati, Mangalagiri - 522502, Andhra Pradesh, India Guntur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)MALINENI, Purnima**

Address of Applicant :Dept. of Computer Science and Engineering, SRM University – AP, Neerukonda, Mangalagiri mandal, Guntur - 522502, Andhra Pradesh, India Guntur -----

**2)GADDAM, Haveela**

Address of Applicant :Dept. of Computer Science and Engineering, SRM University – AP, Neerukonda, Mangalagiri mandal, Guntur - 522502, Andhra Pradesh, India Guntur -----

**3)KOTHA, Udhika Meghana**

Address of Applicant :Dept. of Computer Science and Engineering, SRM University – AP, Neerukonda, Mangalagiri mandal, Guntur - 522502, Andhra Pradesh, India Guntur -----

**4)REDDY, Deepthi Siddenki**

Address of Applicant :Dept. of Computer Science and Engineering, SRM University – AP, Neerukonda, Mangalagiri mandal, Guntur - 522502, Andhra Pradesh, India Guntur -----

**5)SALETI, Sumalatha**

Address of Applicant :Dept. of Computer Science and Engineering, SRM University – AP, Neerukonda, Mangalagiri mandal, Guntur - 522502, Andhra Pradesh, India Guntur -----

(57) Abstract :

**ABSTRACT A SYSTEM AND A METHOD FOR AN ESSAY GRADING SYSTEM** The present disclosure discloses a system (100) and a method (200) for an essay grading system. The system(100) comprises repository (102) configured to store at least one pre-determined grading rules and a set of pre-determined classifiers; an input module (104) configured to receive at least one essay; an input processing module (106) configured to process said essay, and further configured to form a word cloud; a word processing module (108) configured to process said word cloud; and a training module (110) configured to apply said classifiers on said processed word cloud to generate a training model to grade said essay based on said pre-determined grading rules.

No. of Pages : 16 No. of Claims : 5

(54) Title of the invention : IOT based heart disease prediction using deep Neural network

(51) International classification :A61B0005000000, G06N0003080000, A61K0031353000, A61B0005040200, A23L0033000000

(86) International Application No :PCT//

Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :  
**1)Dr A Kovalan**  
 Address of Applicant :Associate Professor, Computer Science, Nehru Arts and Science College, Tirumalayampalayam, Coimbatore -----  
**2)Dr.N.Jayakanthan**  
**3)Mr Ghanges Gunaseelan**  
**4)Dr. PONNU KANGESWARI**  
**5)Saini Jacob Soman**  
**6)Mr.J Logeshwaran**  
**7)Dr.Amjan Shaik**  
**8)Mr.P.Vijayaragavan**  
**9)Ghazaala Yasmin**  
**10)Dr.S.P.Subashini**  
**11)Mrs T. Suneetha**  
**12)Dr. Pasupuleti Subrahmanya Ranjit**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Dr A Kovalan**  
 Address of Applicant :Associate Professor, Computer Science, Nehru Arts and Science College, Tirumalayampalayam, Coimbatore -----  
**2)Dr.N.Jayakanthan**  
 Address of Applicant :Assistant Professor – III, Master of Computer Application, Kumaraguru College of Technology, Coimbatore -----  
**3)Mr Ghanges Gunaseelan**  
 Address of Applicant :AI & Ops Architect, Information Systems, Company Name: Master Peace Technologies, Coimbatore -----  
**4)Dr. PONNU KANGESWARI**  
 Address of Applicant :PRINCIPAL, MEDICAL SURGICAL NURSING, DRIEMS SCHOOL & COLLEGE OF NURSING, TANGI, CUTTACK. PIN 754022 -----  
**5)Saini Jacob Soman**  
 Address of Applicant :Saini jacob Soman Poomkavil House Tholicode PO, Punalur - 691333 --  
**6)Mr.J Logeshwaran**  
 Address of Applicant :Research Scholar, Department of Electronics and Communication Engineering, Sri Eshwar College of Engineering, Coimbatore -----  
**7)Dr.Amjan Shaik**  
 Address of Applicant :Professor and HoD-CSE, Computer Science and Engineering, St.Peter's Engineering College, Maisammaguda,Hyderabad -----  
**8)Mr.P.Vijayaragavan**  
 Address of Applicant :Assitant Professor, CSE(CS-DS), Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology(VNRVJIET),Hyderabad -----  
**9)Ghazaala Yasmin**  
 Address of Applicant :Assistant Professor,University: Bennett University, Plot No. 8-11, Tech, Zone -II, Greater Noida, -----  
**10)Dr.S.P.Subashini**  
 Address of Applicant :Dean, Nursing, Galgotias School of Nursing, Galgotias University, Greater Noida -----  
**11)Mrs T. Suneetha**  
 Address of Applicant :Assistant professor, CsIoT, Loyola Academy Degree and PG, Hyderabad-500010 -----  
**12)Dr. Pasupuleti Subrahmanya Ranjit**  
 Address of Applicant :Professor, Mechanical Engineering , Aditya Engineering College, Surampalem -----

(57) Abstract :

TITLE - IOT based heart disease prediction using deep Neural network Abstract IoT is a way to understand the risk of heart attack or stroke. It helps to check if you are very healthy at your current age and determine what your heart should be. It assesses how healthy your heart is, how it should be, and how you can improve your heart health. Your Heart Age is calculated based on your risk factors for heart disease, such as age, blood pressure and cholesterol, as well as diet, exercise and smoking. A younger age at your heart means a lower risk of developing heart disease. For man, the heart is very essential. Our main task is to protect it and address its operational constraints. Heart disease is on the rise in India. Therefore, some methods of control must be employed. If we know what causes heart disease, we can take the best way to get rid of it

No. of Pages : 9 No. of Claims : 6

(54) Title of the invention : Facial expression based HRV estimation using IOT and neural network

(51) International classification :A61B0005024000, A61B0005000000, A61B0005160000,  
A61B0005024500, G16H0050300000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Mr Ghangesh Gunaseelan**  
Address of Applicant :AI & Ops Architect, Information Systems, Company Name: Master Peace Technologies, Coimbatore -----  
**2)Dr. Preet Jain**  
**3)Dr.Meetu Jain**  
**4)Dr.Jigar Doshi**  
**5)Dr. Ambika Singh Rathore**  
**6)Dr. K.B. GLORY**  
**7)Dr. Nitish Rai**  
**8)Mr.J Logeshwaran**  
**9)Dr.G.Nandini**  
**10)Mrs. K. Bharathi**  
**11)Dr Shital Kiran D. P.**  
**12)Dr Seema Bargale**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Mr Ghangesh Gunaseelan**  
Address of Applicant :AI & Ops Architect, Information Systems, Company Name: Master Peace Technologies, Coimbatore -----  
**2)Dr. Preet Jain**  
Address of Applicant :PhD Student, Department of Biotechnology, College of Science, Mohanlal Sukhadia University, Udaipur -----  
**3)Dr.Meetu Jain**  
Address of Applicant :Professor, Periodontics & Implantology, R.R. Dental College & Hospital, Udaipur -----  
**4)Dr.Jigar Doshi**  
Address of Applicant :MDS (ORTHODONTIST), Orthodontics & Dentofacial Orthopedics, College of Dental Science, Amargadh, Bhavnagar -----  
**5)Dr. Ambika Singh Rathore**  
Address of Applicant :Associate professor, Department of Pediatric and Preventive Dentistry, RUHS College of Dental Sciences, Jaipur -----  
**6)Dr. K.B. GLORY**  
Address of Applicant :Assistant Professor, Engineering English,, Koneru Lakshmaiah Education Foundation, Vaddeswaram, -----  
**7)Dr. Nitish Rai**  
Address of Applicant :Assistant Professor, Biotechnology, University College of Science, Mohanlal Sukhadia University (MLSU), Udaipur -----  
**8)Mr.J Logeshwaran**  
Address of Applicant :Research Scholar, Department of Electronics and Communication Engineering, Sri Eshwar College of Engineering, Coimbatore -----  
**9)Dr.G.Nandini**  
Address of Applicant :Assistant Professor, Mathematics, SNS College of Technology, Coimbatore -----  
**10)Mrs. K. Bharathi**  
Address of Applicant :Associate Professor , Dept of MCA, Loyola Academy , Hyderabad -----  
**11)Dr Shital Kiran D. P.**  
Address of Applicant :Professor, Pediatric and Preventive Dentistry, College of Dental Science, Amargadh, Bhavnagar -----  
**12)Dr Seema Bargale**  
Address of Applicant :Professor, Pediatric and Preventive Dentistry, K. M. Shah Dental College and Hospital, Sumandeep Vidyapeeth Deemed to be University, Vadodara -----

(57) Abstract :  
TITLE - Facial expression based HRV estimation using IOT and neural network Abstract Stress is among the psychological factors thought to contribute to the risk of cardiovascular disease (CVD). Heart rate variability (HRV) is a measure of fluctuation in the time interval between successive heartbeats. It is an important indicator of the stress response of the cardiovascular system. It is also thought that lifestyle factors including physical activity and diet can affect HRV (heart rate variability). High HRV indicates greater adaptability of the heart in response to environmental and psychological challenges, while low HRV is linked to cardiovascular disease and sudden cardiac death. It's useful to think about having a higher HRV because the heart can shift gears faster in response to demands on the body, meaning greater cardiovascular resilience and flexibility during times of stress. In the long run, it benefits cardiovascular health. It affects risk factors including the body's response to stress. Eating almonds instead of regular snacks can reduce the drop in HRV during stress. This dietary strategy has the potential to increase cardiovascular resilience to stress, along with other heart health benefits such as improving heart function, lowering LDL-cholesterol, and improving blood vessel function.

No. of Pages : 9 No. of Claims : 7

(54) Title of the invention : An AI &amp; ML based system for tagging for connected devices in a wireless network and method thereof

(51) International classification :G06N002000000, G06N0007000000, G06N0003063000, H04W0004700000, G06N0003020000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Nellore Manoj Kumar**  
 Address of Applicant :Independent Researcher, 15-225, Gollapalem, Venkatagiri, Tirupati District, Andhra Pradesh, India, Pincode: 524132 Venkatagiri -----  
**2)Dr. Ajit Kumar Patro**  
**3)Dr. Jagana Bihari Padhy**  
**4)Dr. Bibhu Prasad**  
**5)Dr. Tusharkant Panda**  
**6)Dr. Hari Kishan Chapala**  
**7)Dr. Grandhi Prasuna**  
**8)Mr. K. Shyam Sundar Rao**  
**9)Dr. D. V. Lokeswar Reddy**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Dr. Nellore Manoj Kumar**  
 Address of Applicant :Independent Researcher, 15-225, Gollapalem, Venkatagiri, Tirupati District, Andhra Pradesh, India, Pincode: 524132 Venkatagiri -----  
**2)Dr. Ajit Kumar Patro**  
 Address of Applicant :Assistant Professor, Dept. of ECE, SoET, GIET University, Gunupur, Odisha, India, Pincode: 765022 Gunupur -----  
**3)Dr. Jagana Bihari Padhy**  
 Address of Applicant :Assistant Professor, Dept. of ECE, SoET, GIET University, Gunupur, Odisha, India, Pincode: 765022 Gunupur -----  
**4)Dr. Bibhu Prasad**  
 Address of Applicant :Assistant Professor, Dept. of ECE, SoET, GIET University, Gunupur, Odisha, India, Pincode: 765022 Gunupur -----  
**5)Dr. Tusharkant Panda**  
 Address of Applicant :Assistant Professor, Dept. of ECE, SoET, GIET University, Gunupur, Odisha, India, Pincode: 765022 Gunupur -----  
**6)Dr. Hari Kishan Chapala**  
 Address of Applicant :Professor & Head, Department of CSE, (Artificial Intelligence & Machine Learning), St. Ann's College of Engineering & Technology, Chirala, BapatlaDt, Andhra Pradesh, India, Pincode: 523187 Chirala -----  
**7)Dr. Grandhi Prasuna**  
 Address of Applicant :Associate Professor, Department of Computer Science & Engineering, St. Ann's College of Engineering & Technology, Chirala, BapatlaDt, Andhra Pradesh, India, Pincode: 523187 Chirala -----  
**8)Mr. K. Shyam Sundar Rao**  
 Address of Applicant :Assistant Professor, Department of Pharmaceutical Chemistry, School of Pharmacy, Centurion University Technology and Management, Rayagada, Odisha, India, Pincode: 765002 Rayagada -----  
**9)Dr. D. V. Lokeswar Reddy**  
 Address of Applicant :Assistant Professor, Humanities and Social Sciences Department, JNTU College of Engineering, Pulivendula, Kadapa, Andhra Pradesh, India, Pincode: 516390 Pulivendula -----

## (57) Abstract :

In a few short years, the world will be full of billions of linked gadgets that will be installed in our homes, cities, automobiles, and industries. These devices will also be able to communicate with one another. In the future, there will be devices with limited resources that interact with their surroundings and with people. A significant number of these gadgets will be built on models of machine learning and artificial intelligence in order to decipher the meaning and behaviour hidden behind the data collected by sensors, implement correct forecasts, and make judgments. The huge number of linked items, which may cause the network to get congested, is going to be the bottleneck. Because of this, it is necessary to implement intelligence on end devices by using algorithms for machine learning. The deployment of machine learning on edge devices like these relieves congestion in the network by enabling calculations to be carried out in close proximity to the sources of the data. In order to pave the way for the Internet of Conscious Things, the purpose of this work is to present a review of the primary methods that ensure the execution of machine learning models on hardware with poor performances within the paradigm of the Internet of Things.

No. of Pages : 24 No. of Claims : 5



(54) Title of the invention : TWO COMPONENT ONE STEP SYNTHESIS OF INDAZOLES

<p>(51) International classification :C07D0231560000, C07C0241020000, A61K0031416000, B01J0031240000, C07D0207160000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Dr. Kavitha Siddoju</b>  Address of Applicant :Professor &amp; Head, Department of Chemistry, Chaitanya (Deemed to be University), Kishanpura, Hanamkonda, Telangana State – 506001. Hanamkonda ----- -  -----  <b>2)Dr. Jagadeesh Kumar Ega</b>  <b>3)Laxman. G</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Dr. Kavitha Siddoju</b>  Address of Applicant :Professor &amp; Head, Department of Chemistry, Chaitanya (Deemed to be University), Kishanpura, Hanamkonda, Telangana State – 506001. Hanamkonda ----- -  -----  <b>2)Dr. Jagadeesh Kumar Ega</b>  Address of Applicant :Professor, Department of Chemistry, Chaitanya (Deemed to be University), Kishanpura, Hanamkonda, Telangana State – 506001. Hanamkonda -----  <b>3)Laxman. G</b>  Address of Applicant :Research Scholar, Department of Chemistry, Chaitanya (Deemed to be University), Kishanpura, Hanamkonda, Telangana State – 506001. Hanamkonda ----- -  -----</p>
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(57) Abstract :

Various 3-Bromo-2-naphthonitriles (1a–e) with tert-butylhydrazine carboxylate (2) via CuBr-catalyzed coupling reaction 80°C under DMSO solvent to afford tert-butyl-3-amino-1H-benzo[f]indazole give -1-carboxylates (3a-e) through the coupling pathway shown in Scheme 1. Furthermore, the formation of methyl 3-amino-1H-benzo[f]indazole-1-carboxylates (5a-e) from equivalent reactants with (1a-e) methyl hydrazine carboxylate (4) cascade coupling reaction is shown in Scheme 2.

No. of Pages : 17 No. of Claims : 4

(54) Title of the invention : THE SMART IMPROVEMENT OF AUTOMATIC SOLAR LIGHT TRACKING STRUCTURE BY DEEP LEARNING MODEL

(51) International classification :H02S0020320000, F24S0050200000, F24S0030000000, H01L0031054000, F24S0030425000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Mr. Pilla Srinivas**

Address of Applicant :Mr. Pilla Srinivas Assistant Professor, Department of Computer Science and Engineering, Dadi Institute of Engineering and Technology, Anakapalle-531002, Andhra Pradesh, India. -----

**Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)Mr. Pilla Srinivas**

Address of Applicant :Mr. Pilla Srinivas, Assistant Professor, Department of Computer Science and Engineering, Dadi Institute of Engineering and Technology, Anakapalle-531002, Andhra Pradesh, India -----

**2)Dr. Kausar Jahan**

Address of Applicant :Dr. Kausar Jahan, Assistant Professor, Department of Electronics and Communication Engineering, Dadi Institute of Engineering and Technology, Anakapalle-531002, Andhra Pradesh, India. -----

**3)Dr. Debnath Bhattacharyya**

Address of Applicant :Dr. Debnath Bhattacharyya, Professor, Department of Computer Science and Engineering, K L Deemed to be University, KLEF, Guntur-522502, India. -----

**4)Mr. Venkata Naresh Mandhala**

Address of Applicant :Mr. Venkata Naresh Mandhala, Associate Professor, Department of Computer Science and Engineering, K L Deemed to be University, KLEF, Guntur-522502, India. -----

## (57) Abstract :

Energy crisis is the most important issue in today's world. Conventional energy resources are not only limited but also the prime culprit for environmental pollution. Renewable energy resources are getting priorities in the whole world to lessen the dependency on conventional resources. Solar energy is rapidly gaining the focus as an important means of expanding renewable energy uses. Solar cells those convert sun's energy into electrical energy are costly and inefficient. Different mechanisms are applied to increase the efficiency of the solar cell to reduce the cost. Solar tracking system is the most appropriate technology to enhance the efficiency of the solar cells by tracking the sun. A microcontroller based design methodology of an automatic solar tracker is presented in this paper. Light dependent resistors are used as the sensors of the solar tracker. The designed tracker has precise control mechanism which will provide three ways of controlling system.

No. of Pages : 23 No. of Claims : 4

(51) International classification :G06Q0040060000, G06N0020000000, G06F0040400000, G06F0040300000, G06Q0010060000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Dr. Jagadeesan D**

Address of Applicant :Professor, Department of Computer Science & Engineering, Madanapalle Institute of Technology & Science, Madanapalle, Annamayya District, Andhra Pradesh, India - 517325 -----

**2)Dr. Anandkumar R****3)Dr. Sundar R****4)Galeebathullah B****5)Dr. Sivakoumar R****6)Anandaraj B****7)Bommy M****8)Asha G****9)Dr. Sultanuddin S J****10)Nagaraj J**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Dr. Jagadeesan D**

Address of Applicant :Professor, Department of Computer Science & Engineering, Madanapalle Institute of Technology & Science, Madanapalle, Annamayya District, Andhra Pradesh, India - 517325 -----

**2)Dr. Anandkumar R**

Address of Applicant :Associate Professor, Department of Computer Science & Engineering, Madanapalle Institute of Technology & Science, Madanapalle, Annamayya District, Andhra Pradesh, India - 517325 -----

**3)Dr. Sundar R**

Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Madanapalle Institute of Technology & Science, Madanapalle, Annamayya District, Andhra Pradesh, India - 517325 -----

**4)Galeebathullah B**

Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Madanapalle Institute of Technology & Science, Madanapalle, Annamayya District, Andhra Pradesh, India - 517325 -----

**5)Dr. Sivakoumar R**

Address of Applicant :G1, VSP Ganesh Flats, 5, Nehru Nagar, Chrompet, Tamilnadu, Chennai -----

**6)Anandaraj B**

Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Madanapalle Institute of Technology & Science, Madanapalle, Annamayya District, Andhra Pradesh, India - 517325 -----

**7)Bommy M**

Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Madanapalle Institute of Technology & Science, Madanapalle, Annamayya District, Andhra Pradesh, India - 517325 -----

**8)Asha G**

Address of Applicant :Assistant Professor, Department of ECE, Adhiparasakthi College Of Engineering, G.B. Nagar, Kalavai, Ranipet District, Tamil Nadu, India - 632506 -----

**9)Dr. Sultanuddin S J**

Address of Applicant :Assistant Professor, Department of ECE, MEASI Institute of Information Technology, Chennai, Tamil Nadu, India -----

**10)Nagaraj J**

Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Madanapalle Institute of Technology & Science, Madanapalle, Annamayya District, Andhra Pradesh, India - 517325 -----

## (57) Abstract :

This invention attempts to identify the importance of sentiment words in financial reports on financial risk. By using a finance-specific sentiment lexicon, we apply regression and ranking techniques to analyze the relations between sentiment words and financial risk. The experimental results show that, based on the bag-of-words model, models trained on sentiment words only result in comparable performance to those on origin texts, which confirms the importance of financial sentiment words on risk prediction. Furthermore, the learned models suggest strong correlations between financial sentiment words and the risk of companies. As a result, these findings are of great value for providing us more insight and understanding into the impact of financial sentiment words in financial reports.

No. of Pages : 9 No. of Claims : 7

(54) Title of the invention : A Method For Molecular Traffic Control In A One Dimensional Lattice

<p>(51) International classification :G06F0030200000, G06T0009000000, G16C0020500000, G06N0003120000, G02B0005180000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)R Harish</b> Address of Applicant :S/o. M. Ramanna, Department of Physics, Sapthagiri College of Engineering, Hesaraghatta Main Road, Bengaluru - 560057, Karnataka, India. Bengaluru -----</p> <p>-----</p> <p><b>2)Raghavendra G Deshpande</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)R Harish</b> Address of Applicant :S/o. M. Ramanna, Department of Physics, Sapthagiri College of Engineering, Hesaraghatta Main Road, Bengaluru - 560057, Karnataka, India. Bengaluru -----</p> <p>---</p> <p><b>2)Raghavendra G Deshpande</b> Address of Applicant :S/o. G A Deshpande, Department of Physics, Sapthagiri College of Engineering, Hesaraghatta Main Road, Bengaluru - 560057, Karnataka, India. Bengaluru -----</p> <p>-----</p>
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(57) Abstract :

The present invention relates to physics of elements and more particularly it relates to a method for molecular traffic control in a one dimensional lattice. The study has shown the possibility of casting the Sinai diffusion problem in the language of iterated function system (IFS). In the IFS, two maps derived from the right and left jump probabilities  $p_i$  and  $q_i$  at site  $i$  on a one-dimensional lattice model the binary disorder satisfying the condition  $\sum p_i = \sum q_i = 1$ . We consider the case of a random walk with disorder. We restrict ourselves to binary disorder. This kind of random walk can be treated as an IFS, where the dynamical evolution is governed by a set of two maps chosen randomly.

No. of Pages : 9 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :28/07/2022

(21) Application No.202241043385 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : MODERN ELECTRIC FUSE TO AVOID ELECTRIC ARC TO ENSURE SAFETY IN A MOTOR VEHICLE

(51) International classification :H01H0085055000, G02B0027640000, H01H0085044000, A61F0002160000, H01R0013680000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Mr.S.NISHANT**  
Address of Applicant :Assistant Professor Department of Electrical and Electronics Engineering, St.Joseph College of Engineering, OMR, Chennai-119 Mail id: nishant.electrical06@gmail.com Phone,no.9791712788 --  
-----  
**2)Dr.P.Velmurugan, St.Joseph's College of Engineering**  
**3)Dr.N.Chidambararaj, St. Joseph's College of Engineering**  
**4)Mr.K.Aravindhan, St. Joseph's College of Engineering**  
**5)Mr.R.Sreekanth, St. Joseph's College of Engineering**  
**6)Mr.S.S.Harish, St. Joseph's College of Engineering**  
**7)Dr.S.Sridharan, St. Joseph's College of Engineering**  
**8)Mr.C.M.Vivek, Periyar Maniammai Institute of Science and Technology**  
**9)Dr.P.Ramkumar, Kalasalingam Academy of Research and Education**  
**10)Mr.N.Jeyaprakash, St.Joseph's College of Engineering**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Mr.S.NISHANT**  
Address of Applicant :Assistant Professor Department of Electrical and Electronics Engineering, St.Joseph College of Engineering, OMR, Chennai-119 Mail id: nishant.electrical06@gmail.com Phone,no.9791712788 --  
-----  
**2)Dr.P.Velmurugan, St.Joseph's College of Engineering**  
Address of Applicant :Associate Professor, St.Joseph's College of Engineering, Department of Electrical and Electronics Engineering, OMR, Chennai-119 velupriya10@gmail.com 9976949243 -----  
**3)Dr.N.Chidambararaj, St. Joseph's College of Engineering**  
Address of Applicant :Associate Professor, Department of Electrical and Electronics Engineering, St. Joseph's College of Engineering, OMR, Chennai 119 chidambararaj@stjosephs.ac.in 9840826431 -----  
**4)Mr.K.Aravindhan, St. Joseph's College of Engineering**  
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, St. Joseph's College of Engineering, OMR, Chennai 119 aravindhank@stjosephs.ac.in 9790940165 -----  
**5)Mr.R.Sreekanth, St. Joseph's College of Engineering**  
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, St. Joseph's College of Engineering, OMR, Chennai 119 sreekanthr@stjosephs.ac.in 9789840294 -----  
**6)Mr.S.S.Harish, St. Joseph's College of Engineering**  
Address of Applicant :Assistant professor, Department of Electrical and Electronics Engineering, St. Joseph's College of Engineering, OMR, Chennai-119 harishss@stjosephs.ac.in 9940225739 -----  
**7)Dr.S.Sridharan, St. Joseph's College of Engineering**  
Address of Applicant :Associate Professor, Department of Electrical and Electronics Engineering, St. Joseph's College of Engineering, OMR, Chennai 119 sridharans@stjosephs.ac.in 9444226928 -----  
**8)Mr.C.M.Vivek, Periyar Maniammai Institute of Science and Technology**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Periyar Maniammai Institute of Science and Technology, Thanjavur vivekintense@gmail.com 9791752823 -----  
**9)Dr.P.Ramkumar, Kalasalingam Academy of Research and Education**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Kalasalingam Academy of Research and Education, Srivilliputhur rkmailmech@gmail.com 9791298174 -----  
**10)Mr.N.Jeyaprakash, St.Joseph's College of Engineering**  
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, St.Joseph's College of Engineering, OMR, Chennai-119 reachjeyaprakash@gmail.com 9566704479 -----

(57) Abstract :  
One type of fuse currently known and used in motor vehicles is the so-called MIDI fuse. This fuse has a first contact metal portion, a second contact metal portion, and a melting section connecting the first contact portion with the second contact portion to form a single metal part. In this invention, a safety fuse is provided for use in an electric motor vehicle to ensure overall safety. The first contact portion, the second contact portion, and the melting section lie on a common plane. The melting section is enclosed by a casing made of a non-conductive material, preferably polymeric material. At least part of the first contact portion and at least part of the second contact portion freely protrude from the casing along the same direction in respective opposite directions. The casing protrudes with respect to the common plane on both sides of the plane, for about the same distance from the plane on both sides.

No. of Pages : 11 No. of Claims : 3

## (54) Title of the invention : DIABETIC WOUND HEALING METHOD BY PERFORMING IN VITRO AND IN VIVO EVALUATION USING POLYMERIC FILM USING FLUOXETINE AND RETINOIC ACID

(51) International classification :C01G0009020000, B01J0035000000, A61K0048000000,  
H01L0031180000, C01B0039480000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Mrs. Segu Prathyusha**  
Address of Applicant :Research Scholar, VEL'S INSTITUTE of Science, Technology and Advanced studies (VISTAS), P. V. Vaithiyalingam Rd, Velan Nagar, Krishnapuram, Pallavaram, Chennai, Tamil Nadu 600117 -----  
**2)Dr. Pushpendra Kumar**  
**3)Dr.Vijay kumar Yadav**  
**4)Mrs. Rajni Dubey**  
**5)Mr. Hires Dutt**  
**6)Ms. Sweta Sinha**  
**7)Dr. Bhagwat Nivruttirao Poul**  
**8)Dr. Rahul Shivajirao Solunke**  
**9)Mr. Mohit Agrawal**  
**10)Dr. Kantrol Kumar Sahu**  
**11)Ms. Shikha Goswami**  
**12)Mr. Ayush Garg**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Mrs. Segu Prathyusha**  
Address of Applicant :Research Scholar, VEL'S INSTITUTE of Science, Technology and Advanced studies (VISTAS), P. V. Vaithiyalingam Rd, Velan Nagar, Krishnapuram, Pallavaram, Chennai, Tamil Nadu 600117 - -----  
**2)Dr. Pushpendra Kumar**  
Address of Applicant :Assistant professor Faculty of Pharmacy Uttar Pradesh University of Medical Sciences Saifai, Etawah, Pin Code-206130 , Uttar Pradesh, India -----  
**3)Dr.Vijay kumar Yadav**  
Address of Applicant :Assistant Professor, Department of Pharmacy Dr.Bhimrao Ambedkar University Chhalesar Campus, Agra 282006, Uttar Pradesh , India -----  
**4)Mrs. Rajni Dubey**  
Address of Applicant :Associate professor, School of Pharmacy and Research, People's University Bhopal , Pin- 462037 , Madhya Pradesh ,India -----  
**5)Mr. Hires Dutt**  
Address of Applicant :Associate professor, School of Pharmacy and Research, People's University Bhopal , Pin- 462037 , Madhya Pradesh, India -----  
**6)Ms. Sweta Sinha**  
Address of Applicant :Asst professor, LCIT, School of Pharmacy, Raipur Road, Chirchirda, Bilaspur, Pin- 495223, Chhattisgarh -----  
**7)Dr. Bhagwat Nivruttirao Poul**  
Address of Applicant :Principal, Maharashtra Poly (D.Pharm) Institute , Main Road, Nilanga, Tal: Nilanga, Latur-413521, Maharashtra, India -----  
**8)Dr. Rahul Shivajirao Solunke**  
Address of Applicant :HOD & Associate Professor, Department of Pharmaceutics, Maharashtra College of Pharmacy, Main Road, Nilanga, Tal: Nilanga, Latur-413521, Maharashtra, India -----  
**9)Mr. Mohit Agrawal**  
Address of Applicant :Assistant Professor , Department of Pharmacology, School of Medical & Allied Sciences, K.R. Mangalam University, Gurugram,Pin- 122103 Haryana, India -----  
**10)Dr. Kantrol Kumar Sahu**  
Address of Applicant :Assistant Professor, Institute of Pharmaceutical Research, GLA University, Mathura, UP, 281406 -----  
**11)Ms. Shikha Goswami**  
Address of Applicant :PhD Scholar, Delhi Pharmaceutical Sciences and research University, New Delhi, 110017 -----  
**12)Mr. Ayush Garg**  
Address of Applicant :Associate Profesor, Department of Pharmaceutics, Pacific College of Pharmacy, PAHER University, Pacific Hills, Pratap Nagar Extension, Airport Road, Debari, Udaipur-313024, Rajasthan - -----

(57) Abstract :  
DIABETIC WOUND HEALING METHOD BY PERFORMING IN VITRO AND IN VIVO EVALUATION USING POLYMERIC FILM USING FLUOXETINE AND RETINOIC ACID A method for analysis of aluminium incapacitated zno squeaky films for antibacterial activity. The method includes depicting the XRD peaks of pure and Al- incapacitated ZnO squeaky films which are post-annealed at 300°C, wherein the hexagonal Wurtzite form of the deposited films is confirmed by the diffraction peaks, which match the 36-1451 JCPDS card. Changing the microstrain and crystallite size with variation in Al content, indicating a potential reduction in crystallite size as evidenced by the broadening of the diffraction pattern. Doping the squeaky film of ZnO in pure form and also squeaky films of ZnO Al with a scan region of 3x3µm. The bandgap for pure ZnO squeaky film is 3.15eV and bandgap for (1, 3, and 5) % Al incorporated ZnO squeaky films are 3.12eV, 3.10eV, and 3.06eV. FIG.1

No. of Pages : 19 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241043393 A

(19) INDIA

(22) Date of filing of Application :28/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : IN SILICO APPROACH AND IN VITRO ACETYLCHOLINE ESTERASE INHIBITION ACTIVITY OF COSCINIUM FENESTRATUM ETHANOL SEED EXTRACT FOR ANTI ALZHEIMER ACTIVITY

<p>(51) International classification :G01N0021310000, A61K0031437500, A61K0031473000, G16B0015000000, A61P0025280000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr.Kuntal Das</b> Address of Applicant :Professor Department of Pharmacognosy and Phytochemistry Krupanidhi College of Pharmacy #12/1, Chikkabelandur, Carmelaram, post. Varthur Hobli. Bangalore- 560035. India -----</p> <p><b>2)Ms. Keerthana Ramesh Iyer</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr.Kuntal Das</b> Address of Applicant :Professor Department of Pharmacognosy and Phytochemistry Krupanidhi College of Pharmacy #12/1, Chikkabelandur, Carmelaram, post. Varthur Hobli. Bangalore- 560035. India -----</p> <p><b>2)Ms. Keerthana Ramesh Iyer</b> Address of Applicant :Student Department of Pharmacognosy and Phytochemistry Krupanidhi College of Pharmacy #12/1, Chikkabelandur, Carmelaram post., Varthur Hobli. Bangalore- 560035. India -----</p>
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(57) Abstract :

IN SILICO APPROACH AND IN VITRO ACETYLCHOLINE ESTERASE INHIBITION ACTIVITY OF COSCINIUM FENESTRATUM ETHANOL SEED EXTRACT FOR ANTI ALZHEIMER ACTIVITY Coscinium fenestratum (CF) seed was evaluated for presence of alkaloids especially berberine and confirmed with phytochemical screening, and identification by TLC. Thereafter, acetylcholine esterase inhibition activity was performed for its effectiveness against Alzheimer disease for the ethanol seed extract. It was established first time confirmed by the mechanism through in silico docking study followed by in vitro assay method. Berberine is docked with Alzheimer's protein (PDB ID: 4ACU). The binding energy of Berberine was found to be -8.84. The acetylcholine esterase inhibition activity showed dose dependent manner with IC50 value of 90.49. Additionally, some important elemental analysis was carried out by Atomic Absorption Spectrophotometer and revealed presence of high content of Zinc (Zn) and Copper (Cu) which directly helped in accumulation of alkaloids especially Berberine and high content of saponins in the seed. FIG.1

No. of Pages : 24 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241043498 A

(19) INDIA

(22) Date of filing of Application :29/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A process and method of 100 % reutilization and usage of plastics and ensuring cleaner and greener environment

(51) International classification :C04B0033132000, B09B0003000000, C04B0033135000, C08J0011040000, E04C0001400000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)RAVIKRISHNAN KAKKIRIKKAN**

Address of Applicant :Anjali (H),UC College PO East  
Kadungalur, Aluva-683102,Ernakulam, Kerala, India -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)RAVIKRISHNAN KAKKIRIKKAN**

Address of Applicant :Anjali (H),UC College PO East  
Kadungalur, Aluva-683102,Ernakulam, Kerala, India -----

(57) Abstract :

A method for achieving total conversion of plastic waste materials, used plastics of all types, glass and non wovens into Orangutan bricks which can be used in the construction industry, wherein said Orangutan bricks are made by melting powdered inorganic and non-metallic wastes mixed with raw materials at 90° to 330°c temperature wherein this gives said Orangutan Bricks double the strength and durability of ordinary bricks and at the same time, the said Orangutan Bricks have only half the weight of ordinary bricks. This method of manufacturing Orangutan bricks ensure 100 % utilization of wasted plastic materials and ensure that there are no left overs and thus entail in a situation wherein there are no hazardous and harmful effects of plastic materials on the surface of the earth. The Green house emissions are reduced and environment friendly aspects are taken care of to ensure the Earth is clean and green for future generations.

No. of Pages : 8 No. of Claims : 3



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241043506 A

(19) INDIA

(22) Date of filing of Application :29/07/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : METHOD AND SYSTEM FOR ANALYZING PATIENT DATA FROM ELECTRONIC MEDICAL RECORD

(51) International classification :G16H0010600000, G06N0020000000, G16H0050200000, G16H0050700000, G16H0015000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Cloudphysician Healthcare Pvt Ltd**

Address of Applicant :7, Bellary Road, Ganganagar, Bangalore- 560032, India Bangalore -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dileep C Unnikrishnan**

Address of Applicant :Cholamana, T.K.V Nagar, Kalmandapam, Palakkad, Kerala, India, 678001 Palakkad -----

**2)Dileep Raman**

Address of Applicant :Apt 1041, Shobha Petunia, Bengaluru, Karnataka, India, 560045 Bangalore -----

(57) Abstract :

METHOD AND SYSTEM FOR ANALYZING PATIENT DATA FROM ELECTRONIC MEDICAL RECORD A method and system for analyzing patient data from electronic medical record (EMR) through machine learning (ML) models is disclosed. In some embodiments, the method includes receiving real-time patient data (102) corresponding to the patient; associating an adaptive trial platform (104) and a disease-specific registry (106) of the patient with the EMR to monitor the real-time patient data (102); analysing, through a first ML model (110A), prestored current medical literature to obtain a disease-specific medical literature analysis; and automatically generating at least one recommendation for the patient based on the adaptive trial platform (104), the disease-specific registry (106), the disease-specific medical literature analysis, and the real-time patient data (102) in the EMR for providing real-time clinical decision support to the patient. The real-time patient data (102) includes geographical location of the patient, patient details, and information of a provider associated with the patient. (To be published with FIG. 1)

No. of Pages : 28 No. of Claims : 10

(54) Title of the invention : DIGITAL SCENT TECHNOLOGY

(51) International classification :G06Q0030020000, A61L0009140000, A61L0009120000, G06F0003010000, A45D0034020000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE**

Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR Chennai -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Dr.J.Joyce Jacob**

Address of Applicant :Professor, Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----

**2)ARAVIND G**

Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----

**3)CHITTUMOTHU PAVANKUMAR**

Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----

**4)Prof. S Madhumathi**

Address of Applicant :Assistant Professor, Biomedical Engineering, Prince Dr K Vasudevan College of Engineering and Technology, Ponmar, Chennai - 600127 Chennai -----

**5)Dr.R.Punithavalli**

Address of Applicant :Assistant Professor, Department of Mathematics, Prince Shri Balaji Arts and Science College, Medavakkam-Mambakam Road, Ponmar, Chennai - 600127 Chennai -----

**(57) Abstract :**

The technology has targeted only on our sense of sight and sound so far. This is the reason why we have realistic games, and graphics card. Now with the digital scent technology we are able to sense smell through internet in which a perfume can be smelled online before buying them. As this technology gains extensive assert, there is nothing stopping it from entering into all areas of virtual world. Being able to smell things using a device connected to our smartphone. Digital scent technologies are making this a reality. This paper presents a detailed analysis on broadcasting of smell, hardware devices and applications of digital smell technology. From last 5 to 6 years, scientists have bought the term virtual reality in many applications. One of the experiments with virtual reality has resulted in constructing a device which transmits the smell of online products. The fundamental idea for this was given by the perfume making companies for the advertisements of their perfumes. This is how digital scent technology came into existence.

No. of Pages : 6 No. of Claims : 4

(54) Title of the invention : CYLINDRICAL SHELL ROOF USING BAMBOO AS REINFORCEMENT

(51) International classification :G01N0003080000, E04C0003360000, E04C0003290000, E04C0002340000, D04H0001640000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Dr. G B Krishnappa**

Address of Applicant :Dean (R&amp;D), Vidyavardhaka College of Engineering, Gokulam 3rd Stage, Mysuru - 570 002 -----

**2)Vidyavardhaka College of Engineering****Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)Dr UMESHA P K**

Address of Applicant :Vidyavardhaka College of Engineering, no. 206, 3rd Stage, Gokulam, Mysuru - 570002 Mysuru -----

**2)Prof. ARJUN V**

Address of Applicant :Vidyavardhaka College of Engineering, no. 206, 3rd Stage, Gokulam, Mysuru - 570002 Mysuru -----

**3)Prof. ANJAN B K**

Address of Applicant :Vidyavardhaka College of Engineering, no. 206, 3rd Stage, Gokulam, Mysuru - 570002 Mysuru -----

**4)Mr. SHASHANK S**

Address of Applicant :Vidyavardhaka College of Engineering, no. 206, 3rd Stage, Gokulam, Mysuru - 570002 Mysuru -----

**5)Ms. TANUSH A**

Address of Applicant :Vidyavardhaka College of Engineering, no. 206, 3rd Stage, Gokulam, Mysuru - 570002 Mysuru -----

**6)Mr. MADAN KUMAR Y**

Address of Applicant :Vidyavardhaka College of Engineering, no. 206, 3rd Stage, Gokulam, Mysuru - 570002 Mysuru -----

**7)Mr. RANJAN M**

Address of Applicant :Vidyavardhaka College of Engineering, no. 206, 3rd Stage, Gokulam, Mysuru - 570002 Mysuru -----

## (57) Abstract :

Production of steel is energy consuming process, and it causes environmental pollution due to emission of CO<sub>2</sub>. Bamboo is a naturally available material having more tensile strength to weight ratio than the steel. It is also light weight, economical and abundantly available in our surroundings. In this research an attempt has been made to replace the steel by bamboo in a cylindrical shell supported by beams which is being used as roofing element. Here a model of dimension 1m x1m is casted and tested by applying the load on the crest on 14th and 28th day of curing. The load carrying capacity and the actual deformation are encouraging to use as roofing structural elements.

No. of Pages : 11 No. of Claims : 6

(54) Title of the invention : IoT and AI-based Smart Storage Unit for Food Processing Industry

<p>(51) International classification :G06Q0010060000, G06Q0050120000, G06F0040174000, G06Q0010100000, A47J0043070000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr. B. Muthu Kumar</b> Address of Applicant :School of Computing and Information Technology, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru, Karnataka, India Bangalore</p> <p>-----</p> <p><b>2)Mr. Krishna Mohan Koyya</b> <b>3)REVA UNIVERSITY</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr. B. Muthu Kumar</b> Address of Applicant :School of Computing and Information Technology, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru, Karnataka, India Bangalore</p> <p>-----</p> <p><b>2)Mr. Krishna Mohan Koyya</b> Address of Applicant :Research Scholar, School of Computing and Information Technology, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru, Karnataka, India. Bangalore -----</p>
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(57) Abstract :

Abstract: The fast-food restaurant chains that serve items like pizzas and etc., usually prepare the ingredients in a food processing centre and send them to the outlets based on the demand. The outlet supervisors regularly track the demand-supply of the food products and send the estimates for ingredients to the food processing centre. The food processing centre assimilates the estimates from all the outlets and schedules the work. This whole process depends on the manual intervention at the outlets in terms of checking the currently available quantities by weighing the ingredients, estimating the demand, filling the physical/ electronic forms and sending them to the food processing centre. The smooth functioning of the outlet depends heavily on the commitment, acumen and timely intervention of the supervisor. The problem being attempted to solve is to make the functioning of the business as agnostic as possible to the people and automate the whole process of tracking, estimating and scheduling the demand and supply between the outlets and the food processing centre.

No. of Pages : 11 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :30/07/2022

(21) Application No.202241043676 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : DESIGN AND DEVELOPMENT OF DGS INSPIRED ULTRA WIDE BAND ANTENNA FOR WIRELESS APPLICATIONS

(51) International classification :H01Q0009280000, H01Q0001360000, H01Q0001380000, H04B0001719000, H01Q0001240000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)REVA University**

Address of Applicant :Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka INDIA, 560064 Bangalore -----

**2)SUBHASH B K**

**3)JYOTHY S T**

**4)SAI DEEP K**

**5)CHARAN TEJA N**

**6)SHASHAANK R**

**7)RAVI KUMAR K**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)SUBHASH B K**

Address of Applicant :SCHOOL OF ECE REVA UNIVERSITY RUKMINI KNOWLEDGE PARK, KATTIGENEHALI YELAHANKA BANGALORE 560064 Bangalore -----

**2)JYOTHY S T**

Address of Applicant :: SCHOOL OF ECE REVA UNIVERSITY RUKMINI KNOWLEDGE PARK, KATTIGENEHALI YELAHANKA BANGALORE 560064 Bangalore -----

**3)SAI DEEP K**

Address of Applicant :1652 PIPELINE ROAD PRASHANTH NAGAR T DASRAHALI BANGALORE 560057 Bangalore -----

**4)CHARAN TEJA N**

Address of Applicant :#204/10 SATHYANARAYANA BUILDING, SHARDAMBA NAGAR,JALAHALLI VILLAGE, BANGALORE-13 Bangalore - -----

**5)SHASHAANK R**

Address of Applicant :NO 23 K CHANNAPPA ROAD KAMMANAHALLI MAIN ROAD BANGALORE-560084 Bangalore -----

**6)RAVI KUMAR K**

Address of Applicant :ACHYUTHA NIVASA, TERUBEEDI STREET, SHIKARIPURA 577427, SHIMOGA DISTRICT SHIKARIPURA -----

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(57) Abstract :

With the recent advancement and phenomenal progress in the field of wireless communication technology, there is an ever increasing demand for high data rates and improved quality of service for the end users. In recent times various designs of ultra wideband antennas (UWB) fulfilling diverse objectives have been proposed for modern wireless networks. Design of compact and wideband antenna for high speed, high capacity, and secure wireless communications presents a challenging task for designers of fixed and mobile wireless communication systems. In this paper, a comprehensive review concerning antenna structures and the technologies adopted for design and analysis of UWB antennas for wireless application is reported. Comparative parameters in terms of electrical dimension, bandwidth, Fractional bandwidth (FB) and Bandwidth Dimension Ratio (BDR) are presented which introduces the researchers to the technical challenges in the design of a compact wideband antenna. This paper contributes to present existing novel approaches along with its adequacy in the design techniques. This review exercise will assist the researchers with valuable support for further research and to achieve better impedance matching, wide bandwidth, high gain and good efficiency along with well directive radiation characteristics.

No. of Pages : 15 No. of Claims : 3

(54) Title of the invention : A METHOD FOR PERSONALITY PREDICTION BASED ON HANDWRITING ANALYSIS USING SUPPORT VECTOR MACHINE

<p>(51) International classification :G06K0009620000, G06N0020000000, G06F0003035400, G06F0040279000, H04N0013000000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Prof. Sohara Banu A R</b> Address of Applicant :School of Computer Science and Engg, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----</p> <p><b>2)Dr. Farooque Azam</b> <b>3)Thriveni V</b> <b>4)Prof. Asha K</b> <b>5)Dr. Ashwin Kumar U M</b> <b>6)REVA University</b> <b>7)Tejashree A J</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Prof. Sohara Banu A R</b> Address of Applicant :School of Computer Science and Engg, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----</p> <p><b>2)Dr. Farooque Azam</b> Address of Applicant :School of Computer Science and Engg, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----</p> <p><b>3)Thriveni V</b> Address of Applicant :School of Computer Science and Engg, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----</p> <p><b>4)Prof. Asha K</b> Address of Applicant :School of Computer Science and Engg, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----</p> <p><b>5)Dr. Ashwin Kumar U M</b> Address of Applicant :School of Computer Science and Engg, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----</p> <p><b>6)Tejashree A J</b> Address of Applicant :School of Computer Science and Engg, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----</p>
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## (57) Abstract :

Emotional stability, Will Power, Modesty, Lack of discipline, Personal Harmony, Non-communicativeness, Social Isolation, and poor concentration are some of the personality qualities that our idea aims to predict. Graphology is approach for determining a person's personality traits by evaluating numerous traits in the handwriting. The page margin, the baseline, letter size, pen pressure, the slant of the alphabets, line spacing, and word spacing are the most important aspects of handwriting to consider. The invention intends to build a machine learning model which could do the same job as a graphologist. The idea is to use a supervised learning model called a support vector machine. It's effective in high-dimensional spaces, memory-efficient, and versatile: the decision function can be set with multiple Kernel functions. Custom kernels can be supplied in addition to the standard kernels.

No. of Pages : 17 No. of Claims : 2

(54) Title of the invention : Enhanced Protected Statistics Dispersal by CC-ABE in Cloud Location aimed at Stoic medical document

<p>(51) International classification :G06Q0030020000, H04L0029060000, G06F0003038000, H04L0029080000, G06F0021620000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr. M.Sangeetha</b> Address of Applicant :School of Computing and Information Technology, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru, Karnataka, India Bangalore</p> <p>-----</p> <p><b>2)Neela V</b> <b>3)Bhavya K R</b> <b>4)REVA University</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr. M.Sangeetha</b> Address of Applicant :School of Computing and Information Technology, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru, Karnataka, India Bangalore</p> <p>-----</p> <p><b>2)Neela V</b> Address of Applicant :School of Computing and Information Technology, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru, Karnataka, India Bangalore</p> <p>-----</p> <p><b>3)Bhavya K R</b> Address of Applicant :School of Computing and Information Technology, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru, Karnataka, India Bangalore</p> <p>-----</p>
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## (57) Abstract :

The goal of the exploration is centred around distributed computing for creating plan to distribute securely to constant files. Data distribution is described as broadcast of somewhere around single reports beneficially and methodology which used to share information's, qualities, file within various customers and also relationship in locked mode and checks from untouchable customers. Typically, this is done by encoding and unravelling procedure done secluded framework. The sort of data distribution is done with novel advancement of Collaborative joined ABE(CC-ABE). This is used to make safe file distribution by having bound admittance advancement. It is creating technique which been checked in lenient discrete prosperity greatest maintenance. These archives are logged and recuperated securely short of entree by non-accepted customers. CC-ABE encryption structure is substantial to deliver for versatile and safe distribution of data in circulated processing, it may support steady prosperity making records in progressively protective way. In CC-ABE technique, the nuances of patient are taken care of in CC-ABE server ranch. In CC-ABE, Main patron simply ignore the entry done without of the encryption. Thusly the relating open minded simply save the choices to go with this CC-ABE advancement. It stretches safer data distribution than other encryption structure. The key usage of this method is less of key generation and encryption time. It can achieve fewer encoding time and significant stage period to further develop usefulness of CC-ABE.

No. of Pages : 8 No. of Claims : 3

(54) Title of the invention : RFID with GSM module based Smart Door Lock

<p>(51) International classification :G07C0009330000, G07C0009230000, G06Q0090000000, G08B0005360000, G99Z0099000000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)REVA University</b>  Address of Applicant :Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka INDIA, 560064 Bangalore -----  <b>2)Anil Kumar C S</b>  <b>3)Debarun Ghosh</b>  <b>4)Ayan Kumar Mal</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Anil Kumar C S</b>  Address of Applicant :School of ECE, Reva University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka INDIA, 560064 Bangalore -----  <b>2)Debarun Ghosh</b>  Address of Applicant :Prestige Royale Gardens, Flat 7112, Doddaballapur Rd, Yelahanka, Bengaluru - 560064 Bangalore ----  -----  <b>3)Ayan Kumar Mal</b>  Address of Applicant :: #31, Sri Maheswari Mahal,1st Main Road, Kemmpana Block, Palace Guttahalli, Bengaluru 560003 Bangalore -----</p>
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(57) Abstract :

As technology advances, securing our children and home from unwanted mishaps has become necessary. Many antiviruses and tracking prevention software keep us safe, secure, and notified while surfing the electronic world. However, what about our children's who come home after school? It is known that they do not carry phones to contact! It is seen that several technological evolvments on matters like camera surveillance etc. When it comes to tracking our loved ones, there are various tools and software, but nothing has come close to something that can work without Wi-Fi insertion. Considering this, the system has been designed in a way that can work as a security lock for doors and a mode to track who is entering the building. The device is mapped with RFID connected to microcontroller with supporting peripherals like – GSM Module for message transmission between the door lock and the parent's phone. Also, with keypad for added security stage for completing the entire authentication process. These security stages will ensure smooth entry for children, and zero security breaches as hacking any SIM is impossible. Hence the aim is to find out the most efficient, reliable, and accustomed to human ease utilization and low cost and minimal maintenance facility

No. of Pages : 13 No. of Claims : 3



(54) Title of the invention : SEGREGATION OF WASTE AND ANTI SEPTICIZATION

(51) International classification :B09B0001000000, B09B0003000000, C22B0007000000, C05F0017500000, G06Q0010000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)REVA University**

Address of Applicant :Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka INDIA, 560064 Bangalore -----

**2)Ms. Aswini P****3)DEEKSHITH A****4)HARISH S****5)HARSHITH KUMAR S****6)HEMANTH R**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Ms. Aswini P**

Address of Applicant :Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, INDIA, 560064 Bangalore -----

**2)DEEKSHITH A**

Address of Applicant :Nalli maradahalli, sidlaghatta 562105 sidlaghatta -----

**3)HARISH S**

Address of Applicant :Bhagath Enclave, Yelahanka, Bengaluru - 560064 Bangalore -----

**4)HARSHITH KUMAR S**

Address of Applicant :#22, Anjanadri Nilaya, Near Vijaya Shree School, New Extension, Manjunath Nagar, Bengaluru - 560073 Bangalore -----

**5)HEMANTH R**

Address of Applicant :#22/200, 4th cross, Parimala Nagar, Nandini Layout, Bengaluru - 560096 Bangalore -----

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## (57) Abstract :

With ever increasing urbanization and growth all over the world, we need a stable and sustainable development plan. One of the vital parts of the urban development plan is proper waste management in which waste collection is a very complicated process which involves efficient management of the entire system, beginning with the collection to the dumping of wastes hygienically. Segregation of collected waste is essential due to the fact that if all waste materials such as polythene bags, old furniture, and e-waste get mixed up in the landfills, it could lead towards contamination of the land through leaking toxic substances. Wet waste fraction is converted either into compost or methane gas. Compost can replace chemical fertilizers demands, and biogas can be used as a source of energy. The metallic, plastic and paper waste can be reused or recycled. An automated waste segregation process is the most basic requirement for kick-starting management process. The mentioned tasks can be achieved by separating the basic wastes that can be easily separated by using modern techniques like using sensors, machine learning, AI, to identify and detect the types and simple controllers to segregate the items and collect it to separate bins.

No. of Pages : 10 No. of Claims : 6

(54) Title of the invention : Novel Model for Event Criticality Detection, Classification, & Propagation for Natural Calamities Data in Social Media

<p>(51) International classification :G06Q0050000000, H04L0012580000, H04L0029080000, H04W0004020000, H04W0004120000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Dr. Geeta C Mara</b>  Address of Applicant :School of Computing and Information Technology, REVA University, Bengaluru, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Karnataka, India Bangalore -----</p> <p>-----  <b>2)Mrs. Rashmi K T</b>  <b>3)REVA University</b>  Name of Applicant : NA  Address of Applicant : NA</p> <p>(72)Name of Inventor :  <b>1)Dr. Geeta C Mara</b>  Address of Applicant :School of Computing and Information Technology, REVA University, Bengaluru, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Karnataka, India Bangalore -----</p> <p>-----  <b>2)Mrs. Rashmi K T</b>  Address of Applicant :School of Computing and Information Technology, REVA University, Bengaluru, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Karnataka, India Bangalore -----</p> <p>-----</p>
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(57) Abstract :

5. Abstract With an extensive usage of interactive application over internet over various stages in life, the evolution of social media assists people to construct relationship with both known and unknown member. Apart from personal usage, social networking application has extensive utilization in spreading awareness for social cause, updating essential information which makes the local information spread into global network without any additional cost or resources. The information propagated in social media could be in the form of image, text, audio, and video. This research work focuses on using social network for critical information propagation where information is considered as events of natural calamities. In real-life environment, the information about natural calamities are primarily reported either by victim or some witness of the event (now called as user). However, as this information, which is normally in the form of image, propagation is completely dependent on the capacity of the circle of user, there are more chances that the criticality of the information will be less understood by the connected members of user. At the same time, it is manually impossible to determine the criticality of the natural disaster just from image captured by user, which could have possibly many artifacts. Hence, the proposed work presents a solution towards this challenge by evolving up with computational model which is capable of understanding the criticality of event of natural calamities using classification model while the critical information is forwarded to correct intended

No. of Pages : 10 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :30/07/2022

(21) Application No.202241043693 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : HEART PATIENT SCANNING AND MONITORING USING MACHINE LEARNING

(51) International classification :A61B0005000000, A61B0005024000, A61B0005021000, A61B0005020500, G16H0050200000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :**

**1)Mr. Hanumant Pujar**

Address of Applicant :Assistant Professor, Department of Information Science and Engineering, East Point College of Engineering and Technology, Jnanaprabha Campus, Virgo Nagar Post, Bidarahalli, Bangalore-560049 Bangalore -----

**2)Mr. Pavan Mulgund**

**3)Ms. Indumathi S**

**4)Swetha R**

**5)Ashwini S**

**6)Vaishali Shende**

**7)Dr. Nanda Ashwin**

**8)Tejaswini B**

**9)Dr. Udayabalan Balasingam**

**10)Netra S N**

**Name of Applicant : NA**

**Address of Applicant : NA**

**(72)Name of Inventor :**

**1)Mr. Hanumant Pujar**

Address of Applicant :Assistant Professor, Department of Information Science and Engineering, East Point College of Engineering and Technology, Jnanaprabha Campus, Virgo Nagar Post, Bidarahalli, Bangalore-560049 Bangalore -----

**2)Mr. Pavan Mulgund**

Address of Applicant :Assistant Professor, Department of Information Science and Engineering, East Point College of Engineering and Technology -560049 Bangalore -----

**3)Ms. Indumathi S**

Address of Applicant :Research Scholar, Department of Information Science and Engineering, East Point College of Engineering and Technology Assistant Professor, East Point College of Engineering and Technology -560049 Bangalore -----

**4)Swetha R**

Address of Applicant :Assistant professor, Department of Information Science and Engineering, East Point College of Engineering and Technology -560049 Bangalore -----

**5)Ashwini S**

Address of Applicant :Assistant professor, Department of Computer Science and Engineering, East Point College of Engineering and Technology -560049 Bangalore -----

**6)Vaishali Shende**

Address of Applicant :Assistant professor, Department of Information Science and Engineering, East Point College of Engineering and Technology -560049 Bangalore -----

**7)Dr. Nanda Ashwin**

Address of Applicant :Professor, Department of Information Science and Engineering, East Point College of Engineering and Technology -560049 Bangalore -----

**8)Tejaswini B**

Address of Applicant :Assistant professor, Department of Information Science and Engineering, East Point College of Engineering and Technology -560049 Bangalore -----

**9)Dr. Udayabalan Balasingam**

Address of Applicant :Associate professor, Department of Information Science and Engineering, East Point College of Engineering and Technology -560049 Bangalore -----

**10)Netra S N**

Address of Applicant :Assistant professor, Department of Information Science and Engineering, East Point College of Engineering and Technology -560049 Bangalore -----

**(57) Abstract :**

Monitoring a user's health continuously is one of the purposes of the inventions described herein. To determine whether a user has normal health in comparison to, say, PPG signals, heart rate, or blood pressure, the present disclosure describes systems, methods, devices, software, and platforms for continuously monitoring a user's health-indicator data (for example and without limitation, PPG signals, heart rate, or blood pressure) from a user device.

No. of Pages : 24 No. of Claims : 6

(54) Title of the invention : Implementation of Real time design of crowd enumeration via tracking using AI system

<p>(51) International classification :G06K0009000000, G06K0009620000, G06K0009460000, G06N0020000000, G06N0003040000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Dr Manjunath R Kounte</b>  Address of Applicant :Computer Engineering, School of ECE, REVA University, Rukmini knowledge Park, Bengaluru- 560064 Bangalore -----  <b>2)Jonnalgadda Rishitha</b>  <b>3)Sneha Sarika Setty</b>  <b>4)SHIVANI. S</b>  <b>5)REVA University</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Dr Manjunath R Kounte</b>  Address of Applicant :Computer Engineering, School of ECE, REVA University, Rukmini knowledge Park, Bengaluru- 560064 Bangalore -----  <b>2)Jonnalgadda Rishitha</b>  Address of Applicant :5-81, Siri Nilayam, behind K.P.S., Maruthi layout, Shanthi Nagar, Kuppam, Chittoor district Andhrapradesh, 517425 Kuppam -----  <b>3)Sneha Sarika Setty</b>  Address of Applicant :#60,4thcross,manjunatha layout,singapura, vidyaranya pura post,bangalore-560097 Bangalore -----  -----  <b>4)SHIVANI. S</b>  Address of Applicant :#7, Malliga Nilayam, Nandini Layout, R S Palya, kammanahalli main road, Bangalore 560033 Bangalore ----  -----</p>
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(57) Abstract :

Crowd enumeration can help to evaluate and count the number of visitors to a place. There are many reasons that span a wide range of applications, from security considerations, optimization of operations to efficiency in profitability. In the paper, we propose to develop a prototype for implementing a high frame rate, low processing environment, high performance, and highly efficient real-time crowd enumeration system. The latest method for object detection is deep learning. When it comes to deep learning or machine learning, performance and computation are the key parameters. In our model, there is a provision to schedule the model for the required amount of time. In our work, we are using mobilenet SSD as an object detector to detect humans. It is a preprocessed, highly efficient, and light weight model which can run on low power devices like jetson nano and is cost-efficient unlike others. The advantage of our model is if there is overcrowding in a specified location with known capacity, alarm is enabled

No. of Pages : 12 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :30/07/2022

(21) Application No.202241043753 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : New Nanofertilizers to improve plant mineral nutrition for eco crop production

(51) International classification :C05D0009020000, C05G0005300000, B01J0035000000, B01J0035100000, C23C0016455000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr. E. Sreedevi**  
Address of Applicant :Lecturer in Botany, Department of Collegiate Education, Govt. College (Autonomous), Anantapur, Andhra Pradesh, India, Pincode: 515001 Anantapur -----  
**2)Mrs. M. Vishnu Priya**  
**3)Dr. D. Nagarjuna Reddy**  
**4)Dr. S. Thirumalaairajan**  
**5)Mr. Dwity Sundar Rout**  
**6)Dr. Y. Ganesh Kumar**  
**7)Mrs. V. Anusha**  
**8)Dr. Venugopal Muralidharan**  
**9)Mrs. Galipelly Sunitha**  
**10)Mr. Yagnambhatla Rajendra**  
**11)Dr. D. V. Lokeswar Reddy**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr. E. Sreedevi**  
Address of Applicant :Lecturer in Botany, Department of Collegiate Education, Govt. College (Autonomous), Anantapur, Andhra Pradesh, India, Pincode: 515001 Anantapur -----  
**2)Mrs. M. Vishnu Priya**  
Address of Applicant :Lecturer in Botany, Department of Collegiate Education, Govt. College (Autonomous), Anantapur, Andhra Pradesh, India, Pincode: 515001 Anantapur -----  
**3)Dr. D. Nagarjuna Reddy**  
Address of Applicant :Associate Professor, Department of Chemistry, Best Innovation University, Gorantla, Sri SathyaSai (Dist), Andhra Pradesh, India, Pincode: 515231 Anantapur -----  
**4)Dr. S. Thirumalaairajan**  
Address of Applicant :DBT - Ramalingaswami Re-entry Faculty Fellow, Department of Nano Science & Technology, Tamil Nadu Agricultural University, Coimbatore, Tamilnadu, India, Pincode:641003 Coimbatore -----  
**5)Mr. Dwity Sundar Rout**  
Address of Applicant :Ph.D. Scholar, Department of Agricultural Extension Education, M. S. Swaminathan School of Agriculture, Centurion University of Technology and Management, Paralakhemundi, Odisha, India, Pincode: 761211 Paralakhemundi -----  
**6)Dr. Y. Ganesh Kumar**  
Address of Applicant :Associate Professor & HOD, Department of Pharmaceutics, KVK College of Pharmacy, Surmaiguda (V), Lashkarguda (G.P), Abdullapurmet (M), R.R Dist., Telangana, India, Pincode: 501512 Abdullapurmet -----  
**7)Mrs. V. Anusha**  
Address of Applicant :Assistant Professor, Department of Pharmaceutics, KVK College of Pharmacy, Surmaiguda (V), Lashkarguda (G.P), Abdullapurmet (M), R.R Dist., Telangana, India, Pincode: 501512 Abdullapurmet -----  
**8)Dr. Venugopal Muralidharan**  
Address of Applicant :Associate Professor, Department of Pharmaceutical Chemistry, Vishnu Institute of Pharmaceutical Education and Research, Narsapur, Hyderabad, Telangana, India, Pincode: 502313 Hyderabad -----  
**9)Mrs. Galipelly Sunitha**  
Address of Applicant :Research Scholar, Department of Botany, Kakatiya University, Warangal, Telangana, India, Pincode: 506009 Warangal -----  
**10)Mr. Yagnambhatla Rajendra**  
Address of Applicant :Associate Professor, Department of Pharmaceutical Chemistry, MAK College of Pharmacy, Moinabad, Rangareddy, Telangana, India, Pincode: 501504 Moinabad -----  
**11)Dr. D. V. Lokeswar Reddy**  
Address of Applicant :Assistant Professor, Humanities and Social Sciences Department, JNTU College of Engineering, Pulivendula, Kadapa, Andhra Pradesh, India, Pincode: 516390 Pulivendula -----

(57) Abstract :

Nano fertilizers that include at least one plant nutrient coated onto a metal Nanoparticle are obtainable by implementations of the present disclosure that are disclosed herein. A method of producing nanofertilizers is provided by certain embodiments. This technique involves supplying a metal Nanoparticle and then coating the metal Nanoparticle with at least one plant nutrient or a precursor thereof. A method of producing a nanofertilizers may, in some implementations, involve the formation of a solution by combining a metal salt and a plant nutrient in an aqueous medium to make the solution, followed by the addition of a reducing agent to the solution in order to form a coated metal Nanoparticle. Boron nanofertilizers and techniques for their production are provided by certain implementations of the invention. A method of correcting a plant nutrient shortfall is provided by certain implementations of the invention. One example of such a deficiency is a boron deficiency. Additionally, certain implementations allow for the availability of a kit for the production of a plant nutrient loaded Nanoparticle.

No. of Pages : 26 No. of Claims : 4

(54) Title of the invention : PREPARATION OF E-GLASS FIBRE REINFORCED EPOXY BASED HYBRID COMPOSITES FILLED WITH RHA/WDA/RHAWDA FOR WATER TANK AND ROOF SHEET MANUFACTURING

<p>(51) International classification :B27G0003000000, C04B0018100000, C02F0001280000, C08K0003040000, B32B0037140000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Mr. Vidya Sagar Battula</b> Address of Applicant :Research Scholar, Department of Mechanical engineering, Andhra University College of Engineering, Andhra University, South Campus, Waltair Junction, Vishakhapatnam Andhra Pradesh, India – 530003 Visakhapatnam</p> <p>-----</p> <p><b>2)Dr. K. Venkata Subbaiah</b> <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Mr. Vidya Sagar Battula</b> Address of Applicant :Research Scholar, Department of Mechanical engineering, Andhra University College of Engineering, Andhra University, South Campus, Waltair Junction, Vishakhapatnam Andhra Pradesh, India – 530003 Visakhapatnam</p> <p>-----</p> <p><b>2)Dr. K. Venkata Subbaiah</b> Address of Applicant :Senior professor &amp; Head of the Department of Mechanical engineering Andhra University College of Engineering Andhra University, South Campus Waltair Junction, Andhra Pradesh, India – 530003 Visakhapatnam -----</p> <p>--</p>
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## (57) Abstract :

The Present inventions discloses A E-glass fibre Reinforced Epoxy Based Hybrid Composites preparation filled with: RHA (rice husk ash) ; or WDA( wood dust ash); or RHAWDA (rice husk ash and wood dust ash); for water tank and roof sheet manufacturing. To enhance the properties of composites and to reduce the manufacturing or fabrication cost, the researchers are using various industrial waste materials as polymer modifiers or fillers. The usage of these fillers in large scales can reduce the environmental pollution and also the disposal problems.

No. of Pages : 15 No. of Claims : 5

(54) Title of the invention : 3D Printer with a Filament Detection System

(51) International classification :B29C0064118000, B29C0064209000, B33Y0040000000, B33Y0050020000, A61B0017000000

(86) International Application No Filing Date :PCT// :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number Filing Date :NA :NA

(62) Divisional to Application Number Filing Date :NA :NA

## (71)Name of Applicant :

**1)Aditya Engineering College**

Address of Applicant :ADB Road, Aditya Nagar, Surampalem, East Godavari, Andhra Pradesh, India – 533437. Surampalem -----

---

**2)Aditya College of Engineering and technology****3)Aditya College of Engineering**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Karedla Lakshmi Kishore**

Address of Applicant :Associate Professor, Department of ME, Aditya Engineering College, ADB Road, Aditya Nagar, Surampalem, East Godavari, Andhra Pradesh, India – 533437. Surampalem -----

---

**2)J D Venkatesh**

Address of Applicant :Sr. Assistant Professor, Department of ME, Aditya Engineering College, ADB Road, Aditya Nagar, Surampalem, East Godavari, Andhra Pradesh, India – 533437. Surampalem -----

---

**3)Dr. R V V Krishna**

Address of Applicant :HOD (ECE) , Aditya College of Engineering and Technology, ADB Road, Aditya Nagar, Surampalem, East Godavari, Andhra Pradesh, India – 533437. Surampalem -----

**4)M. Rambabu**

Address of Applicant :Assistant Professor, Department of ME, Aditya College of Engineering and Technology, ADB Road, Aditya Nagar, Surampalem, East Godavari, Andhra Pradesh, India – 533437. Surampalem -----

**5)Tadi Satya Kumari**

Address of Applicant :Associate Professor, Department of CSE, Aditya College of Engineering, ADB Road, Aditya Nagar, Surampalem, East Godavari, Andhra Pradesh, India – 533437. Surampalem -----

---

**6)Peyyala Sree Devi**

Address of Applicant :Associate Professor, Department of Mechanical, Aditya College of Engineering, ADB Road, Aditya Nagar, Surampalem, East Godavari, Andhra Pradesh, India – 533437. Surampalem -----

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## (57) Abstract :

ABSTRACT: Title: 3D Printer with a Filament Detection System The present disclosure proposes a 3D printer with a filament detection system. The filament detection system 100 comprises a filament detection module 102, a processing module 104, and a control module 106. The filament detection system 100 detects multiple parameters of the filament and controls the 3D printer, and thereby prevents jamming and clogging of filament in the 3D printer. The proposed filament detection system 100 detects various characteristics of the filament to control the 3D printer. The proposed filament detection system 100 activates the 3D printer, after detection of the filament and thereby reduces the power consumption. The proposed filament detection system 100 facilitates automatic adjustment of the nozzle diameter, printing speed and also allows for adjusting the distance between the nozzle and the building surface based on the parameters of the filament.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :31/07/2022

(21) Application No.202241043791 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : ROTATABLE ROOFTOP SHIELD PROTECTED CAMERA IN VEHICLE OPERATED THROUGH CONTROL DEVICE AND MOBILE APPLICATION

<p>(51) International classification :H04N0005225000, H04N0005232000, H04N0007180000, B60R0011020000, H04L0029080000</p> <p>(86) International Application No :PCT// / Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Kesavamoorthy R.</b> Address of Applicant :23, South Car Street, Sivakasi. ----- ----- <b>2)Puneeth M.</b> <b>3)Pavan Kumar P.</b> <b>4)Raja M.</b> <b>5)CMR Institute of Technology, Bengaluru</b> Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : <b>1)Dr. Kesavamoorthy R.</b> Address of Applicant :Associate Professor, Department of Computer Science and Engineering, CMR Institute of Technology, Bengaluru Bangalore ----- <b>2)Puneeth M.</b> Address of Applicant :#01, Kurubarapalya, Medigeshe, Tumakuru, Karnataka Tumkur ----- <b>3)Pavan Kumar P.</b> Address of Applicant :#57, 4th Main, 7th Cross, SR Nagar, Bangalore South, Bangalore, Karnataka Tumkur ----- -- <b>4)Raja M.</b> Address of Applicant :Professor, Department of Computer Science and Engineering, CMR Institute of Technology, Bengaluru Bangalore -----</p>
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(57) Abstract :

The best part of travelling is sharing the experiences with others. As fun and wonderful as they all were, sometimes it is difficult to share about those experiences, if those travel moments are not captured visually. And it is still more difficult if you are a lone traveller and drives vehicle self. One can use the dashboard camera in car to capture the experiences, but because of the limitations in those types of cameras, it will not give what our eyes see. It will be better if there is an eye for the vehicle that captures all the moments that we intend to be captured. The present invention has been made in the view of the above mentioned situation; where in there will a camera placed on the rooftop of the car or any vehicle that can be controlled from the control device inside the car and also through a mobile application. This camera also comes up with a shield to protect itself from the external environment. Through the control device inside the vehicle or through the mobile app we can; open and close the shield, open and close the camera, rotate the camera in 360 degree and capture the video. There is microphone facility provided in the control device and also in the mobile app through which the user can record voice from inside the vehicle. The recorded video along with audio will get saved in the mobile and that can be used to share in the social medial. This way of using a rotatable camera fixed on the roof top of the vehicle controlled from inside the car through control device and mobile app will not only give high quality visuals but also avoids the risk of getting distracted by using mobile phone to capture videos while driving vehicle.

No. of Pages : 15 No. of Claims : 10



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :01/08/2022

(21) Application No.202241043811 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : Analysis of medical records of patients using artificial intelligence

(51) International classification :G16H0010600000, G06Q0050220000, G16H0050200000,  
G16H0050700000, G16H0015000000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr P Sampath**  
Address of Applicant :Dean, School of Computing, DEPARTMENT:CSE, Easa College of Engineering and technology, Coimbatore -----  
**2)Dr. SUNIL TAMBVEKAR**  
**3)Dr. S.P. Subashini**  
**4)Dr R Sujatha**  
**5)Mrs. G. Sirisha**  
**6)Saini Jacob Soman**  
**7)Mr.J Logeshwaran**  
**8)Mr. Arun Singh Bhadwal**  
**9)Mr. KRISHNAKUMAR S**  
**10)Dr Shital Kiran D. P.**  
**11)Dr Seema Bargale**  
**12)Dr. V. Kannan**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr P Sampath**  
Address of Applicant :Dean, School of Computing, DEPARTMENT:CSE, Easa College of Engineering and technology, Coimbatore -----  
**2)Dr. SUNIL TAMBVEKAR**  
Address of Applicant :Assistant Professor, Dept. Of Obstetrics and Gynecology, Nowrosjee Wadia Maternity Hospital affiliated to Seth GS Medical College, Mumbai-400012 -----  
**3)Dr. S.P. Subashini**  
Address of Applicant :Dean, Nursing, Galgotias School of Nursing, Galgotias University, Greater Noida -----  
**4)Dr R Sujatha**  
Address of Applicant :Assistant Professor, Computer Science, PSG College of Arts & Science, Coimbatore ----  
**5)Mrs. G. Sirisha**  
Address of Applicant :Assistant Professor , MCA, Loyola Academy, Degree and PG College, Alwal, Secunderabad-500010 -----  
**6)Saini Jacob Soman**  
Address of Applicant :Saini jacob Soman Poomkavil House Tholicode PO, Punalur - 691333 -----  
**7)Mr.J Logeshwaran**  
Address of Applicant :Research Scholar, Department of Electronics and Communication Engineering, Sri Eshwar College of Engineering, Coimbatore -----  
**8)Mr. Arun Singh Bhadwal**  
Address of Applicant :Research Scholar, Computer Science and Engineering, NIT uttrakhand, Srinagar Garwal -----  
**9)Mr. KRISHNAKUMAR S**  
Address of Applicant :Assistant Professor, ece, K. S. R. College of Engineering, Namakkal -----  
**10)Dr Shital Kiran D. P.**  
Address of Applicant :Professor, Pediatric and Preventive Dentistry, College of Dental Science, Amargadh, Bhavnagar -----  
**11)Dr Seema Bargale**  
Address of Applicant :Professor, Pediatric and Preventive Dentistry, K. M. Shah Dental College and Hospital, Sumandeep Vidyapeeth Deemed to be University, Vadodara -----  
**12)Dr. V. Kannan**  
Address of Applicant :Managing director, CLDC Research and Development No.997, Mettupalayam Road, Near X-Cut Signal,R.S.Puram, Coimbatore-641002 -----

(57) Abstract :

An electronic health record (EHR) or electronic medical record (EMR) is a systematic collection of electronically stored patient and population health information in digital form. These records can be shared across different healthcare settings. Records are shared through networked, enterprise-wide information systems or other information networks and exchanges. EHRs can contain a wealth of data, including demographics, medical history, medications and allergies, immunization status, laboratory test results, radiology images, vital signs, personal statistics such as age and weight, and billing information. EHR systems are designed to accurately store data and capture patient status over time. This eliminates the need to find a patient's previous paper medical records and helps ensure that the data is accurate and legible. This reduces the risk of data duplication as there is only one transferable file, meaning the file is up-to-date, and reduces the risk of lost paperwork. Because digital information is searchable and in one file, EMRs are particularly useful when extracting clinical data to examine potential trends and long-term changes in a patient. Population-based studies of medical records may be facilitated by the widespread adoption of EHRs and EMRs.

No. of Pages : 10 No. of Claims : 6

(54) Title of the invention : Study on incentive payment of employee influence the overall work performance

(51) International classification :G06Q0030020000, G06Q0010100000, G06Q0010060000, B42D0015040000, G06F0016930000

(86) International Application No :PCT//

Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)Dr.K.Kumaravel**  
Address of Applicant :Director, Vinayaka Processing Mills (Textiles), Erode -----

**2)Mrs Syed SalehaJaved Abbas**

**3)Dr.Ankita shukla**

**4)Dr. Ashish Rami**

**5)Mr. Saini Jacob Soman**

**6)Mr KUSHALKUMAR NIJALING KURANI**

**7)Dr. Asim Kumar Rajbhar**

**8)Dr. Priyadarshini Nidhan**

**9)Dr.Snehil Dahima**

**10)Mr.J Logeshwaran**

**11)Dr.Kinjal. Shah**

**12)Dr. V.Kannan**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr.K.Kumaravel**  
Address of Applicant :Director, Vinayaka Processing Mills (Textiles), Erode -----

**2)Mrs Syed SalehaJaved Abbas**  
Address of Applicant :Assistant Professor, Business Economics, Hassaram Rijhumal College of Commerce and Economics, Mumbai-400020 -----

**3)Dr.Ankita shukla**  
Address of Applicant :Assistant Professor, MBA, Noida Institute of Engineering And Technology , Greater Noida - 201306 -----

**4)Dr. Ashish Rami**  
Address of Applicant :Associate Professor, Management, Rai School of Management Studies, Rai University, Ahmedabad -----

**5)Mr. Saini Jacob Soman**  
Address of Applicant :Poomkavil House, Tholicode PO Punalur 691333 Kerala -----

**6)Mr KUSHALKUMAR NIJALING KURANI**  
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF MANAGEMENT STUDIES (BMS), CHANGU KANA THAKUR COLLEGE OF ARTS COMMERCE AND SCIENCE ,NEW PANVEL (AUTONOMOUS), NEW PANVEL -----

**7)Dr. Asim Kumar Rajbhar**  
Address of Applicant :Assistant Professor, Department of Rural Management, School of Management and Commerce, Babasaheb Bhimrao Ambedkar University (A Central University) -----

**8)Dr. Priyadarshini Nidhan**  
Address of Applicant :Asst. Professor HR Department Lala lajpatrai institue of management Mumbai Maharashtra -----

**9)Dr.Snehil Dahima**  
Address of Applicant :Assistant Professor, Computer Applications, SIES College of Management Studies, Mumbai -----

**10)Mr.J Logeshwaran**  
Address of Applicant :Research Scholar, Department of Electronics and Communication Engineering, Sri Eshwar College of Engineering, Coimbatore -----

**11)Dr.Kinjal. Shah**  
Address of Applicant :Assistant professor, Assistant professor, Lala Lajpatrai Institute of Management, Mumbai -----

**12)Dr. V.Kannan**  
Address of Applicant :Managing director, CLDC Research and Development No.997, Mettupalayam Road, Near X-Cut Signal,R.S.Puram, Coimbatore-641002 -----

## (57) Abstract :

Study on incentive payment of employee influence the overall work performance Abstract Recharging works like a non-monetary motivation, and this motivation involves encouraging, rewarding, and motivating non-monetary rewards. In fact, such motivation serves a double purpose: it attracts many people and motivates them to improve the quality and productivity of labor, and provides more important thing, - recognition, which becomes more important. I think many of the readers, in one way or another, use various methods of mutual motivation to make working in a group interesting. I will write what methods I know, and you can describe your experience in the comments. Bring a sense of competition to your business or production. Even on a modest budget, I think a sheet of Whatman paper and a couple of bright markers would be quite a bit of money. Depending on the type of activity you are involved in, you can record on this paper the best work... In my case, these are the sales volumes and the number of concluded contracts. Someone can mark the cakes made in pieces or in kilograms or the time taken to release a piece. It is useful to add the words of a good morning prayer and a good working day greeting to this card, and consider that the spirit of competition is already ingrained in your work association. Such a group, placed in full view, can be a source of annoying that motivates you to achieve a better result.

No. of Pages : 11 No. of Claims : 7

(54) Title of the invention : An emotion intelligence auto music play for stress burst based on Nomogram model for quarantine and self-isolation of people using deep learning in COVID 19 pandemic

<p>(51) International classification :G06N0003080000, G06N0003040000, G06K0009620000, G06K0009000000, G06F0016638000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)IYER MANIMOZHI</b> Address of Applicant :No 46, 6th cross, Srimunishwara Layout, varanasi, Near Mother Terasa School, K R Puram ----- ----- <b>2)Dr.T K SATEESH</b> <b>3)S SENTHIL MURUGAN</b> <b>4)NEHA GOPAL N</b> Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : <b>1)IYER MANIMOZHI</b> Address of Applicant :No 46, 6th cross, Srimunishwara Layout, varanasi, Near Mother Terasa School, K R Puram ----- --- <b>2)Dr.T K SATEESH</b> Address of Applicant :East Point College of Engineering and Technology Bangalore ----- <b>3)S SENTHIL MURUGAN</b> Address of Applicant :TATA Elxsi Pvt Ltd Bangalore ----- ----- <b>4)NEHA GOPAL N</b> Address of Applicant :East Point College of Engineering and Technology -----</p>
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## (57) Abstract :

Music listeners have a tough time creating and segregating the playlist manually when they have hundreds of songs. It is also difficult to keep track of all the songs: sometimes songs that are added and never used, wasting a lot of device memory and forcing the user to find and delete songs manually. Users have to manually select songs every time based on interest and mood. Currently, there are no applications that allow users to play songs on the go without selecting songs manually or from a playlist. In the existing system, the user will have to manually select and play songs. Randomly played songs may not match the mood of the user. There is no program or application that can predict the user's emotion and play music accordingly. The advantage of an emotion-based music system is that it automatically recognizes a person's mood and plays music suitable to his/her current mood. Thereby, providing a hassle-free way of enjoying music. In the proposed system, seven states of facial emotion are recognized by the deep convolutional network which includes three steps of feature learning, selection, and classification simultaneously. Training a network with more than two layers was a difficult problem, but with the progress of GPUs, it is possible to train a neural network with more than one layer. The deep neural network has three alternating types of layers which include convolutional, sub-sampling, and fully connected layers

No. of Pages : 5 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :01/08/2022

(21) Application No.202241043851 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : A Smart Navigative Eyewear for Visually Challenged and System Thereof

(51) International classification :G02C0011000000, G02C0005000000, A61H0003060000, G02C0005140000, G02B0027640000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr. Surakasi Raviteja**

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Lendi Institute of Engineering and Technology, Jonnada, Vizianagaram – 535005, Andhra Pradesh, India. Vizianagaram -----

**2)Dr. Usha S M**

**3)Dhruva R. Rinku**

**4)Dr. Katta Subba Rao**

**5)Ms. Sreedevi S**

**6)Dr. Pratik Gite**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr. Surakasi Raviteja**

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Lendi Institute of Engineering and Technology, Jonnada, Vizianagaram – 535005, Andhra Pradesh, India. Vizianagaram -----

**2)Dr. Usha S M**

Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, JSS Academy of Technical Education, Bengaluru – 560060, Karnataka, India. Bengaluru -----

**3)Dhruva R. Rinku**

Address of Applicant :Associate Professor, Department Electronics and Communication Engineering, CVR College of Engineering, Hyderabad – 501510, Telangana, India. Hyderabad -----

**4)Dr. Katta Subba Rao**

Address of Applicant :Professor, Department of Computer Science and Engineering, BV Raju Institute of Technology, Narsapur – 502313, Medak District, Telangana, India. Narsapur -----

**5)Ms. Sreedevi S**

Address of Applicant :Managing Director, Sree Garg's Online Learning Solutions, LIG - 49, Phase 1, Urban Estate, Patiala - 147002, Punjab, India Patiala -----

**6)Dr. Pratik Gite**

Address of Applicant :Associate Professor, Department of Computer Engineering, St. John College of Engineering and Management, Palghar (East), Mumbai – 401404, Maharashtra, India. Mumbai -----

(57) Abstract :

This invention relates to a navigation and information assistive eyewear for a user comprising: a detection apparatus configured to receive information about an environment surrounding said user; wherein said detection apparatus is placed on the bridge solder of said assistive eyewear and is of infrared imager or thermal imager type; a battery having a ON/OFF switch on to a first temple of said assistive eyewear; an electronic processor coupled on to a second temple of said assistive eyewear; wherein said electronic processor is configured to access information from cloud server and communicate wirelessly with an ear phone mike; and a button is placed on to a second temple of said assistive eyewear. A method for navigation and information to the user by using the navigation and information assistive eyewear is also disclosed. The information assistive eyewears will also provide the detail information related to the structures or currencies to the user via Bluetooth ear as well.

No. of Pages : 28 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241043854 A

(19) INDIA

(22) Date of filing of Application :01/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : IOT BASED FOUR STROKE PETROL ENGINE GEAR CONDITION MONITORING SYSTEM USING MACHINE LEARNING TECHNIQUES

(51) International classification :G01M0013028000, G05B0023020000, G01M0013045000, G01H0001000000, G01M0013021000

(86) International Application No :PCT// /  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date

(62) Divisional to :NA  
Application Number :NA  
Filing Date

(71)Name of Applicant :

**1)Nithin Somenahalli Kapanigowda**

Address of Applicant :Mysore University School of Engineering Department of Biomedical and robotic Engineering, Mysore. -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Nithin Somenahalli Kapanigowda**

Address of Applicant :Mysore University School of Engineering Department of Biomedical and robotic Engineering, Mysore. -----

**2)Hemanth Krishna**

Address of Applicant :School of Mechanical Engineering REVA University, Bangalore Bangalore -----

(57) Abstract :

Condition monitoring of machinery is the measurement of various parameters (such as vibration, bearing temperature, oil pressure, oil debris, and performance) related to the mechanical condition of the machinery, which makes it possible to determine whether the machinery is in good or bad mechanical condition. Machine condition monitoring is gaining importance in industry due to the need to increase machine reliability and decrease the possible loss of production due to machine breakdown. In this present work, condition monitoring of IC engine based on the vibration and acoustic signal have been investigated on a Four stroke engine gearbox. A Four stroke, single cylinder spark ignition engine (Caliber Bajaj KB-100) has been chosen for analysis. Vibration and acoustic signals corresponding to a healthy (baseline) and faulty conditions of gear components were recorded. The present work carried out in three phases. The first phase investigates fault detection of gear using conventional signal processing such as time domain, spectrum analysis and advance signal processing techniques namely wavelet plots have been used. The results show that signal processing techniques may useful for revealing post fault detection information. The Second phase experimentally describes fault diagnosis of engine gear using machine learning approach. Two classifier algorithms are used to track and detect the condition of gear components. Results showed that machine learning technique could be used to detect and indicate the severity of the damage effectively with vibration and acoustic signals. The third phase experimentally describes fault diagnosis of engine gear using IoT. In this experimentation two measured parameters that is vibration and acoustics are monitored on-line. For this purpose the corresponding sensors compatible to IoT environment are used. A hardware circuit along with IoT compatible sensors is developed and placed in Gear set-up. Decision tree was used for important feature selection. Naïve Bayes and KNN classifier were used for fault classification. Result shows that DWT features with Naïve Bayes classifier are the most promising approach which can be recommended for practical applications and development of on-line fault diagnosis systems for machine condition monitoring.

No. of Pages : 10 No. of Claims : 5

(54) Title of the invention : REAL TIME MONITORING, DETECTION AND EARLY WARNING SYSTEM FOR POTENTIAL LANDSLIDES USING INTERNET OF THINGS AND CLOUD COMPUTING TECHNOLOGY

(51) International classification :G08B0021100000, H04L0029080000, A61K0048000000, H01L0029080000, G01N0021310000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Dr S A Sivakumar**  
 Address of Applicant :Associate Professor - ECE, Dr.N.G.P. Institute of Technology, Coimbatore. -----  
**2)Dr. M.SATHYA**  
**3)Dr M JAHIR PASHA**  
**4)S.RAMESH BABU**  
**5)D WASIHA TASNEEM**  
**6)Y CHINTU SAGAR**  
**7)KAMARTHI REKHA**  
**8)A HARI PRIYA**  
**9)C.V.SUBHASKARA REDDY**  
**10)PUTLURU RAMA BAYAPA REDDY**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Dr S A Sivakumar**  
 Address of Applicant :Associate Professor - ECE, Dr.N.G.P. Institute of Technology, Coimbatore. -----  
**2)Dr. M.SATHYA**  
 Address of Applicant :Dr. M.SATHYA INDIAN NATIONAL Professor and Head, AMC Engineering college Bengaluru-560083 msathya15@gmail.com Bangalore -----  
**3)Dr M JAHIR PASHA**  
 Address of Applicant :Dr M JAHIR PASHA INDIAN NATIONAL Professor& Head Ashoka Women's Engineering College, Kurnool - 518002 Emailid:jahirpasha@kvsw.in Kurnool -----  
**4)S.RAMESH BABU**  
 Address of Applicant :S.RAMESH BABU INDIAN NATIONAL Assistant Professor, Department of ECE, Ashoka Women's Engineering college, kurnool. Emailid:rameshs451@gmail.com Kurnool -----  
**5)D WASIHA TASNEEM**  
 Address of Applicant :D WASIHA TASNEEM INDIAN NATIONAL Assistant Professor Ashoka Women's Engineering College-518218 wasihataneem@ashokacollege.in Kurnool ----  
**6)Y CHINTU SAGAR**  
 Address of Applicant :Y CHINTU SAGAR INDIAN NATIONAL Assistant Professor Ashoka Womens Engineering College, Kurnool - 518002 Email id:Sagarkvsw@gmail.com Kurnool ---  
**7)KAMARTHI REKHA**  
 Address of Applicant :KAMARTHI REKHA INDIAN NATIONAL Assistant Professor Ashoka Women's Engineering College Kurnool-518002 Emailid:kamarthi29@gmail.com Kurnool -----  
**8)A HARI PRIYA**  
 Address of Applicant :A HARI PRIYA INDIAN NATIONAL Assistant Professor Ashoka Womens Engineering College, Kurnool -518002. Email id:Haripriya.apathi@gmail.com Kurnool -----  
**9)C.V.SUBHASKARA REDDY**  
 Address of Applicant :C.V.SUBHASKARA REDDY INDIAN NATIONAL Associate Professor - Dept of ECE Sri Venkateswara Institute of Science Technology (SVIST) KADAPA Email id:subaskar.reddy@gmail.com Kadapa -----  
**10)PUTLURU RAMA BAYAPA REDDY**  
 Address of Applicant :PUTLURU RAMA BAYAPA REDDY INDIAN NATIONAL Associate professor, Dept of CSE, Sri Venkateswara Institute of Science Technology, (SVIST) KADAPA. Email id:putluru.ramreddy@gmail.com Kadapa -----

## (57) Abstract :

Landslide is one of the natural disasters which cause enormous damage to the lives and the properties. According to the recent survey conducted, around 50000 human lives were lost and properties worth a billion dollar were subjected to massive destructions in the decade globally. This astonishing value insist the need of a real time system which needs to monitor, detect the landslide and also to provide early warning so that it is possible to avoid losing valuable human lives, properties and infrastructures. This invention presents a real time system which is developed not only with internet of things but also involves cloud computing technology to be more precious in monitoring and detecting the landslide. The invention analyze various parameters of the soil in the particular area using dedicated sensors along with cloud data obtained from authenticated resources to determine the early warning. The invention also alerts the public of the locality well before the landslide; thereby it is possible to avoid the loss of priceless lives.

No. of Pages : 11 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241043895 A

(19) INDIA

(22) Date of filing of Application :01/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SYSTEM TO DETERMINE CLEANLINESS FACTOR IN HEAT EXCHANGERS

(51) International classification :G05B0023020000, G05B0019418000, G06N0005040000, G06Q0010060000, G01V0011000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)SRM Institute of Science and Technology**

Address of Applicant :Kattankulathur, Chennai-603203, Tamil Nadu, India Kattankulathur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Anitha Kumari S**

Address of Applicant :SRMIST, Kattankulathur, Chennai-603203,Tamil Nadu, India Kattankulathur -----

**2)Vimala Starbino A**

Address of Applicant :SRMIST, Kattankulathur, Chennai-603203,Tamil Nadu, India Kattankulathur -----

(57) Abstract :

**ABSTRACT A SYSTEM TO DETERMINE CLEANLINESS FACTOR IN HEAT EXCHANGERS** The present disclosure envisages a system (100) to determine cleanliness factor in heat exchangers. The system (100) comprises a data collection unit (102), a data analyzing unit (104), and a computation unit (106). The data collection unit (102) is configured to cooperate with a plurality of data measuring units to receive a real-time data comprising measurements of a set of variables associated with the industrial plant. The data analyzing unit (104) is configured to receive the measured data from the data collection unit (102) to analyze the received data to estimate a plurality of parameters associated with a heat exchanger model. The computation unit (106) is configured to cooperate with the data analyzing unit (104) to compute the cleanliness factor based on the estimated parameters associated with the heat exchanger model. Further, the computation unit (106) is configured to calculate a fouling factor (Rf).

No. of Pages : 30 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :01/08/2022

(21) Application No.202241044001 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : SYSTEM AND METHOD FOR MINING OF CONSTRAINT BASED HIGH UTILITY TIME INTERVAL SEQUENTIAL PATTERNS

(51) International classification	:G06F0016245800, H04L0005000000, G06Q0010040000, G06Q0010060000, H04B0007080000	(71)Name of Applicant : <b>1)SRM UNIVERSITY</b> Address of Applicant :Amaravati, Mangalagiri, Andhra Pradesh-522502, India Guntur ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b>
(86) International Application No	:PCT//	(72)Name of Inventor : <b>1)Sumalatha Saleti</b> Address of Applicant :Dept. of Computer Science and Engineering SRM University AP Amaravati, Neerukonda, Mangalagiri Mandal 522502, Guntur, Andhra Pradesh, India Guntur -----
Filing Date	:01/01/1900	<b>2)Kamineni Rasagna</b> Address of Applicant :Dept. of Computer Science and Engineering SRM University AP Amaravati, Neerukonda, Mangalagiri Mandal 522502, Guntur, Andhra Pradesh, India Guntur -----
(87) International Publication No	: NA	<b>3)Nagisetty Naga Sahithya</b> Address of Applicant :Dept. of Computer Science and Engineering SRM University AP Amaravati, Neerukonda, Mangalagiri Mandal 522502, Guntur, Andhra Pradesh, India Guntur -----
(61) Patent of Addition to Application Number	:NA	<b>4)Katari Hemalatha</b> Address of Applicant :Dept. of Computer Science and Engineering SRM University AP Amaravati, Neerukonda, Mangalagiri Mandal 522502, Guntur, Andhra Pradesh, India Guntur -----
Filing Date	:NA	<b>5)Battula Sai Charan</b> Address of Applicant :Dept. of Computer Science and Engineering SRM University AP Amaravati, Neerukonda, Mangalagiri Mandal 522502, Guntur, Andhra Pradesh, India Guntur -----
(62) Divisional to Application Number	:NA	<b>6)Venkata Upendra Karthik</b> Address of Applicant :Dept. of Computer Science and Engineering SRM University AP Amaravati, Neerukonda, Mangalagiri Mandal 522502, Guntur, Andhra Pradesh, India Guntur -----
Filing Date	:NA	

(57) Abstract :

ABSTRACT SYSTEM AND METHOD FOR MINING OF CONSTRAINT BASED HIGH UTILITY TIME INTERVAL SEQUENTIAL PATTERNS The present disclosure relates to a system (100) for mining of constraint based high utility time interval sequential patterns. The system (100) includes a data processor (104) to: define a set of candidate sequential patterns (C; 114) and a set of output sequential patterns (L; 116); scan a dataset (D; 106) for finding items whose assigned sequence profit weight value (swu) being higher than their minimum individual unit profit value (MIU) and whose time interval satisfies time constraints (C1,C2,C3,C4; 112); include a candidate sequence pattern of the determined items in the set of candidate sequential patterns (C; 114); apply a pattern growth approach to repeatedly introduce the candidate sequence patterns into the set of candidate sequential patterns (C); determine the candidate sequential patterns in the set of candidate sequential patterns (C; 114) which have sequence unit profit value (su) higher than a minimum sequence unit profit value; and include the determined candidate patterns into the set of output sequential patterns (L; 116).

No. of Pages : 29 No. of Claims : 8



(54) Title of the invention : A SYSTEM AND A METHOD FOR GENERATING A SOCIAL DISTANCING ALERT BASED ON HUMAN COUNT

<p>(51) International classification :H04L0029060000, H04N0019172000, G06K0009460000, G06K0009000000, G06K0009520000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)SRM Institute of Science and Technology</b> Address of Applicant :Kattankulathur, Chennai-603203, Tamil Nadu, India Kattankulathur -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)VATS, Aryan</b> Address of Applicant :T1 PB Enclave, Chinara Complex, Udhampur-180003, Jammu and Kashmir, INDIA Udhampur -----</p> <p><b>2)BHANDARI, Shaurya</b> Address of Applicant :25, Samrat Enclave, Pitampura, New Delhi-110034, INDIA New Delhi -----</p> <p><b>3)THANKA NADAR STELLA BAI, Shiny Angel</b> Address of Applicant :Department of Computational Intelligence, School of Computing, SRM IST, Kattankulathur, Chennai-603203, Tamil Nadu, INDIA Kattankulathur -----</p>
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(57) Abstract :

**ABSTRACT A SYSTEM AND A METHOD FOR GENERATING A SOCIAL DISTANCING ALERT BASED ON HUMAN COUNT** The present disclosure discloses a system(100) and method(200) for generating a social distancing alert based on a human count. The system(100) comprises a processing circuitry(106) to receive the media from an imaging device(104). The processing circuitry(106) includes a frame extractor(108) to extract a media frame from the media, a coordinate extractor(110) to extract coordinates for each human identified in the media frame, a filtering unit(112) to filter the extracted coordinates for eliminating overlapping coordinates by a non-maximal suppression model(102a) to remove duplicate human detection, and a classifier unit(114) to draw frames around the filtered extracted coordinates labelled as the human. Further, the system(100) includes a control device(116) to determine the human count based on drawn frames, and to generate at least one alert notification when the human count is above a safety threshold. Figure 1

No. of Pages : 19 No. of Claims : 7

(54) Title of the invention : INTEGRATION OF ELECTRIC VEHICLES INTO MICRO GRIDS

(51) International classification :B60L0053630000, B60L0055000000, H02J0007000000, B60L0053300000, B60L0053510000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Dr. K. Selvakumar**

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, SRM Institute of Science and Technology, Kattankulathur, Chengalpattu - 603203  
Chengalpattu -----

**2)Dr. R. Palanisamy****3)Dr. D. Karthikeyan****4)Mr. Selvabharathi D**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Dr. K. Selvakumar**

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, SRM Institute of Science and Technology, Kattankulathur, Chengalpattu - 603203  
Chengalpattu -----

**2)Dr. R. Palanisamy**

Address of Applicant :Assistant Professor, Department of EEE, SRM Institute of Science and Technology, Kattankulathur, Chengalpattu - 603203  
Chengalpattu -----

**3)Dr. D. Karthikeyan**

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, SRM Institute of Science and Technology, Kattankulathur, Chengalpattu - 603203  
Chengalpattu -----

**4)Mr. Selvabharathi D**

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, SRM Institute of Science and Technology, Kattankulathur, Chengalpattu - 603203  
Chengalpattu -----

## (57) Abstract :

An expert system is used to manage a power grid that contains charging stations that are connected to the power grid and electric vehicles that are connected to the charging stations. This allows the expert system to selectively backfill the power grid with power from the connected electric vehicles by using a grid tie inverter, which may or may not be present within the charging stations. When used in a manner more consistent with its intended purpose, the expert system makes it possible to charge electric vehicles while also accommodating individual user preferences regarding charge time, charge cost, and charging station capabilities. All of this is accomplished without ever exceeding the capacity of the power grid. In addition, a method for the robust and accurate calculation of the state of charge (SOC) is presented. This method begins with the calculation of an open circuit voltage (OCV) based on the sampled voltages and currents of the battery and then proceeds to the determination of the SOC based on a mapping between a previously measured reference OCV (ROCV) and the SOC. The OCV-SOC calculation approach is flexible enough to suit most any battery type operating at any current profile.

No. of Pages : 20 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241044115 A

(19) INDIA

(22) Date of filing of Application :02/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : TWO- WAY MOBILE COMMUNICATION (G2C AND C2G) FOR DISSEMINATION OF FLOOD FORECASTS

<p>(51) International classification :G06T0017050000, G06F0016290000, H04N0007180000, G06T0015200000, G06F0016440000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE</b> Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR Chennai-600127 Chennai ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr.X.Mercilin Raajini</b> Address of Applicant :Associate Professor, Department of Electronics &amp; Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai ----- <b>2)Prof.Kavitha Karthikeyan</b> Address of Applicant :Associate Professor, Department of Civil Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai ----- <b>3)V.Jahnavi</b> Address of Applicant :Department of Computer Science Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai ----- <b>4)S.Gayathri</b> Address of Applicant :Department of Computer Science Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai ----- <b>5)Fahmida Begum</b> Address of Applicant :Department of Computer Science Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai ----- <b>6)S.P.Hema Deepika</b> Address of Applicant :Department of Computer Science Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai ----- <b>7)Harish Roshan</b> Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai ----- <b>8)S.S.Bharath</b> Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai -----</p>
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(57) Abstract :

• The capability of switching among different topographic models and the flexibility of managing and searching data through a geospatial database are also explained, and suggestions are made for future works. • The prototype of FPERS was the web-based Google Earth that enabled users to select image-based or vector-based datasets from a preset list and display them on a map as overlaid layers. With the backbone of GEE, FPERS not only had an easily accessible and user-friendly front-end, but also a powerful back-end with petabyte-scale data prepared and updated by Google for scientific analysis and visualization. • We were able to add and curate more data and collections to FPERS, as long as the data was preprocessed and stored as standard tiles, following the rules specified by the Google Earth API. Displaying huge amounts of geospatial data in a 3D fashion, especially through the Internet, is supposed to be a resource-demanding task that required tedious amounts of coding and a large network bandwidth. • Google would undertake all the required processing, whether a few or a multitude of users were using FPERS simultaneously from anywhere all over the world through the Internet. This capacity allowed this study to bypass purchasing the large processing power in the form of the latest computers or the latest software and allowed us to focus on the development and application of FPERS in three stages: post-, pre-, and during-flood. • In light of the successful case of rapid response to Typhoon Morakot using Formosat-2 imagery, acquiring, processing, and sharing a huge amount of Formosat-2 imagery to the general public was set up as FPERS primary function. • Although optical images obtained from space borne platforms are limited by weather in terms of mapping the inundated regions, they are advantageous for monitoring existing barrier lakes and detecting emergent ones that are formed in mountainous areas after a major typhoon or earthquake. This function is crucial because a barrier lake might have a large water capacity, and the catastrophic burst of a dam would result in significant casualties.

No. of Pages : 9 No. of Claims : 4

(54) Title of the invention : AUTOMATIC SOIL MOISTURE SENSOR FOR NURSERY PURPOSES

(51) International classification :A01G0025160000, A01G0027000000, G06Q0050020000, A01G0022000000, G01N0033240000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE**

Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR Chennai-600127 Chennai -----

**Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)Prof.G.Kalanandhini**

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----

**2)Pooja G**

Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----

**3)Sowmya U**

Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----

**4)Prof. R Deepa**

Address of Applicant :Assistant Professor, Department of Computer Science &amp; Engineering, Prince Dr K Vasudevan College of Engineering and Technology, Ponmar, Chennai – 600127 Chennai -----

**5)Prof.R Tharani**

Address of Applicant :Assistant Professor, Department of Commerce, Prince Shri Balaji Arts and Science College, Medavakkam-Mambakam Road, Ponmar, Chennai - 600127 Chennai -----

## (57) Abstract :

water is an important resource and not all communities around the world can afford to be liberal with their water needs; it has become important to use available water as efficiently as possible, especially in agriculture. For the purpose of reducing the overwatering of crops, an unattended ground moisture sensor can be implemented to measure the current moisture level in the soil surrounding the plants. This will allow a farmer to know when to water/stop watering his crop. For convenience, the moisture data information should be transmitted wirelessly to the use This research is about the automatic water planting system using a moisture sensor which senses the humidity level of the soil. Depending on the moisture or humidity level of the soil, water pump is being set on or off. This research is being done using Arduino on Arduino ide. This research has increasing demands in agriculture sector. Using this system farmer can easily monitor usage of water according to crops they use. By using this method, they can cultivate crops more easily and it reduces the labour.

No. of Pages : 6 No. of Claims : 5

(54) Title of the invention : A NEW MANAGEMENT APPROACH TO KNOWLEDGE CREATING STRATEGIC DECISION-MAKING IN ORGANIZATIONS

(51) International classification :G06Q0010060000, G06N0005040000, G06F0040300000, G06N0005020000, G09B0019180000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

**1)Dr. Rachana Saxena**

Address of Applicant :Professor, Jain (Deemed-To-be) University 44/4, District Fund Road, Behind Big Bazaar, Jayanagar 9th Block, Bengaluru, Karnataka, Pin Code: 560069 560069 -----

**2)Dr. Rishi Chakravarty****3)Dr. Charu Agarwal****4)Mr. Servesh Kumar Sheetal****5)Dr. Kumar Gaurav****6)Dr. M. S. R. Sessa Giri****7)Dr. Arindam Ghosh****8)Mr. Sourav Kumar Das****9)Dr. Mainak Chakraborty****10)Dr. Ekta Chakravarty**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Dr. Rachana Saxena**

Address of Applicant :Professor, Jain (Deemed-To-be) University 44/4, District Fund Road, Behind Big Bazaar, Jayanagar 9th Block, Bengaluru, Karnataka, Pin Code: 560069 560069 ----

**2)Dr. Rishi Chakravarty**

Address of Applicant :Assistant Professor, Assam Down Town University, Sankar Madhab Path, Gandhinagar, Panikhaiti, Guwahati, Assam, Pin Code: 781026 Guwahati -----

**3)Dr. Charu Agarwal**

Address of Applicant :Assistant Professor, Teerthankar Mahaveer Institute of Management and Technology (TMU), National Highway 24, Delhi Road, Moradabad, Uttar Pradesh, Pin Code:244001 Moradabad -----

**4)Mr. Servesh Kumar Sheetal**

Address of Applicant :Assistant Professor, Vivek College of Management and Technology, AKTU, Lucknow, Firozpur Mohan, Bijnor, Uttar Pradesh, Pin Code: 246701 Lucknow -----

**5)Dr. Kumar Gaurav**

Address of Applicant :Assistant Professor, Chandigarh University, NH-05, Ludhiana - Chandigarh State High Way, Sahibzada Ajit Singh Nagar, Punjab, Pin Code: 140413 Punjab --

**6)Dr. M. S. R. Sessa Giri**

Address of Applicant :Professor, GVP College for Degree and PG Courses, Department of Basic Sciences, Rushikonda, Visakhapatnam, Pin Code: 530045 Rushikonda -----

**7)Dr. Arindam Ghosh**

Address of Applicant :Assistant Professor, Department of Management, School of Business and Economics, Adamas University, Kolkata, Pin Code: 700126 Kolkata -----

**8)Mr. Sourav Kumar Das**

Address of Applicant :Assistant Professor, Department of Economics and Commerce, School of Business and Economics, Adamas University, Kolkata, Pin Code: 700126 Kolkata -----

**9)Dr. Mainak Chakraborty**

Address of Applicant :Assistant Professor, Department of Management, School of Business and Economics, Adamas University, Kolkata, Pin Code: 700126 Kolkata -----

**10)Dr. Ekta Chakravarty**

Address of Applicant :Assistant Professor, BMBB Commerce College, 72, KRB Road, Narayan Nagar, Bharalumukh, Guwahati, Assam, Pin Code: 781009 Guwahati -----

## (57) Abstract :

The present invention relates to a new method (100) for the management approach to knowledge-creating (KC) strategic decision-making in organizations. The method (100) includes steps: collect the information about knowledge management and organization dynamics by using different journals and literature; generate a review of different journals and literature; explain the importance of knowledge management, and organization dynamics; the relation between knowledge management and organization dynamics; generate conceptual models on the explained information; analyze the generated conceptual models, and display the analyzed result. The new method (100) for management approach to knowledge-creating strategic decision-making in organizations to incorporate and conceptualize the related principles. The conceptual model (200) provides advantages for managers, decision-makers, and consultants to understand the role of creating new strategic and competitive knowledge from their current decision-making processes.

No. of Pages : 14 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241044291 A

(19) INDIA

(22) Date of filing of Application :02/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A LEVELING APPARATUS FOR DIFFERENTIAL, PROFILE, OR TOPOGRAPHIC SURVEYING AND THE METHOD THEROF

(51) International classification :G01C0015000000, G01C0015060000, G01C0005000000, G01C0003000000, F16M0011320000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)HARISH KUMAR SOLANKI**  
Address of Applicant :D-16, NIRDPR Campus,Rajendranagar, Hyderabad,Telangana, India. Hyderabad -----  
**2)NATIONAL INSTITUTE OF RURAL DEVELOPMENT AND PANCHAYATI RAJ**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)HARISH KUMAR SOLANKI**  
Address of Applicant :D-16, NIRDPR Campus,Rajendranagar, Hyderabad,Telangana, India. Hyderabad -----

(57) Abstract :

ABSTRACT A levelling apparatus to get elevations or reduced levels in engineering surveys is disclosed. It is an easy to use apparatus with setup consisting of a transparent and flexible tube, filled with water or other suitable viscous fluid; two sop with pattern with telescopic lengths, solid or folding or hollow transparent, in hands, or fitted on tripod/s staffs, of about 1.5 to 2 meters height; thin paper, plastic or small plates or pegs or powder to identify the survey points; and a bottle to carry the water or fluid. Inclusion of optional accessories like Electronic Distance Measurement (EDM) device and Global Positioning System (GPS) is proposed to enhance the scope and usability of apparatus. Apparatus is more suitable for survey of linear features of any length without error from earth curvature or refraction, in all-weather, round the clock, without depending on line of sight, with least setup time and resources required. Figure accompanied with Abstract is Fig. 1

No. of Pages : 45 No. of Claims : 13

(54) Title of the invention : Bio-Inspired Intelligent Implant to Predict and Detect Parkinson's disease using Supervised Machine Learning

<p>(51) International classification :G06N0003040000, G06N0003080000, A61B0005000000, A61N0001360000, G06K0009620000</p> <p>(86) International Application No Filing Date :PCT// :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number Filing Date :NA :NA</p> <p>(62) Divisional to Application Number Filing Date :NA :NA</p>	<p>(71)Name of Applicant :  <b>1)Dr.S.Balamurugan</b>  Address of Applicant :No.21, Kalloori Nagar, Peelamedu, Coimbatore-641004, Tamilnadu, India -----  <b>2)Dr.K.SUGANTHI</b>  <b>3)Dr.V.SARADA</b>  <b>4)Dr.E.CHITRA</b>  <b>5)Dr.P.RADHIKA</b>  <b>6)Ms.SOLANKI MITRA</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Dr.S.Balamurugan</b>  Address of Applicant :No.21, Kalloori Nagar, Peelamedu, Coimbatore-641004, Tamilnadu, India -----  <b>2)Dr.K.SUGANTHI</b>  Address of Applicant :Assistant Professor /ECE Dept, SRM Institute of Science and Technology, College of Engineering and Technology, SRM Nagar, Kattankulathur, Chengalpattu District, Tamil Nadu, Pin code 603 203, India -----  <b>3)Dr.V.SARADA</b>  Address of Applicant :Assistant Professor /ECE Dept, SRM Institute of Science and Technology, College of Engineering and Technology, SRM Nagar, Kattankulathur, Chengalpattu District, Tamil Nadu, Pin code 603 203, India -----  <b>4)Dr.E.CHITRA</b>  Address of Applicant :Assistant Professor /ECE Dept, SRM Institute of Science and Technology, College of Engineering and Technology, SRM Nagar, Kattankulathur, Chengalpattu District, Tamil Nadu, Pin code 603 203, India -----  <b>5)Dr.P.RADHIKA</b>  Address of Applicant :Assistant Professor /ECE Dept, SRM Institute of Science and Technology, College of Engineering and Technology, SRM Nagar, Kattankulathur, Chengalpattu District, Tamil Nadu, Pin code 603 203, India -----  <b>6)Ms.SOLANKI MITRA</b>  Address of Applicant :Post Graduate Scholar, School of Computing Science, 18 Lilybank Gardens, Glasgow G12 8RZ, University of Glasgow, Glasgow, United Kingdom -----</p>
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## (57) Abstract :

Parkinson's Disease is considered to be one of the most common neurological disorders occurring in older adults. It is learnt from the literature that nearly 4.5 million people are reported with Parkinson's disease around the globe every year. Also, the cost incurred in treating the Parkinson's disease is also increasing rapidly reporting to 14 billion euros every year. Proposed is a Bio-Inspired Intelligent Implant to predict and detect Parkinson's disease using Supervised Machine Learning. A Deep Neural Network (DNN), a Convolutional Neural Network (CNN) and Long Short-Term Memory (LSTM) networks are designed to deploy and evaluate the performance of detection of seizures. Implant is made up of three main components which include battery, piezo electric array and necessary electronics to support and handle ultrasonic transducer waves. Piezo array captures the micro electrodes from target light sensitive neuron. The array consists of micro-LED, integrated circuit die and storage capacitor. Brain activity and delivery of drugs is recorded by the neurostimulator which is miniaturized and biocompatible.

No. of Pages : 16 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241044317 A

(19) INDIA

(22) Date of filing of Application :02/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SMART ARTIFICIAL INTELLIGENCE BASED APPROACH TO MANAGE THE PAYMENT GATEWAY OF E-COMMERCE SITES AND GRIP ON FINANCIAL MANAGEMENT

<p>(51) International classification :G06Q0020020000, G06Q0040000000, G06Q0020400000, G01M0017007000, G06Q0020100000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr.P.G. KATHIRAVAN</b> Address of Applicant :ASSISTANT PROFESSOR OF COMMERCE THIAGARAJAR COLLEGE, MADURAI-9,TAMILNADU INDIA Madurai ----- ----- <b>2)SUMAN DEVI</b> <b>3)Dr.SHIVAM AGARWAL</b> <b>4)VIPIN SHUKLA</b> <b>5)Dr.G.MUNEESWARI</b> <b>6)PRIYANKA SAWALE</b> <b>7)Dr. DEVESH PRATAP SINGH</b> <b>8)VISHAL KUMAR RAI</b> Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : <b>1)Dr.P.G. KATHIRAVAN</b> Address of Applicant :ASSISTANT PROFESSOR OF COMMERCE THIAGARAJAR COLLEGE, MADURAI-9,TAMILNADU INDIA Madurai ----- ----- <b>2)SUMAN DEVI</b> Address of Applicant :ASSISTANT PROFESSOR, SUSHANT UNIVERSITY, GURGAON- 122003 Gurgaon ----- <b>3)Dr.SHIVAM AGARWAL</b> Address of Applicant :ASSISTANT PROFESSOR, MANAGEMENT DEPARTMENT, HIMT GROUP OF INSTITUTION, 08, KNOWLEDGE PARK- 1, GAUTAM BIHAR, GREATER NOIDA, U.P 201310 Noida ----- <b>4)VIPIN SHUKLA</b> Address of Applicant :ASSISTANT PROFESSOR/ DEPARTMENT OF BUSINESS ADMINISTRATION, SHAMBHUNATH INSTITUTE OF ENGINEERING AND TECHNOLOGY, PRAYAGRAJ, 211012 Prayagraj ----- ----- <b>5)Dr.G.MUNEESWARI</b> Address of Applicant :PROFESSOR, SCHOOL OF COMPUTER SCIENCE AND ENGINEERING, VIT-AP UNIVERSITY, AMARAVATI, ANDHRA PRADESH 522237 Amaravati ----- <b>6)PRIYANKA SAWALE</b> Address of Applicant :ASSISTANT PROFESSOR,BBA CA,C.M.C.S COLLEGE,NASHIK 422013 Nashik ----- <b>7)Dr. DEVESH PRATAP SINGH</b> Address of Applicant :PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY, GRAPHIC ERA DEEMED TO BE UNIVERSITY, DEHRADUN, UTTAKHAND, INDIA 248002 Dehradun ----- ----- <b>8)VISHAL KUMAR RAI</b> Address of Applicant :ASSISTANT PROFESSOR, KASHI INSTITUTE OF TECHNOLOGY,VARANASI Varanasi -----</p>
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(57) Abstract :

Smart Artificial Intelligence based approach to manage the Payment Gateway of E-Commerce Sites and grip on Financial Management is the proposed invention. The invention aims at analysing the payment gateway of e-commerce sites through the algorithms of Artificial Intelligence. The proposed invention focuses on monitoring and rectifying the flaws that are inherent in the existing financial management aspects of e-commerce sites.

No. of Pages : 14 No. of Claims : 6



## (54) Title of the invention : HYBRID ULTRA FAST E VEHICLE CHARGING STATION WITH CLOUD BASED BATTERY MANAGEMENT

(51) International classification :G07F0015000000, B60L0053600000, B60L0053310000, H04M0015000000, B60L0053660000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to :NA  
 Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application :NA  
 Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Jyothilal Nayak Bharothu**  
 Address of Applicant :Assistant Professor, Department of Electrical & Electronics Engineering, AP IIIT, Rajiv Gandhi University of Knowledge Technologies, Nuzvid, Andhra Pradesh, India, Pincode: 521202 Krishna -----  
**2)Dr. P. Suresh**  
**3)Dr. D. Lenine**  
**4)Ms. Surabhi Singh**  
**5)Dr. P. Thamaraiselvan**  
**6)Dr. S. Vijayabaskar**  
**7)Dr. V. Sailaja**  
**8)Mr. G. Hussain Basha**  
**9)Dr. P. Sunitha**  
**10)Mrs. B. Vasantha Lakshmi**  
**11)Dr. D. V. Lokeswar Reddy**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Dr. Jyothilal Nayak Bharothu**  
 Address of Applicant :Assistant Professor, Department of Electrical & Electronics Engineering, AP IIIT, Rajiv Gandhi University of Knowledge Technologies, Nuzvid, Andhra Pradesh, India, Pincode: 521202 Krishna -----  
**2)Dr. P. Suresh**  
 Address of Applicant :Assistant Professor. Department of EEE, SRM Institute of Science and Technology, Kattankulathur, Chennai, Tamilnadu, India, Pincode: 603203 KANCHIPURAM -----  
**3)Dr. D. Lenine**  
 Address of Applicant :Professor, Department of Electrical and Electronics Engineering, RGM College of Engineering and Technology (Autonomous), Nandyal, Nandyal (Dt), Andhra Pradesh, India, Pincode: 518501 Kurnool -----  
**4)Ms. Surabhi Singh**  
 Address of Applicant :Research Scholar, Department of Electrical and Electronics Engineering, Birla Institute of Technology and Science-Pilani, Pilani, Rajasthan, India, Pincode: 333031 JHUNJHUNU -----  
**5)Dr. P. Thamaraiselvan**  
 Address of Applicant :Assistant Professor, HoD cum Vice Principal, Department of Electronics and Communication, Selvamm Arts and Science College (Autonomous), Namakkal, Tamilnadu, India, Pincode: 637 003 Namakkal -----  
**6)Dr. S. Vijayabaskar**  
 Address of Applicant :Professor, Department of Electrical and Electronics Engineering, P.A. College of Engineering and Technology, Pollachi, Coimbatore, Tamilnadu, India, Pincode: 642002 Coimbatore -----  
**7)Dr. V. Sailaja**  
 Address of Applicant :Professor, Department of ECE, Pragati Engineering College, Surampalem, Andhra Pradesh, India, Pincode: 533437 EAST GODAVARI -----  
**8)Mr. G. Hussain Basha**  
 Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, K.S.R.M. College of Engineering (Autonomous), Kadapa, Andhra Pradesh, India, Pincode: 516003 Kadapa -----  
**9)Dr. P. Sunitha**  
 Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Aditya Engineering College, Surampalem, Kakinada, Andhra Pradesh, India, Pincode: 533437 EAST GODAVARI -----  
**10)Mrs. B. Vasantha Lakshmi**  
 Address of Applicant :Associate Professor, Department of ECE, Pragati Engineering College, Surampalem, Andhra Pradesh, India, Pincode: 533437 EAST GODAVARI -----  
**11)Dr. D. V. Lokeswar Reddy**  
 Address of Applicant :Assistant Professor, Humanities and Social Sciences Department, JNTU College of Engineering, Pulivendula, Kadapa, Andhra Pradesh, India, Pincode: 516390 Kadapa -----

(57) Abstract :  
 A solar-powered charging station that is compatible with both electric and hybrid vehicles is the subject of this cutting-edge invention. The driver of a vehicle that parks in a space that also has a charging station has the option of paying for both the space and the power by making use of a credit card, a debit card, cash, a smart card, or a network link to a database such as EZ-Pass. Alternatively, the driver may pay for both the space and the power with a smart card. As long as the automobile is connected to the station, the station will charge the vehicle's battery on its own without any intervention from the driver. When the battery of the car has been charged to its full potential, the charging station will automatically switch off. The only expenses that are the customer's responsibility are those that are linked with the use of space and electricity. In the event that the charging circuit is disrupted, customers are required to reinsert their smart card or credit card into the reader before charging can be resumed. When the billing procedure is started, an appropriate quantity of money is taken out of the method used to make the payment. If the customer plugs in their smart card before leaving the business, any unused funds will be put back onto the customer's account or smart card.

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241044485 A

(19) INDIA

(22) Date of filing of Application :03/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : DETECTION OF CHILD MOVEMENT FOR RESCUE FROM BOREWELL

<p>(51) International classification :A61B0090000000, C09K0008800000, G08B0025010000, H04W0004029000, H04N0001210000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE</b> Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR Chennai-600127 Chennai -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. D. Jyothi Preshiya</b> Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----</p> <p><b>2)S. Rithika</b> Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----</p> <p><b>3)Prof. N Kavitha</b> Address of Applicant :Assistant Professor, Department of Computer Science &amp; Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----</p> <p><b>4)Prof. B Uma Maheswari</b> Address of Applicant :Assistant Professor, Department of Computer Science &amp; Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----</p> <p><b>5)Prof. G Renuka</b> Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----</p>
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(57) Abstract :

The proposed system is developed in order to rescue children and other small creatures from bore well. It consists of sensor at top of the bore well. Once it identifies anyone falling into the bore well, it would provide an alarm along with information in the form of message shown in the LCD display and gives bore owner a continuous alert. Also the key feature about this system is, if it sense the child or anything falling in to it then automatically the child or object inside the well is pulled up with the help of carrier which is mounted inside at 5 feet distance. The automatic action is carried out with the help of DC motor.

No. of Pages : 6 No. of Claims : 6

(54) Title of the invention : BARRIER ELUSION ROBOT USING ULTRASONIC SENSOR

(51) International classification :G05D0001020000, B25J0009160000, G01S0015931000, A01D0034000000, B25J0011000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE**

Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR Chennai-600127 Chennai -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Prof. G.Vijayalakshmi**

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakam Road Ponmar, Chennai – 600127 Chennai -----

**2)K. Sakthi Priya**

Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakam Road Ponmar, Chennai – 600127 Chennai -----

**3)R. Saranya**

Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakam Road Ponmar, Chennai – 600127 Chennai -----

**4)Prof. D. Padmavathi**

Address of Applicant :Assistant Professor, Department of Economics, Prince Shri Balaji Arts and Science College, Medavakkam-Mambakam Road, Ponmar, Chennai – 600127 Chennai -----

**5)Dr G N K Suresh Babu**

Address of Applicant :Professor, Department of Computer Science &amp; Engineering, Prince Dr K Vasudevan College of Engineering and Technology, Medavakkam-Mambakam Road Ponmar, Chennai – 600127 Chennai -----

**(57) Abstract :**

The project is design to build an obstacle avoidance robotic vehicle using ultrasonic sensors for its movement. A microcontroller (ATmega328) is used to achieve the desired operation. A robot is a machine that can perform task automatically or with guidance. The project proposes robotic vehicle that has an intelligence built in it such that it directs itself whenever an obstacle comes in its path. An ultrasonic sensor is used to detect any obstacle ahead of it and sends a command to the micro-controller. Depending on the input signal received the micro-controller redirects the robot to move in an alternate direction by actuating the motors which are interfaced to it through a motor driver. Some of the project is built with the IR sensors has its own application so in our project those application is not compactable so we are using ultrasonic sensor.

No. of Pages : 6 No. of Claims : 6

(54) Title of the invention : Method for prediction of Angina Pectoris based on the user input or dataset

(51) International classification :G06K0009620000, G16H0050300000, G16H0050200000, G06K0009000000, A61B0005000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :**

**1)VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet(S.O), Hyderabad 500 090 Telangana State, India.  
Nizampet -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :**

**1)D. Dakshayani HimaBindu**

Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet(S.O), Hyderabad 500 090 Telangana State, India.  
Nizampet -----

**2)G. Uday Bhaskar**

Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet(S.O), Hyderabad 500 090 Telangana State, India.  
Nizampet -----

**3)M. Sanjay**

Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet(S.O), Hyderabad 500 090 Telangana State, India.  
Nizampet -----

**4)N. Saivandana**

Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet(S.O), Hyderabad 500 090 Telangana State, India.  
Nizampet -----

**5)V. Dhanu Sri**

Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet(S.O), Hyderabad 500 090 Telangana State, India.  
Nizampet -----

**(57) Abstract :**

A method for prediction of Angina Pectoris based on the user input or dataset comprising the steps of: 1) UCI cleveland dataset; 2) Pre-processing; 3) Feature selection; 4) Classification modeling; 5) Log of the performance; 6) Output. The method provides prediction of Angina Pectoris based on the user's dataset which includes daily life activities and well-being such as age, glucose levels, BMI, gender, previous history of any heart-related diseases. Facilitating the platform for end users for self-assessment of their health and knowing whether he or she is likely to be affected with angina or not. The invention is using a random forest algorithm as it gives minimal data loss, and it is well suited for a medium sized data set like ours. The invention uses a new dataset to achieve a good amount of accuracy of 94%.

No. of Pages : 18 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241044534 A

(19) INDIA

(22) Date of filing of Application :04/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN INNOVATIVE METHODOLOGY TO PREDICT POLYCYSTIC OVARY SYNDROME

(51) International classification	:G06K0009620000, A61Q0007000000, G16H0050200000, G16H0010600000, G01N0033520000	(71)Name of Applicant : <b>1)Rakshitha Kiran P</b> Address of Applicant :Assistant Professor, Department of MCA, Dayananda Sagar College of Engineering, Bengaluru, Karnataka, India - 560078 -----
(86) International Application No	:PCT//	<b>2)Dr. Naveen N C</b>
Filing Date	:01/01/1900	<b>Name of Applicant : NA</b>
(87) International Publication No	: NA	<b>Address of Applicant : NA</b>
(61) Patent of Addition to Application Number	:NA	(72)Name of Inventor :
Filing Date	:NA	<b>1)Rakshitha Kiran P</b>
(62) Divisional to Application Number	:NA	Address of Applicant :Assistant Professor, Department of MCA, Dayananda Sagar College of Engineering, Bengaluru, Karnataka, India - 560078 -----
Filing Date	:NA	<b>2)Dr. Naveen N C</b>
		Address of Applicant :Professor & Head, Department of CSE, JSS Academy of Technical Education, Bengaluru, Karnataka, India - 560060 -----

(57) Abstract :

Polycystic Ovary Syndrome (PCOS) is a medical condition which causes hormonal disorder in women in their childbearing years. The hormonal imbalance leads to a delayed or even absent menstrual cycle. Women with PCOS majorly suffer from excessive weight gain, facial hair growth, acne, hair loss, skin darkening and irregular periods leading to infertility in rare cases. The existing methodologies and treatments are insufficient for early-stage detection and prediction. To deal with this problem, we propose a system which can help in the early detection and prediction of PCOS treatment from an optimal and minimal set of parameters. Random Forest, SVM, Logistic Regression, Gaussian Nave Bayes, and K Neighbours are utilised to identify PCOS. The top 30 features from the dataset were utilised in the feature vector using CHI SQUARE. We examined each classifier's findings and found that Random Forest is the most accurate and trustworthy.

No. of Pages : 10 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241044554 A

(19) INDIA

(22) Date of filing of Application :04/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : IOT Based Sleep apnea detection by using inter heartbeat period for healthcare

(51) International classification :A61B0005024000, A61B0005000000, A61B0005024500, A61B0005040200, A61B0005045200

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Sathiyavel**

Address of Applicant :Dr.A.P.J.Abdulkalam Research centre,Marichetti Halli(Village & Post ) -----

**2)Dr.S.Purushothaman**

**3)Dr. K. Padma priya**

**4)Mr. A. Jaya kumar**

**5)Mrs.G.Ramani**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Sathiyavel**

Address of Applicant :Dr.A.P.J.Abdulkalam Research centre,Marichetti Halli(Village & Post ) -----

**2)Dr.S.Purushothaman**

Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering VSB Engineering College, Karur. karur -----

**3)Dr. K. Padma priya**

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Government College of Engineering, Tirunelveli, Tamilnadu. Tirunelveli -----

**4)Mr. A. Jaya kumar**

Address of Applicant :Associate Professor ,IFET College of engineering (Autonomous), Gangarampalayam,Valavanur, Villupuram. viluppuram -----

**5)Mrs.G.Ramani**

Address of Applicant :Assistant professor Department of Electronics and Communication Engineering, Adhiyamaan college of Engineering,Hosur. krishnagiri -----

(57) Abstract :

The presents invention related to the IOT based sleep apnea detection by using inter heartbeat period or heart rate variability (HRV) for health care. The heart beat sensor(1) is sense the heart rate (beats per second) via human finger and node MCU microcontroller (2)which is also calculation of inter heartbeat period between two successive heart beat value. Once heart rate value greater than 100 beats/second then after heart rate variability value is 0 to 50ms which this information is then transmitted via the Node MCU microcontroller to think speak channel. In the Think speak channel, the real time sensor measuring data is denoted as a line graph that can be understood easily. The HRV value is lower (0 to 50ms), to affect sleep apnea disorder to human and also alert to human through alarm device(7).

No. of Pages : 14 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :04/08/2022

(21) Application No.202241044559 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : DESIGN OF A MINIATURIZED ANTENNA WITH T SHAPED DGS FOR WIRELESS APPLICATION

(51) International classification :H01Q0001240000, H01Q0009040000, H01Q0001380000, H01Q0001480000, H01Q0009420000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)TANWEER**  
Address of Applicant :DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, MANIPAL INSTITUTE OF TECHNOLOGY, MANIPAL ACADEMY OF HIGHER EDUCATION, MANIPAL, KARNATAKA, INDIA 576104. -----  
**2)VEETRAGJAIN**  
**3)OM PRAKASH KUMAR**  
**4)SAMEENA BEGUM PATHAN**  
**5)SHWETA VINCENT**  
**6)Y J NAZEER AHMED**  
**7)IMRAN KHAN**  
**8)SUBHASH B K**  
**9)RAJASHEKHAR C BIRADAR**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)TANWEER**  
Address of Applicant :DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, MANIPAL INSTITUTE OF TECHNOLOGY, MANIPAL ACADEMY OF HIGHER EDUCATION, MANIPAL, KARNATAKA, INDIA 576104. -----  
**2)VEETRAGJAIN**  
Address of Applicant :DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, MANIPAL INSTITUTE OF TECHNOLOGY, MANIPAL ACADEMY OF HIGHER EDUCATION, MANIPAL, UDUPI, KARNATAKA, INDIA 576104. -----  
**3)OM PRAKASH KUMAR**  
Address of Applicant :DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, MANIPAL INSTITUTE OF TECHNOLOGY, MANIPAL ACADEMY OF HIGHER EDUCATION, MANIPAL, UDUPI, KARNATAKA, INDIA 576104. -----  
**4)SAMEENA BEGUM PATHAN**  
Address of Applicant :DEPARTMENT OF INFORMATION AND COMMUNICATION ENGINEERING, MANIPAL INSTITUTE OF TECHNOLOGY, MANIPAL ACADEMY OF HIGHER EDUCATION, MANIPAL, UDUPI, KARNATAKA, INDIA 576104. -----  
**5)SHWETA VINCENT**  
Address of Applicant :DEPARTMENT OF MECHATRONICS, MANIPAL INSTITUTE OF TECHNOLOGY, MANIPAL ACADEMY OF HIGHER EDUCATION, MANIPAL, UDUPI, KARNATAKA, INDIA 576104. -----  
**6)Y J NAZEER AHMED**  
Address of Applicant :ASSOCIATE PROFESSOR, SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES, MURUKAMBATTU, CHITTOOR, ANDRA PRADESH, INDIA 517127. -----  
**7)IMRAN KHAN**  
Address of Applicant :DEPARTMENT OF ELECTRONICS AND COMMUNICATION, GOVERNMENT ENGINEERING COLLAGE RAMANAGARA, RAMANAGARA, KARNATAKA, INDIA 552159. -----  
**8)SUBHASH B K**  
Address of Applicant :SCHOOL OF ELECTRONICS AND COMMUNICATION ENGINEERING, REVA UNIVERSITY, BAGALURU CROSS YALAHANKA BENGALURU, KARNATAKA, INDIA 560064. -----  
**9)RAJASHEKHAR C BIRADAR**  
Address of Applicant :PRO-VICE CHANCELLOR, REVA UNIVERSITY, KATTIGENAHALLI BSF CIRCLE YALAHANKA BENGALURU, KARNATAKA, INDIA 560064. -----

(57) Abstract :

Abstract: A compact (25mm x 20mm x1.6mm){ penta band antenna for WiMAX/ WLAN application is proposed. Compactness and multiband operation is accomplished by utilizing circular patch unit and T-shaped Defected Ground Structure (DGS). The main advantages of the invented antenna structure is that, T- shaped unit cell independently control a set of bands (i.e. Upper circular radiating cell controls 2.55, 3.85, while lower T-shaped unit cell DGS structure controls the band at 5.1,6.45 and 8.1ghz). The antenna shows the resonance at 2.55GHz (lower WiMAX), 3.85GHz (middle WiMAX), 5.1 GHz(upper wifi),6.45GHz (uplink satellite band) and 8.1GHz (X-band operations). The proposed invention is compact, the designed antenna is- 60% Miniaturized with T Shaped DGS integration compared to conventional antenna and can be outfit elementary design for handheld devices. This designed antenna operates in multiple frequencies like 2.55, 3.85, 5.1,6.45 and 8.1ghz, which can be used for multiple applications at a time. The potential of the proposed antenna has good reflection coefficient, stable radiation pattern and efficiencies upto 95% at all operating bands.

No. of Pages : 10 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :04/08/2022

(21) Application No.202241044701 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : LASER TRIPWIRE ALARM USING ARDUINO UNO

(51) International classification :G08B0013196000, G08B0013183000, G08B0003100000, G06T0017050000, F21S0045700000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE**

Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR Chennai-600127 Chennai -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Prof. G.Vijayalakshmi**

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakam Road Ponmar, Chennai – 600127 Chennai -----

**2)Dr. D. Jyothi Preshiya**

Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakam Road Ponmar, Chennai – 600127 Chennai -----

**3)Priya G**

Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakam Road Ponmar, Chennai – 600127 Chennai -----

**4)Reeba Surendran**

Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakam Road Ponmar, Chennai – 600127 Chennai -----

**5)Dr. C Anbarasi**

Address of Applicant :HOD, Dept of Computer Science & Application, Prince Shri Balaji Arts and Science College, Medavakkam-Mambakam Road, Ponmar, Chennai - 600127 Chennai -----

(57) Abstract :

As technology develops day by day within the world, even the criminal gang improves their technology to hold out their operation. So technology of security should be modern with time to shield the planet from crime. The main issue addressed in our project is the security issue. In this project, laser rays are used to hide an outsized area. As we are aware of the fact that the laser light travels long distances without scattering effects. In addition, the laser beam at the source and destination point is in any case invisible. These two properties help us to develop a contemporary security system, which may be named as the Laser Tripwire Alarm. When somebody or object crosses the laser light, automatically the buzzer starts ringing, which can be turned off by the pass code or by pressing a button, controlled by the Arduino UNO.

No. of Pages : 6 No. of Claims : 7



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241044756 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SELF-COMPACTING CONCRETE (SCC) COMPOSITION

(51) International classification :C04B0111000000, C22C0038020000, C22C0038000000, G21D0001000000, C22C0038460000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)VAHANTHI CONSULTANCY**

Address of Applicant :PLOT NO 37, FIRST FLOOR, GREEN GARDENS, LAWSPET, PUDUCHERRY -605008 LAWSPET --

-----  
Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)T.M. SUPRAJA**

Address of Applicant :PLOT NO 37, FIRST FLOOR, GREEN GARDENS, LAWSPET, PUDUCHERRY -605008 LAWSPET --

-----

(57) Abstract :

A SELF-COMPACTING CONCRETE (SCC) COMPOSITION ABSTRACT A self-compacting concrete (SCC) composition is provided. The SCC composition includes steel slag as replacement of the sand. The SCC composition provided by the present invention exhibit better performance at elevated temperature of 300°C, 600°C, and 900°C. The steel slag replacement reduces the spalling, improves serviceability, and holds integrity in the concrete. The SCC composition is applicable in highly reinforced structure, high temperature exposed structure, nuclear power plant structure, and sustainable concrete structure. FIG. 12

No. of Pages : 90 No. of Claims : 10

(54) Title of the invention : A NOVEL OPTO ACOUSTIC MODEM SUITABLE FOR UNDERWATER COMMUNICATION

(51) International classification :H04B0013020000, H04B0011000000, H04L0012280000, G01S0003808000, H04R0001440000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)DR.M.LENIN KUMAR**

Address of Applicant :DEPARTMENT OF ECE, DR.MGR EDUCATIONAL AND RESEARCH INSTITUTE, MADURAVOYAL, CHENNAI, TAMILNADU, INDIA -----

**2)DR.JENEETHA JEBANAZER J****3)CH.PALLAVI****4)DR.S.SATHYA**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)DR.M.LENIN KUMAR**

Address of Applicant :DEPARTMENT OF ECE, DR.MGR EDUCATIONAL AND RESEARCH INSTITUTE, MADURAVOYAL, CHENNAI, TAMILNADU, INDIA -----

**2)DR.JENEETHA JEBANAZER J**

Address of Applicant :PROFESSOR, DEPARTMENT OF ECE, PANIMALAR ENGINEERING COLLEGE, POONAMALLE, CHENNAI, TAMILNADU-600123 -----

**3)CH.PALLAVI**

Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF ECE, SVUCE, SV UNIVERSITY, TIRUPATI, ANDHRAPRADESH-517502 -----

**4)DR.S.SATHYA**

Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF ECE, GOJAN SCHOOL OF BUSINESS AND TECHNOLOGY, POONAMALLE, CHENNAI, TAMILNADU-600052 -----

## (57) Abstract :

Underwater communication has become one of the most interesting and rapid growing field with its broad areas of water based applications in military and also in commercial systems, -it? communication channels undergo severe attenuation, frequency dispersion, multipath effect and limited power resources which has made it one of the most challenging communications. Of these key challenges, optical and acoustic are the most predominantly compelling underwater communication with complexities for long range and high bandwidth requirement especially power constrained modems. In this invention, integration of both optical and acoustic signals through a single hybrid opto- acoustic modem is proposed for underwater communication. The proposed modem has been simulated for transmission and reception of both optical and acoustic signals'. The output signals are verified with respect to the input signal. The proposed design has been simulated and the simulation results prove the success and efficiency of the proposed hybrid modem design. Achieving high bandwidth for long distance transmission with low power consumption and high speed on terrestrial and subsequently in underwater can be carried out as the future work.

No. of Pages : 14 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :05/08/2022

(21) Application No.202241044831 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : Innovative system of flexible production line manufacturing method

(51) International classification :G05B0019418000, G06Q0010080000, G06Q0010060000, G05B0019042000, G06Q0050040000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Beporam Iftekhar Hussain**  
Address of Applicant :Associate Professor, Department of Mechanical Engineering, Bapatla Engineering College, BAPATLA-522102, Andhra Pradesh, India Bapatla -----  
-----  
**2)Dr.S.Sathees Kumar**  
**3)Dr.S.Sudhagar**  
**4)Dr.V.Mugesh Raja**  
**5)Dr. Abhijeet Ganguly**  
**6)Purushottam Balaso Pawar**  
**7)Mr. Novel Kumar Sahu**  
**8)Mr.Umashanker.L**  
**9)Dr. S Sundaraselvan**  
**10)Mr. C Ezhilarasan**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr. Beporam Iftekhar Hussain**  
Address of Applicant :Associate Professor, Department of Mechanical Engineering, Bapatla Engineering College, BAPATLA-522102, Andhra Pradesh, India Bapatla -----  
**2)Dr.S.Sathees Kumar**  
Address of Applicant :Associate Professor, Department of Mechanical Engineering, Institute of Aeronautical Engineering, Hyderabad – 500 043 Hyderabad -----  
**3)Dr.S.Sudhagar**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, University College of Engineering Dindigul, Dindigul - 624 622 Dindigul -----  
**4)Dr.V.Mugesh Raja**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, University College of Engineering Ramanathapuram, Ramanathapuram 623513 Ramanathapuram -----  
-----  
**5)Dr. Abhijeet Ganguly**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Chhatrapati Shivaji Institute of Technology, Durg, Chhattisgarh Durg -----  
**6)Purushottam Balaso Pawar**  
Address of Applicant :Lecturer, Department of Mechanical Engineering, SVPM'S Institute of Tech and Engineering, Malegaon Bk Tal Baramati, dist Pune 413115 Pune -----  
**7)Mr. Novel Kumar Sahu**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Chhatrapati Shivaji Institute of Technology, Durg, Chhattisgarh Durg -----  
**8)Mr.Umashanker.L**  
Address of Applicant :Associate Professor, Mechanical Engineering Department, AMC Engineering College (Affiliated to VTU), Bannerghatta Road, Bengaluru-560083 Bengaluru ---  
-----  
**9)Dr. S Sundaraselvan**  
Address of Applicant :Head of the Department and Associate Professor, Department of Mechanical Engineering, Arasu Engineering College, Kumbakonam - 612501 Kumbakonam --  
-----  
**10)Mr. C Ezhilarasan**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Arasu Engineering College, Kumbakonam - 612501 Kumbakonam -----

(57) Abstract :

[05] The present invention provides a production control system and method for a flexible production line. The system includes a product specification and a process control module, an operation plan control module, an operation plan execution module and a SCADA module of a data acquisition, monitoring and control system, including: equipment acquisition and monitoring submodules. The module collects information about the status and faults of production equipment, and the scheduling sub-module schedules tasks between the WMS warehouse management system and the farm management system based on the information about the status and faults of production equipment; the WIP tracking sub-module is used to collect information about the manufacturing process of a product. RFID Signal RFID records part status information at each work step to control the part in the flexible production line production process. The invention can realize the information and digital process control of products with flexible production lines, make the details of workshop production section more transparent, improve the degree of downsizing and the degree of standardization of the production mode, and increase the capacity of production and execution efficiency. Accompanied Drawing [FIG. 1] [FIG. 2]

No. of Pages : 27 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241044903 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : SYSTEM AND METHOD FOR IMPLEMENTING LIGHTWEIGHT AUTHENTICATION IN A FOG COMPUTING NETWORK

(51) International classification	:H04L0029060000, H04L0009320000, H04L0029080000, G06F0021340000, G06F0021310000	(71)Name of Applicant : <b>1)SRM UNIVERSITY</b> Address of Applicant :Amaravati, Mangalagiri-522502, Andhra Pradesh, India Guntur -----
(86) International Application No	:PCT//	<b>Name of Applicant : NA</b>
Filing Date	:01/01/1900	<b>Address of Applicant : NA</b>
(87) International Publication No	: NA	(72)Name of Inventor : <b>1)CHAUHAN, Anishka</b> Address of Applicant :SRM UNIVERSITY Amaravati, Neerukonda, Mangalagiri Mandal, Guntur-522502, Andhra Pradesh INDIA Guntur -----
(61) Patent of Addition to Application Number	:NA	<b>2)MITRA, Arnab</b> Address of Applicant :SRM UNIVERSITY Amaravati, Neerukonda, Mangalagiri Mandal, Guntur-522502, Andhra Pradesh INDIA Guntur -----
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT SYSTEM AND METHOD FOR IMPLEMENTING LIGHTWEIGHT AUTHENTICATION IN A FOG COMPUTING NETWORK The present disclosure relates to a system (100) for implementing lightweight authentication in a fog computing network. The system (100) includes a password generation module (108) to generate a set of random one-time-passwords (OTPs) when a request for authentication is received from a client device (102); a transmission module (110) to transmit the set of random OTPs to the client device (102); a reception module (112) to receive an input data comprising the set of OTPs and a timestamp of an internal clock of the client device (102); and an authentication module (114) to authenticate the client device (102) when the set of OTPs matches with the set of random OTPs generated by the central server (100) and when the timestamp matches an internal clock of the central server (100).

No. of Pages : 20 No. of Claims : 6

(54) Title of the invention : A SYSTEM AND METHOD FOR DETECTING DENSITY-BASED INTELLIGENT PARALLEL TRAFFIC

<p>(51) International classification :G06K0009000000, G06K0009620000, G06K0009460000, G06T0007730000, G08G0001040000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)SRM UNIVERSITY</b> Address of Applicant :Amaravati, Mangalagiri-522502, Andhra Pradesh, India Guntur -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)CHILUKURI JETHIN SAI</b> Address of Applicant :ECE Department, SRM University AP, Neerukonda, Mangalagiri mandal, Guntur-522502, Andhra Pradesh, INDIA Guntur -----</p> <p><b>2)MYLAPILLI CHETAN</b> Address of Applicant :ECE Department, SRM University AP, SEAS, Neerukonda, Mangalagiri mandal, Guntur-522502, Andhra Pradesh, INDIA Guntur -----</p> <p><b>3)AKULA ROHITH KUMAR</b> Address of Applicant :ECE Department, SRM University AP, SEAS, Neerukonda, Mangalagiri mandal, Guntur-522502, Andhra Pradesh, INDIA Guntur -----</p> <p><b>4)SANA KALAGOTLA</b> Address of Applicant :ECE Department, SRM University AP, SEAS, Neerukonda, Mangalagiri mandal, Guntur-522502, Andhra Pradesh, INDIA Guntur -----</p> <p><b>5)ANIRBAN GHOSH</b> Address of Applicant :ECE Department, SRM University AP, SEAS, Neerukonda, Mangalagiri mandal, Guntur-522502, Andhra Pradesh, INDIA Guntur -----</p>
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(57) Abstract :

ABSTRACT A SYSTEM AND METHOD FOR DETECTING DENSITY-BASED INTELLIGENT PARALLEL TRAFFIC The present disclosure discloses a system(100) and method(200) for detecting density-based intelligent parallel traffic. The system(100) comprises, an imaging device(102) to capture a real-time video stream of a moving vehicle, a processing circuitry(104), coupled to the imaging device(102), to receive captured video stream, processing circuitry(104) includes a frame extractor(106) to extract at least one frame from the captured video stream, a vehicle landmark detector(108) to detect vehicle landmark points from each direction of the traffic junction using pre-trained model(108a), and an image classifier(110) to process the vehicle landmark points using a vehicle detection model(110a) to detect and count the density of vehicles for each driving lane; a control unit(112) to cooperate with the processing circuitry(104), to control at least one output to an 8-channel relay to operate at least one traffic light of the traffic junction based on the detected and counted density of vehicles in each driving lane. Figure 1

No. of Pages : 17 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241044905 A

(19) INDIA

(22) Date of filing of Application :05/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SYSTEM AND A METHOD FOR CLASSIFICATION OF A DATASET USING MULTIPLE ARTIFICIAL NEURAL NETWORKS

(51) International classification	:G06K0009620000, G06N0003040000, G06N0003080000, G06Q0010040000, G06N0020000000	(71)Name of Applicant : <b>1)SRM Institute of Science and Technology</b> Address of Applicant :Kattankulathur, Chennai-603203, Tamil Nadu, India Chennai -----
(86) International Application No	:PCT//	<b>Name of Applicant : NA</b>
Filing Date	:01/01/1900	<b>Address of Applicant : NA</b>
(87) International Publication No	: NA	(72)Name of Inventor : <b>1)RAJANBABU, Jeya</b> Address of Applicant :Flat G2, Nithyanandham Nagar First Street, Irumpuliyur, Tambaram West, Chennai-600045, Tamil Nadu INDIA Chennai -----
(61) Patent of Addition to Application Number	:NA	<b>2)MAHESH, Shrinidhi</b> Address of Applicant :Block 3 , 1-G , Rani Meiyammai Towers, RA Puram, Chennai-600028, Tamil Nadu, INDIA Chennai -----
Filing Date	:NA	-----
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT A SYSTEM AND A METHOD FOR CLASSIFICATION OF A DATASET USING MULTIPLE ARTIFICIAL NEURAL NETWORKS** The present disclosure relates to a system for classification of a dataset using multiple artificial neural networks. The system comprises an input module(102), a data pre-processing module(104), a data splitting module(106), a neural network module(108), a class handler module(110), a training module(112), a graph plotting module(114) and a testing module(116). The input module(102) receives an input data. The data pre-processing module(104) normalizes the received input data. The data splitting module(106) split the normalized input data into a training dataset and a test dataset. The neural network module(108) compiles a neural network model(NNM) that is trained based on both datasets. The class handler module(110) handles an imbalance in both datasets to generate a balanced training dataset. The training module (112) trains the NNM using the balanced training dataset. The graph plotting module(114) plots a graph based on a plurality of parameters. The testing module(116) evaluates the NNM using the test dataset.

No. of Pages : 24 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :06/08/2022

(21) Application No.202241045000 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : NOVEL METHOD FOR CLOUD ASSISTED SECRACY PRESERVING TRANSPORTABLE HEALTH MONITORING USING BRANCHING PROGRAM & CRYPTOGRAPHIC BUILDING BLOCKS

(51) International classification :H04L0029060000, H04L0029080000, H04L0012240000, G06F0011140000, G06F0021620000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
1)Sridhar.S, Institute of Computer Science and Engineering, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, Chennai  
Address of Applicant :Assistant Professor Institute of Computer Science and Engineering, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, Chennai, India. Chennai -----  
2)Dr. R. Geetha, SRM Institute of Science and Technology, Kattankulathur Campus - Chengalpattu  
3)Mrs.G.Anitha, Saveetha School of Engineering Saveetha Institute of Medical and Technical Sciences Chennai  
4)Senthil Kumaran Selvaraj, Vellore  
5)P.Ponnusamy, Chennai  
6)K R Jothi, Coimbatore  
7)R Lokeshkumar, Coimbatore  
8)Vignesh.T  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
1)Sridhar.S, Institute of Computer Science and Engineering, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, Chennai  
Address of Applicant :Assistant Professor Institute of Computer Science and Engineering, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, Chennai, India. Chennai -----  
2)Dr. R. Geetha, SRM Institute of Science and Technology, Kattankulathur Campus - Chengalpattu  
Address of Applicant :Assistant Professor, Department of Computing Technologies, SRM Institute of Science and Technology, Kattankulathur Campus - Chengalpattu, Chennai, India. Chennai -----  
3)Mrs.G.Anitha, Saveetha School of Engineering Saveetha Institute of Medical and Technical Sciences Chennai  
Address of Applicant :Research Associate Department of Computer Science and Engineering Saveetha School of Engineering Saveetha Institute of Medical and Technical Sciences Chennai, India. Chennai -----  
4)Senthil Kumaran Selvaraj, Vellore  
Address of Applicant :Vellore vellore -----  
5)P.Ponnusamy, Chennai  
Address of Applicant :A 610 , SIS MARRAKESH, Karanai Puducherry Road, Urupakkam, Chennai -603202 Chennai -----  
6)K R Jothi, Coimbatore  
Address of Applicant :A1, AKSHAY GARDENS, JAYA NAGAR, THIRD CROSS, VADAVALLI , COIMBATORE, 641041 Coimbatore -----  
7)R Lokeshkumar, Coimbatore  
Address of Applicant :2/2 School West Street Pudupalayam , NSN Palayam Coimbatore-641031 Coimbatore -----  
8)Vignesh.T  
Address of Applicant :Assistant professor, Department of Mechatronics Engineering, Sri Krishna College of Engineering and Technology, Coimbatore Coimbatore -----

(57) Abstract :

Cloud Assisted Secrecy Preserving Transportable Health Monitoring, which leverages current mobile communications and cloud computing technology to provide feedback decision support, has been praised as a game-changing way to improve healthcare service quality while lowering costs. Unfortunately, it also jeopardizes the privacy of clients and the intellectual property of monitoring service providers, inhibiting wider adoption of technology. The networking of a large number of remote computers to enable centralized data storage and online access to computer services and resources is referred to as cloud computing. Public, private, and hybrid clouds are the three types of clouds. While these e-healthcare systems are becoming more popular, they entail a considerable amount of personal data for medical purposes. People begin to realize that they would lose everything if they did. Once their personal information enters the system, they have no control over it on cyberspace. Medical records should be kept for a variety of reasons. Cloud computing has grown in popularity as a distribution mechanism for secure information services given via the internet in recent years. The capacity to access one's data from any location is one of the benefits of cloud computing, as is the elimination of the need for backups, disaster recovery, and business continuity centers. Cloud computing, on the other hand, raises concerns about how cloud service providers, consumers, and governments should manage the information and interactions that the cloud generates. Enterprises are hastening their transition to the cloud. The security of information processed by applications and finally stored in data centers is a key cause of concern in this fast changing world. Service-based computing has evolved as the dominant paradigm as a result of the rise of cloud computing. Users who want to use cloud platform services or existing cloud-based services must export their personal data to the service provider's newline.

No. of Pages : 10 No. of Claims : 5

## (54) Title of the invention : IOT-BASED WATER QUALITY MONITORING FOR FILTER TESTING

(51) International classification :G01N0033180000, C02F0001000000, G01N0021530000, D06F0034220000, A47L0015420000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

## 1)Dr. Pandarinath Potluri

Address of Applicant :Professor &amp; Principal, Swarnandhra Institute of Engineering and Technology, Narsapur, Andhra Pradesh, Pin – 534280, India. -----

## 2)Dr. Bos Mathew Jos

## 3)Dr. Bandita Naik

## 4)Dr. Shiju George

## 5)Dr. Asha Joseph

## 6)Dr. Deepak Kumar

## 7)Dr. Pradeep Yadav

## 8)Ms. Rakhi Arora

## 9)Dr. Pasupuleti Subrahmanya Ranjit

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

## 1)Dr. Pandarinath Potluri

Address of Applicant :Professor &amp; Principal, Swarnandhra Institute of Engineering and Technology, Narsapur, Andhra Pradesh, Pin – 534280, India. -----

## 2)Dr. Bos Mathew Jos

Address of Applicant :Professor, Electrical and Electronics Engineering, Mar Athanasius College Of Engineering, Kothamangalam, M A College P O Ernakulam (Dist), Kerala - 686666 India -----

## 3)Dr. Bandita Naik

Address of Applicant :Associate professor, Methodist college of engineering and technology, Abida, Hyderabad, India. -----

## 4)Dr. Shiju George

Address of Applicant :Associate Professor, Head of the Department, Department of Information Technology, Amal jyothi college of Engineering, Koovappally, Kanjirappally, Kottayam, Kerala-686518, India -----

## 5)Dr. Asha Joseph

Address of Applicant :Associate Professor, Department of Information Technology, Amal Jyothi College of Engineering, Koovappally, Kanjirappally, Kottayam, Kerala-686518, India. - -----

## 6)Dr. Deepak Kumar

Address of Applicant :Associate professor, Department of Computer Science and Engineering, SGT University Gurgaon, Budhera, Gurugram, Haryana, India. -----

## 7)Dr. Pradeep Yadav

Address of Applicant :Associate Professor, Department of CSE, ITM Gwalior, Turari, Gwalior, Madhya Pradesh, Pin – 475001, India -----

## 8)Ms. Rakhi Arora

Address of Applicant :Associate Professor, Department of CSE, ITM Gwalior, Turari, Gwalior, Madhya Pradesh, Pin – 475001, India -----

## 9)Dr. Pasupuleti Subrahmanya Ranjit

Address of Applicant :Professor, Department Of Mechanical Engineering, Adithya Engineering College, Surampalem, E G Dist. Andra Pradesh - 533437 -----

## (57) Abstract :

ABSTRACT IOT-BASED WATER QUALITY MONITORING FOR FILTER TESTING A method for monitoring a water quality for filter testing using an IOT. The method includes (i) sensing the hydrogen ion concentration in the water using the pH sensor, wherein the pH sensor detects the hydrogen ion concentration and sends the sensor data to the control unit, (ii) determining using a temperature sensor performance by calculating variation between voltage between the plurality of terminals of the diode, (iii) processing using the water level indicator the performance by using the probes of the sensor to mention the level of the water in the storage unit, wherein the plurality of probes transmit data to the control unit for alerting using an alarm or indicator, (iv) measuring using the turbidity sensor the amount of the impurities in the water, wherein the impurities including the soil or unwanted substances is used to calculate the impurities in the fluid, (v) performing using the filtering unit the filtering process using the output from the pH sensor that provides the percentage of water purity, (vi) connecting using the control unit with the plurality of sensors that includes an arduino controller to receive the sensed data from the sensor that is immersed into the tank of the water by using the sensor probe to indicate the level of the water in the storage tank, wherein the plurality of probes transmit information to the control unit to alert using an alarm or indicator, (iv) measuring, using the turbidity sensor, the amount of the impurities in the water, wherein the impurities includes the soil in the water or impurities in the water which is used to calculate the impurities in the fluid, (v) performing, using the filtering unit, based on the output from the pH sensor which provides the state of water purity, (vi) connecting, using the control unit, with the plurality of sensors which includes an arduino controller which 13 receive the sensed data from the sensor is immersed into the tank of the water; and (vii) interconnecting, the plurality of sensors, with the control unit using the wireless devices, wherein the pH sensor and the turbidity sensor data is used to identify the quality of the water and the output of the sensed data is provided to the control unit.

No. of Pages : 18 No. of Claims : 3



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :06/08/2022

(21) Application No.202241045030 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : Artificial Intelligence for Wireless Caching: Schemes, Performance and Challenges

(51) International classification :H04L0029080000, G06N0020000000, G06F0012086600, G06F0016957000, G06N0003080000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Ms.M. Rekha**  
Address of Applicant :Assistant Professor, Department of Information Technology, R.M.K Engineering College, Gummidipoondi Taluk, Kavaraipttai, Pin: 601 206. District: Thiruvallur State : Tamilnadu Country : India -----  
**2)Mr. Naga Venkata RamaKrishna G**  
**3)Mrs.Zubaida Khatoon**  
**4)Ms. K. Ormila**  
**5)Ms.Sangeetha P**  
**6)Mr. Vijaya Kumar M**  
**7)Dr.J. B. Sudharsan**  
**8)Ms.D. Vanusha**  
**9)Ms.D.Vathana**  
**10)Mr.Sibi Amaran**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Ms.M. Rekha**  
Address of Applicant :Assistant Professor, Department of Information Technology, R.M.K Engineering College, Gummidipoondi Taluk, Kavaraipttai, Pin: 601 206. District: Thiruvallur State : Tamilnadu Country : India -----  
**2)Mr. Naga Venkata RamaKrishna G**  
Address of Applicant :Lecturer Department of Computer Science and Engineering, University of Technology and Applied Sciences, Al Musanaa, Sultanate of Oman. State : South Al Batina Country : Sultanate of Oman -----  
**3)Mrs.Zubaida Khatoon**  
Address of Applicant :Assistant Professor Department of ECE Loyola Institute of Technology, NH4 Palanchur, Nazrathpet post, Tamil Nadu, Chennai Pin: 6000123 District: Chennai State : Tamil Nadu Country : India -----  
**4)Ms. K. Ormila**  
Address of Applicant :Lecturer Department of EEE, A.M.K. Technological Polytechnic College, Chennai to Bangalore Road, Sembarambakkam, Chennai Pin: 600 123 District : Tiruvallur State : Tamil Nadu Country : India -----  
**5)Ms.Sangeetha P**  
Address of Applicant :Research scholar, Department of ECE Reva University Srinivasa Nagar, Bengaluru, Karnataka 560064 Distric: Bangalore Urban State : Karnataka Country : India -----  
**6)Mr. Vijaya Kumar M**  
Address of Applicant :Assistant Professor Department of ECE Trichy Engineering College Konalai Trichy Pin: 621132 District: Tiruchirapalli State : Tamilnadu Country : India -----  
**7)Dr.J. B. Sudharsan**  
Address of Applicant :Assistant Professor, Department of Science & Humanities, Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai – 600 069 District : Kancheepuram State : Tamil Nadu Country : India -----  
**8)Ms.D. Vanusha**  
Address of Applicant :Assistant Professor, Department of Computing Technologies, SRM Institute of Science and Technology, Kattankulathur, Chennai Pin: 603203 District : Chengalpattu State :Tamilnadu Country : India -----  
**9)Ms.D.Vathana**  
Address of Applicant :Assistant Professor (O.G) Department of Computing Technologies, SRM Institute of Science and Technology, Kattankulathur, Chennai Pin: 603203 District : Chengalpattu State :Tamilnadu Country : India -----  
**10)Mr.Sibi Amaran**  
Address of Applicant :Assistant Professor (O.G) Department of Computing Technologies, SRM Institute of Science and Technology, Kattankulathur, Chennai Pin: 603203 District : Chengalpattu State :Tamilnadu Country : India -----

(57) Abstract :

Artificial Intelligence for Wireless Caching: Schemes, Performance and Challenges ABSTRACT The volume of wireless data traffic is increasing at an exponential rate, which may hinder the functioning of networks because it requires ever-increasing amounts of bandwidth. As a result of the progression of technology, there are now fundamental procedures that have the ability to enhance the functionality of wireless networks. One such technology that enables machines to make intelligent decisions is known as artificial intelligence (AI), which is constantly evolving. Artificial intelligence can be applied into wireless networks to conduct efficient data caching based on precise forecasts of data requests made by users and the popularity profile of the material being cached. The use of AI in data caching is a viable candidate with the potential to effectively exploit the challenges posed by the expanding backhaul data traffic of future wireless networks, such as the transmission of duplicate data and the latency in accessing data. In this study, we give a systematic analysis of state-of-the-art intelligent data caching systems based on learning mechanism to optimise data caching. This survey is based on previous research that has been published. First, we provide an introduction of traditional caching approaches and discuss the limits of these methods. Next, after providing a quick introduction of various different AI algorithms, we will discuss contemporary learning strategies for cache-enabled wireless networks. We are making considerable research efforts to use AI for effective data placement in the interest of optimising network performance in terms of cache hit rate, throughput, and offloading, among other metrics. In conclusion, we discuss the difficulties that currently exist in the field of AI-based data caching as well as potential future avenues for research.

No. of Pages : 9 No. of Claims : 8

(54) Title of the invention : A Smart Wearable Protection Device

(51) International classification :A61B0005000000, A61B0005024000, A61B0005110000, G01C0021200000, H04W0004900000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Aditya Engineering College**

Address of Applicant :ADB Road, Aditya Nagar, Surampalem, East Godavari-533437, Andhra Pradesh, India. Surampalem -----

**2)Aditya College of Engineering and Technology****3)Aditya College of Engineering****4)Aditya Pharmacy College****5)Aditya College of Pharmacy****6)Aditya Degree College**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Dr. Maasina Venkata Rajesh**

Address of Applicant :Professor, Department of CSE, Aditya Engineering College, ADB Road, Aditya Nagar, Surampalem, East Godavari-533437, Andhra Pradesh, India. Surampalem -----

**2)Chada Lalitha Alivelu Manga Tayaru**

Address of Applicant :Assistant Professor, Department of H&amp;BS, Aditya College of Engineering and Technology, ADB Road, Aditya Nagar, Surampalem, East Godavari-533437, Andhra Pradesh, India. Surampalem -----

**3)Ketha Mahesh Babu**

Address of Applicant :Associate Professor, Department of ECE, Aditya College of Engineering, ADB Road, Aditya Nagar, Surampalem, East Godavari-533437, Andhra Pradesh, India. Surampalem -----

**4)Mrs. Virotula Santhi Swaroopa**

Address of Applicant :Assistant Professor, Aditya College of Pharmacy, ADB Road, Aditya Nagar, Surampalem, East Godavari-533437, Andhra Pradesh, India. Surampalem -----

**5)Mrs. Divya Narla**

Address of Applicant :Associate Professor, Department of Pharmacy, Aditya College of Pharmacy, ADB Road, Aditya Nagar, Surampalem, East Godavari-533437, Andhra Pradesh, India. Surampalem -----

**6)Dr. B E V L Naidu**

Address of Applicant :Director, Aditya College of Engineering, ADB Road, Aditya Nagar, Surampalem, East Godavari-533437, Andhra Pradesh, India. Surampalem -----

## (57) Abstract :

**ABSTRACT** Title: A SMART WEARABLE PROTECTION DEVICE The disclosure herein relates to a smart wearable protection device (100) for the safety monitoring of a user. The wearable protection device (100) comprises a controller (102), a camera (106) configured to rotate about 360 degrees for capturing multimedia data, a sensor (108) for detecting a user's heart rate, and a global positioning system (GPS) (110). The controller (102) may transfer the user's heart rate data to the server (120) for analyzing by an artificial intelligence (AI) system, thereby determining emotional states when detects an abnormal heart rate. The server (120) may send signals to automatically actuate the camera (106) for capturing the multimedia data. The wearable protection device (100) sends an alert message including GPS coordinates automatically to one or more user devices (124), which are wirelessly connected to the wearable protection device (100) or the database (122) through the network (118) based on the emotional states of the user.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045036 A

(19) INDIA

(22) Date of filing of Application :06/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : Piezoelectric Energy Harvesting from Floor mat

<p>(51) International classification :H02N0002180000, H01L0041113000, F03G0005060000, G08B0013160000, H01L0041193000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE</b> Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR Chennai-600127 Chennai -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Prof. KAVITHA KARTHIKEYAN</b> Address of Applicant :Associate Professor Department of Civil Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai -----</p> <p><b>2)Dr.X.MERCILIN RAAJINI</b> Address of Applicant :Associate professor, Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam - Mambakkam Road, Ponmar, Chennai-600127. Chennai -----</p> <p><b>3)SUBATHRA.S</b> Address of Applicant :Department of Mechanical Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam - Mambakkam Road, Ponmar, Chennai-600127. Chennai -----</p> <p>-</p> <p><b>4)AISHWARYA.K</b> Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam - Mambakkam Road, Ponmar, Chennai-600127. Chennai -----</p> <p><b>5)PADMANABAN.D</b> Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam - Mambakkam Road, Ponmar, Chennai-600127. Chennai -----</p> <p><b>6)INDUMATHI.R</b> Address of Applicant :Department of Information Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam - Mambakkam Road, Ponmar, Chennai-600127. Chennai -----</p> <p>-</p> <p><b>7)MUKILPRASATHI</b> Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam - Mambakkam Road, Ponmar, Chennai-600127. Chennai -----</p>
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(57) Abstract :

The goal of this work is to harness the wasted power from footsteps using piezoelectric sensors. Piezoelectric sensor is a transducer that produces electrical energy when mechanical energy is applied on it. In this work, thirty five piezoelectric sensors are connected in series/parallel and covered with a wooden board to form a foot mat which generates AC voltage when people step on it. Since the output is not continues, it is rectified and stored in a battery. The system has found significant use on roads, parks and variegated public space where energy from footsteps can be harnessed and transformed into Energy.

No. of Pages : 7 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :06/08/2022

(21) Application No.202241045039 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : FIRE ALERT AND CONTROL SYSTEM

(51) International classification :G08B0017000000, H04W0004140000, G08B0017060000, G06Q0050220000, H04M0011040000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE**

Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD  
PONMAR Chennai-600127 Chennai -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr.T.Sripriya**

Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----

**2)Naveen R S**

Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----

**3)Thambi Reddy Sathish**

Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----

**4)Prof.T Sivaranjani**

Address of Applicant :Assistant professor, Department of English, Prince Shri Balaji Arts and Science College, Medavakkam-Mambakam Road, Ponmar, Chennai - 600127 Chennai -----

**5)Prof.S Shalini**

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Prince Dr K Vasudevan College of Engineering and Technology, Ponmar, Chennai - 600127, Ponmar, Chennai – 600127 Chennai -----

(57) Abstract :

The purpose of this project is to figure out the problems of loss of life and property due to fire and collateral damage by improving the fire alarm to the next generation by sending the fire detected alarm message to the nearby fire station and number has been entered in the program and it helps the many fire-fighters and help the people to evacuate the place without any loss of life. LCD display will monitor the circuit and indicate process. A fire outbreaks is a major tragedy that must be avoided by every possible means due to the potential loss of lives and property, fire when not controlled can grow large and may require days to bring under control. Hence this technology must be applied to minimize or even eliminate this great hazard. In This study, a fire alarm and detection system was developed. This system was built with the GSM module embedded in it, which helps to send SMS (Short messaging service) to the home owners and the fire service personal, when there is fire outbreak before it gets out of range. Furthermore, this study provides a technology that would be accessible and affordable to the world at large so that homes, offices, and schools can adopt the use in other to protect lives and property. If and when the developed system is commercialized, it will help reduce uncontrolled fires by 50% because it warns of dangerous conditions before a fire outbreak

No. of Pages : 5 No. of Claims : 5

(54) Title of the invention : ECO FRIENDLY DUSTBIN

(51) International classification :B65F0001140000, B65F0001160000, G05B0019042000, B62J0099000000, B65F0001080000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE**

Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR Chennai-600127 Chennai -----

**Name of Applicant : NA****Address of Applicant : NA****(72)Name of Inventor :****1)Dr.A.R.ARAVIND**

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----

**2)R.SALINI**

Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----

**3)N.VARSHA**

Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----

**4)Prof.R.SHANMUGAPRIYA**

Address of Applicant :Assistant Professor, Department of Computer Science &amp; Engineering, Prince Dr K Vasudevan College of Engineering and Technology, Ponmar, Chennai – 600127 Chennai -----

**5)Dr.S.SARA**

Address of Applicant :Assistant Professor, Dept of Business Administration, Prince Shri Balaji Arts and Science College, Medavakkam-Mambakam Road, Ponmar, Chennai – 600127 Chennai -----

**(57) Abstract :**

Waste is an important issue, which needs to be tackled smartly. The main objective of the project is to design a smart dustbin which will help in keeping our environment clean and also eco friendly. We are inspired from Swachh Bharat Mission. Nowadays technologies are getting smarter day-by-day so, as to keep the environment clean we are designing a smart dustbin by using different sensors. We are adding this feature to maintain healthy environment and can reduce pollute that affect our health. In this proposed technology we have designed a smart dustbin using microcontroller along with different sensors, servo motor, battery and jumper wire. After all hardware and software connection, now Smart Dustbin program will run. Dustbin lid will open when someone comes near at some range than wait for user to put garbage and close it. It's properly running or not. For social it will help toward health and hygiene, for business for we try to make it affordable to many as many possible. So that normal people to rich people can take benefit from it.

No. of Pages : 2 No. of Claims : 7

<p>(51) International classification :G06T0015020000, G06Q0010100000, G06K0009620000, G06N0003040000, G06T0011000000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE</b> Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR Chennai-600127 Chennai -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Prof. T. Sathya</b> Address of Applicant :Assistant Professor, Department of Information Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Mambakkam Medavakkam- Road , Ponmar,Chennai-600127 Chennai -----</p> <p><b>2)A.Keerthana</b> Address of Applicant :Department of Information Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Mambakkam Medavakkam- Road Ponmar,Chennai-600127 Chennai -----</p> <p><b>3)R.Lavanya</b> Address of Applicant :Department of Information Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Mambakkam Medavakkam- Road Ponmar,Chennai-600127 Chennai -----</p> <p><b>4)S.P.Yogapriyaa</b> Address of Applicant :Department of Information Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Mambakkam Medavakkam- Road Ponmar,Chennai-600127 Chennai -----</p> <p><b>5)M. Vishali</b> Address of Applicant :Department of Information Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Mambakkam Medavakkam- Road Ponmar,Chennai-600127 Chennai -----</p> <p><b>6)M.Muthuvel</b> Address of Applicant :Department of Information Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Mambakkam Medavakkam- Road Ponmar,Chennai-600127 Chennai -----</p> <p><b>7)B.Sethuraman</b> Address of Applicant :Department of Information Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Mambakkam Medavakkam- Road Ponmar,Chennai-600127 Chennai -----</p>
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## (57) Abstract :

To implement a new framework for estimating generative models via an adversarial process to extend the existing GAN framework and develop a white-box controllable image cartoonization, which can generate high-quality cartoonized images from real-world photos. Images are decomposed into three cartoon representations. The surface representation that contains a smooth surface of cartoon images, the structure representation that refers to the sparse colour-blocks and flattens global content in the celluloid style workflow, and the texture representation that reflects high-frequency texture, contours, and details in cartoon images. The learning objectives of our method are separately based on each extracted representations, making our framework controllable and adjustable. It demonstrates the potential of the framework through qualitative and quantitative evaluation of the generated samples.

No. of Pages : 6 No. of Claims : 7

(54) Title of the invention : A Device, System and Method of a Self-Powered, Cordless Electric Heating Cup for Travelers

<p>(51) International classification :F25B0021040000, H01M0002020000, A47G0019220000, B60N0003100000, G01T0003000000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Dr. Gangadhar N</b>  Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Dr. Ambedkar Institute of Technology, Bengaluru – 560056, Karnataka, India. Bengaluru -----  <b>2)Dr. Dhanraj Pamar J</b>  <b>3)Dr. Nagaraja C. Reddy</b>  <b>4)Ms. Sreedevi S</b>  <b>5)Mr. Praveen M</b>  <b>6)Mr. Sridhar P</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Dr. Gangadhar N</b>  Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Dr. Ambedkar Institute of Technology, Bengaluru – 560056, Karnataka, India. Bengaluru -----  <b>2)Dr. Dhanraj Pamar J</b>  Address of Applicant :Professor and Head, Department of Mechanical &amp; Production Engineering, Deccan College of Engineering and Technology, Hyderabad – 500001, Telangana, India. Hyderabad -----  <b>3)Dr. Nagaraja C. Reddy</b>  Address of Applicant :Associate Professor, Department of Mechanical Engineering, Bangalore Institute of Technology, Bengaluru - 560004, Karnataka, India. Bengaluru -----  <b>4)Ms. Sreedevi S</b>  Address of Applicant :Managing Director, Sree Garg's Online Learning Solutions, LIG-49, Phase I, Urban Estate, Patiala - 147002, Punjab, India Patiala -----  <b>5)Mr. Praveen M</b>  Address of Applicant :S/o. Madhiyazhagan M, #41/1 Jai Nagar, Omalur, Salem - 636455, Tamil Nadu, India. Omalur -----  <b>6)Mr. Sridhar P</b>  Address of Applicant :S/o. Pusparaja C, #239/965, Samsudeen Colony, Dindigul Main Road, Oddanchatram, Dindigul - 624619, Tamil Nadu, India. Oddanchatram -----</p>
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## (57) Abstract :

The invention relates to a self-powered heating cup for instant heating a food or a liquid. The self-powered heating cup can be used during when the user is travelling or for the patients admitted at the hospital. The self-powered heating cup include a multi-layered structure wherein outer layer is an insulated layer, an inner layer is a conductive layer, and an induction coil is placed in between the outer layer and inner conductive layer; a battery, which powers the induction coil for instant heating; and a switch used to start and shut-off the battery. The self-powered heating cup may also include a straw having stirrer, the straw supports the process of smooth drinking, stirring and has spill proof property while travelling. The self-powered heating cup may also include foldable lines, which helps in easily folding the self-powered heating cup for easily transporting the self-powered heating cup.

No. of Pages : 27 No. of Claims : 10

(54) Title of the invention : The Campgrounds

(51) International classification :G06F0009451000, H04W0012060000, G06F0016904000, G06F0021340000, G06F0008360000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :****1)Ravi Mishra**

Address of Applicant :School of Electronics & Communication, Rukmini Knowledge park, Kattigenahalli, Bengaluru Karnataka., 560064 Bangalore -----

**2)Sreekara P****3)Siddharth Shekhar****4)Rakesh B R****5)Nayana D.K****6)REVA University**

**Name of Applicant : NA**

**Address of Applicant : NA**

**(72)Name of Inventor :****1)Ravi Mishra**

Address of Applicant :School of Electronics & Communication, Rukmini Knowledge park, Kattigenahalli, Bengaluru Karnataka., 560064 Bangalore -----

**2)Sreekara P**

Address of Applicant :School of Electronics & Communication Rukmini Knowledge park, Kattigenahalli, Bengaluru Karnataka., 560064 Bangalore -----

**3)Siddharth Shekhar**

Address of Applicant :School of Electronics & Communication Rukmini Knowledge park, Kattigenahalli, Bengaluru Karnataka, 560064 Bangalore -----

**4)Rakesh B R**

Address of Applicant :School of Electronics & Communication Rukmini Knowledge park, Kattigenahalli, Bengaluru Karnataka, 560064 Bangalore -----

**5)Nayana D.K**

Address of Applicant :School of Electronics & Communication Rukmini Knowledge park, Kattigenahalli, Bengaluru Karnataka, 560064 Bangalore -----

**(57) Abstract :**

This Work proposes to find the right and safe Campgrounds. This Project work is being developed by Full Stack Web technologies. This Web Application will help the people to find the right campgrounds, trekking places, waterfalls.It comes with full CRUD functionality, a backend that stores user data, map API integration and responsive Front end design

No. of Pages : 10 No. of Claims : 4



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045086 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : System and Method for an Integrated SoA Cloud-Computing Model using Efficient Wireless Sensor Networks for the Agricultural Applications

(51) International classification	:H04W0084180000, H04L0029080000, H04L0029060000, H04L0009080000, H04W0052020000	(71)Name of Applicant : <b>1)Mrs. Vimala M</b> Address of Applicant :Department of Agricultural Statistics, Applied Mathematics and Computer Science College of Agriculture, University of Agricultural Sciences, GKVK, Bangalore, Karnataka, India, 560065 Bangalore -----
(86) International Application No	:PCT//	<b>2)Dr. Rajeev Ranjan</b>
Filing Date	:01/01/1900	<b>3)REVA University</b>
(87) International Publication No	: NA	Name of Applicant : NA
(61) Patent of Addition to Application Number	:NA	Address of Applicant : NA
Filing Date	:NA	(72)Name of Inventor :
(62) Divisional to Application Number	:NA	<b>1)Mrs. Vimala M</b>
Filing Date	:NA	Address of Applicant :Department of Agricultural Statistics, Applied Mathematics and Computer Science College of Agriculture, University of Agricultural Sciences, GKVK, Bangalore, Karnataka, India, 560065 Bangalore -----
		<b>2)Dr. Rajeev Ranjan</b>
		Address of Applicant :School of Computer Science and Applications, REVA University, Rukmini Knowledge Park, Kattigenahalli,, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

(57) Abstract :

The invention discloses A system for Integrated SoA Cloud-Computing Model using Efficient Wireless Sensor Networks for the Agricultural Applications. The agricultural wireless sensor network system mainly comprises a sensor network and a cloud computing environment, wherein the sensor network mainly comprises terminal nodes, routing nodes and a coordinator, the sensor network protocol forwards data of the terminal nodes between the routing nodes. And the cloud environment comprises an infrastructure as a service (IaaS); and the service cloud comprises software as a service (SaaS) and SOA architecture for monitoring and analysing the data of sensor nodes. This invention also discloses how an efficient centralized routing protocol is used to monitor homogeneous and heterogeneous WSNs and An Efficient wireless system consists of PKNN and HMR protocols for structural representation of the sensor nodes using cluster head information

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045087 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : System and methods for Calm Care Solutions

(51) International classification :G16H0050200000, G16H0050700000, G16H0050300000, G16H0050500000, G16H0010600000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Prof. K V Sheelavathy**

Address of Applicant :School of Computer Science and Engg, REVA University,Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**2)Palgun Kartik Reddy**

**3)Gajula Harshavardhan**

**4)Shyam Sundar Sai**

**5)Saniya Syed**

**6)REVA University**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Prof. K V Sheelavathy**

Address of Applicant :School of Computer Science and Engg, REVA University,Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**2)Palgun Kartik Reddy**

Address of Applicant :School of Computer Science and Engg, REVA University,Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**3)Gajula Harshavardhan**

Address of Applicant :School of Computer Science and Engg, REVA University,Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**4)Shyam Sundar Sai**

Address of Applicant : School of Computer Science and Engg, REVA University,Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**5)Saniya Syed**

Address of Applicant :School of Computer Science and Engg, REVA University,Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

(57) Abstract :

In this invention make a Web app available to the general public that can estimate the disease's risk. Health care industry is merged with technology to create significant amount of data. it's now simple to tap into this data and predict diseases early. Chronic diseases like coronary artery disease, renal disease and diabetes have a high mortality rate and can be fatal if they are not recognized and this technique is helpful to decide further medications is required in the initial period. People can use the web application to enter symptoms and other disease-related information, and the machine learning model will predict disease existence and present it to the user. Medical data is collected and statistics are used as input for the models, which subsequently model those abilities for disease prediction with accuracy. This model is used to forecast people's medical conditions in the backend. This significantly reduces the number of persons duped into taking numerous exams while also cutting expenditures.

No. of Pages : 11 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045088 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : CONTINUOUS AMBULATORY PERITONEAL DIALYSIS ASSISTIVE DEVICE FOR KIDNEY DISEASES

		(71)Name of Applicant : <b>1)Deepa K R</b> Address of Applicant :School of Electrical & Electronics Engineering, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore-64 Bangalore ----- <b>2)Dr. Mallikarjun M Kodabagi</b> <b>3)Ravi Shankar H</b> <b>4)Ashwini Kumari P</b> <b>5)Bhavya K R</b> <b>6)Anitha Kumari R D</b> <b>7)REVA University</b> Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : <b>1)Deepa K R</b> Address of Applicant :School of Electrical & Electronics Engineering, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore-64 Bangalore ----- <b>2)Dr. Mallikarjun M Kodabagi</b> Address of Applicant :School of Computing and Information Technology, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore-560064 Bangalore ----- <b>3)Ravi Shankar H</b> Address of Applicant :School of Computing and Information Technology , REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore-560064 Bangalore ----- <b>4)Ashwini Kumari P</b> Address of Applicant :School of Electrical & Electronics Engineering, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore-560064 Bangalore ----- <b>5)Bhavya K R</b> Address of Applicant :School of computing and information technology, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore-560064 Bangalore ----- <b>6)Anitha Kumari R D</b> Address of Applicant :School of Electronics and Communications Engineering, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore-560064 Bangalore -----
(51) International classification	:A61M0001280000, A61M0001160000, A61M0001340000, A61M0001360000, A61K0045060000	
(86) International Application No	:PCT//	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Dialysis is an artificial way to remove waste products and extra fluid from the blood when the kidneys can no longer do so on their own. There are two main types of Peritoneal Dialysis (PD) namely Continuous Ambulatory Peritoneal Dialysis (CAPD) and Automated Peritoneal Dialysis (APD). CAPD is a type of dialysis which uses manual bags containing peritoneal dialysis fluid. A normal patient who can walk and can do his work should be treated with CAPD process not with the APD process. the issue with APD machine is that the available resources are expensive and hence not affordable to common man. In the traditional methodologies where a patient is required to visit hospital 3-4 times a week for dialysis exchanges. To address these issues, we propose a CAPD system which is flexible, easy to be operated, cost effective and it is expected to provide a better and flexible lifestyle for dialysis patients.

No. of Pages : 21 No. of Claims : 3

(54) Title of the invention : IOT Based Pollution, Temperature Detection Using Raspberry PI Controller and Mobile Application

<p>(51) International classification :G01D0021020000, A61K0036730000, G16H0040670000, H04W0004380000, H04W0088180000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Dr Vishwanath Y</b>  Address of Applicant :REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----  <b>2)Kiran Kumar V</b>  <b>3)Dr Venkatesh Prasad K S</b>  <b>4)Satish G C</b>  <b>5)REVA UNIVERSITY</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Dr Vishwanath Y</b>  Address of Applicant :REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----  <b>2)Kiran Kumar V</b>  Address of Applicant :REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka Bangalore, Karnataka, India, 560064 Bangalore -----  <b>3)Dr Venkatesh Prasad K S</b>  Address of Applicant :REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka Bangalore, Karnataka, India, 560064 Bangalore -----  <b>4)Satish G C</b>  Address of Applicant :REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----</p>
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## (57) Abstract :

Pollution has been major concern that needs to be addressed on large scale and every individual must be aware of the situation. Hence Examining and monitoring the destruction and depletion of our treasured natural resources is an urgent necessity to protect and improve the standard of our environment. In this regard an IoT based mobile application using physical controllers Raspberry Pi and hardware sensors are integrated to constantly check the Air Quality Index at sensitive areas. The developed system would be easy and better analysis could be done based on current location of the user with the help of mobile application

No. of Pages : 13 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045090 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : EPS-APP: Enhancing Programming Skills Android Application

(51) International classification :G06Q0050200000, G09B0005140000, G09B0019020000, A61K0031439000, G06F0008200000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)S. Vaishnavi**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**2)REVA University**

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)S. Vaishnavi**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

(57) Abstract :

7. ABSTRACT: To assist students in developing their programming skills, the EPS-App Android app was developed. Two login options are available in the EPS-app: one is for teachers and the other is for students. Programming is taught using the five forms of learning. Students learn through games in the first strategy, which is known as fun-based learning. The runner-up is scenario-based learning, which teaches programming through real-world circumstances. In the third approach, known as problem-based learning, students utilise code to solve the most frequent problems. Compete is the fourth choice, where pupils are taught through competitions. The fourth choice is learning while speaking, where pupils pick up coding skills. The main objective of this software is to develop student programming abilities by piqueing their interest.

No. of Pages : 12 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045091 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A Novel System to Resolve the Waste Management Using Web based Application

(51) International classification :G06Q0010060000, G06Q0010100000, H04L0012180000, G06Q0050260000, F23G0005027000

(86) International Application No Filing Date :PCT// :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number Filing Date :NA :NA

(62) Divisional to Application Number Filing Date :NA :NA

(71)Name of Applicant :

**1)Mr. Yerriswamy T**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**2)Mrs. Dasari Bhulakshmi**

**3)Dr. Nagashree N**

**4)Ambika B J**

**5)REVA University**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Mr. Yerriswamy T**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**2)Mrs. Dasari Bhulakshmi**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**3)Dr. Nagashree N**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**4)Ambika B J**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**5)REVA University**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

(57) Abstract :

ABSTRACT: The present invention includes a system that is provided for developing a municipal solid waste (MSW) system to handle the various types of waste that the public disposes of, as well as for providing a waste management solution that supports the long-term economic development and growth of communities. The current invention additionally offers a useful state of the work management from Laboure's that are regularly monitored by the admin. Additionally, the present invention offers communities a system and method for more efficiently communicating with users through the user module, where users can post pictures of their surroundings and can also raise complaints that can be sent directly to the admin (Municipal office). The current invention also comprises a process for creating a municipal solid waste management system that makes sustainable development possible while preserving the economic interests of the parties involved.

No. of Pages : 10 No. of Claims : 4

(54) Title of the invention : System and Method to convert sign to speech using machine learning

(51) International classification :G06F0003010000, G06K0009000000, G06K0009460000, G06T0019000000, G06K0009620000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Ms.Geetha B**

Address of Applicant :: School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**2)Mr. Vignesh R****3)Mr. Vinayak B Bidari****4)Mr. Vishal Mise****5)REVA University**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Ms.Geetha B**

Address of Applicant :: School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**2)Mr. Vignesh R**

Address of Applicant :School of Computer Science and Engg, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----

**3)Mr. Vinayak B Bidari**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**4)Mr. Vishal Mise**

Address of Applicant :School of Computer Science and Engg, REVA University, Bangalore, Karnataka, India, 560064 Bangalore -----

## (57) Abstract :

ABSTRACT: The system helps in 2-way communication with the common person, the dumb, and the deaf. The proposed model is an actual-time application for hand gesture recognition that recognizes indications and then converts gesture images into text or speech. The sign to speech conversion is done using CNN. The application consists of an UI which collect the image as input using OpenCV. The text to speech conversion happens using Google API.

No. of Pages : 11 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045093 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : System and Method for Testing Website Vulnerabilities using web crawling and spidering

<p>(51) International classification :G06F0021570000, H04L0029060000, G06F0021450000, G06F0040134000, G06F0016955000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Ms. PRIYADARSHINI R</b> Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore ----- ----- <b>2)Mr. Vinay Kumar M</b> <b>3)REVA University</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Ms. PRIYADARSHINI R</b> Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore ----- ----- <b>2)Mr. Vinay Kumar M</b> Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Banagalore ----- -----</p>
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(57) Abstract :

System and Method for Testing Website Vulnerabilities comprise of Quick scanner, computer coded program to detect the threats on different web applications. The current invention has tried to identify possible security breaches in the web applications by developing a comprehensive tool that can detect the infirmities in the web application. The tool is built using python which detects vulnerabilities in the web applications named Quick Scanner. It can detect five vulnerabilities SQL Injection, Cross site scripting, Open redirection, Vulnerable default pages and Local file inclusion vulnerability. This security breaches may lead to leak of sensitive data like usernames, passwords, personal identifiable information, social security number, credit card details, health information etc. This tool takes very less time to scan and generate report on the web application

No. of Pages : 10 No. of Claims : 2



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/08/2022

(21) Application No.202241045094 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN AUTOMATED ALERT SYSTEM TO DETECT DRIVER DROWSINESS

(51) International classification :G06K0009000000, G08B0021060000, B60K0028060000, G08B0025140000, H04N0017000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Ms. Madhumita Mishra**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**2)Mr. PREM P**

**3)Mr. PRUTHVI NANDAN DH**

**4)Mr. S R SAGAR**

**5)Mr. ROHAN S**

**6)REVA University**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Ms. Madhumita Mishra**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**2)Mr. PREM P**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**3)Mr. PRUTHVI NANDAN DH**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Phone: +91 9902051937 Bangalore -----

**4)Mr. S R SAGAR**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

**5)Mr. ROHAN S**

Address of Applicant :School of Computer Science and Engg, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----

(57) Abstract :

The system for drivers-drowsiness in uses video clips to monitor drivers' tiredness status, such as eyes closure duration, yawning, and head tilt position, without having them carry sensors on their bodies. Due to the limitations of previous methods, an efficient face-tracking algorithm to improve tracking reliability is used in this invention. To distinguish facial areas, we used a technique based on 68 key points. Then we assess the passengers' health using these areas of the head. By integrating the eyes, mouth, and head, the automated alert system raises a fatigue alarm alert to the driver.

No. of Pages : 12 No. of Claims : 3

(54) Title of the invention : Vyoma Spacecraft On Board Application developed on RISC V C class processor and Free RTOS stack suitable for Hard Real Time Applications

<p>(51) International classification :G06F0008200000, H04L0012861000, G06F0030000000, G06F0009500000, C12N0015110000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr Vishwanath Y</b> Address of Applicant :REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----</p> <p><b>2)Dr Venkatesh Prasad K S</b> <b>3)REVA University</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr Vishwanath Y</b> Address of Applicant :REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----</p> <p><b>2)Dr Venkatesh Prasad K S</b> Address of Applicant :REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bangalore, Karnataka, India, 560064 Bangalore -----</p>
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## (57) Abstract :

In space or avionics Industry over past decade, commercial industries have migrated to multi core processors for all ground based applications, which are non- real time or soft real time or any other commercial application. For more than a decade Space industries were using single core Rad hard processors. But with increase in computational loads and parallelism in activities, Avionics industries started moving into multi core processors like Power PC, LEON4 based on ARINC 653 specifications which are proprietary. The operating systems used were VxWorks, RTEMS etc. With advent of Open RISC V architecture, it brings with it a flair of advantages like: openness, modularity, extensibility and stability. Many RISC V designs come with single/multi core architectures with open source RT Linux support. Hence the Current work focussed on setting up architectural and detailed design of Space craft On board Software on Free RTOS RISC V stack on a single core and tested successfully to conclude that RISC V C class processor and FreeRTOS stack is suitable for Hard Real Time Applications.

No. of Pages : 11 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045116 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : IN SILICO APPROACH AND IN VITRO ACETYLCHOLINE ESTERASE INHIBITION ACTIVITY OF ETHANOL FLOWER EXTRACT OF COSCINIUM FENESTRATUM

(51) International classification	:A61K0045060000, A61K0031352000, G16B0015000000, A61P0025280000, A61K0031473000	(71)Name of Applicant : <b>1)Dr.Kuntal Das</b> Address of Applicant :Professor Department of Pharmacognosy and Phytochemistry Krupanidhi College of Pharmacy #12/1, Chikkabelandur, Carmelaram, post. VarthurHobli. Bangalore- 560035. India -----
(86) International Application No	:PCT//	<b>2)Dr. T. S. Roopashree</b>
Filing Date	:01/01/1900	Name of Applicant : NA
(87) International Publication No	: NA	Address of Applicant : NA
(61) Patent of Addition to Application Number	:NA	(72)Name of Inventor :
Filing Date	:NA	<b>1)Dr.Kuntal Das</b>
(62) Divisional to Application Number	:NA	Address of Applicant :Professor Department of Pharmacognosy and Phytochemistry Krupanidhi College of Pharmacy #12/1, Chikkabelandur, Carmelaram, post. VarthurHobli. Bangalore- 560035. India -----
Filing Date	:NA	<b>2)Dr. T. S. Roopashree</b>
		Address of Applicant :Professor, Department of Pharmacognosy Government College of Pharmacy P.Kalingarao Road, Subbaiah Circle. Bangalore-560027 -----

(57) Abstract :

IN SILICO APPROACH AND IN VITRO ACETYLCHOLINE ESTERASE INHIBITION ACTIVITY OF ETHANOL FLOWER EXTRACT OF COSCINIUM FENESTRATUM Quercetin was identified from male and female flower of Coscinium fenestratum (CF) tree and was evaluated for acetylcholine esterase inhibition activity for its effectiveness against Alzheimer disease. The first time established as acetylcholine esterase inhibition activity from the flower parts of CF tree and was identified as quercetin one of the major compounds that responsible for the same. Initially, was confirmed by the mechanism through in silico docking study followed by in vitro assay method. Quercetin was docked with Alzheimer's protein (PDB ID: 4ACU) and showed the binding energy as -7.6. The acetylcholine esterase inhibition activity showed dose dependent manner with IC50 value of 84.12 and 78.34 for male and female flower respectively. Additionally, antioxidant study was performed and showed powerful activity by the female flower but the non significant variation in inhibition of acetylcholine esterase enzyme activity and affirmed as potent anti Alzheimer drug. FIG.1

No. of Pages : 27 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045135 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN ARTIFICIAL GREEN COVER FOR CITY DWELLERS MEANS TO MULTIPURPOSE USE OF METRO BRIDGE PILLARS AND RE

(51) International classification :G06Q0010000000, E03B0001040000, G06Q0010060000, G06Q0050260000, H02J0007350000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)VIKAS JANARDHAN SALUNKHE**

Address of Applicant :#001, CHRIST UNIVERSITY, HOSUR ROAD, BENGALURU, KARNATAKA, INDIA, 560029. -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1) VIKAS JANARDHAN SALUNKHE**

Address of Applicant :#001, CHRIST UNIVERSITY, HOSUR ROAD, BENGALURU, KARNATAKA, INDIA, 560029. -----  
-----

(57) Abstract :

As of now, we do not have any other option rather than Earth for new civilizations in the solar system. Therefore, we have Earth as our only home for now and further (Neil Armstrong). The conservation of Earth has become utmost important and small-small steps towards sustainability begins from individuals. Thereafter homes, communities, villages and finally cities. A city was a village at one point of time. The paradigm shift in the innovation and advancement of standard of living have embraced the inevitable expansion of cities and is continuing. An emerging change occurring in the environment with baby steps day-by-day. The impact of this change is quite visible in our day-to-day life. Adoption of innovations in transportation systems like Metro trains, infrastructure for multi-story buildings, green buildings, broadened roadways. Scientific solutions for drainage systems, recycling of greywater, drinking water management systems, energy consumption, waste to energy generation, waste management, and e-waste disposal. Adoption of green energy enabled gadgets, electric vehicles, and the use of bicycles. Adequate emphasis on public transport infrastructure, health facilities, smart traffic management systems. Smart way ahead on expansion of cities, multi-purpose use of metro bridges, automation, and city forests. Inter-city migration. This is the right time to plan for smart and sustainable cities with future centric policies. The crux of this article is to study the structure of the Bengaluru city and suggestions pertaining to the future planning.

No. of Pages : 10 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/08/2022

(21) Application No.202241045136 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : METHOD FOR PREDICTING CONSUMER BUYING BEHAVIOUR TOWARDS MEDICINE MANAGEMENT SYSTEM

(51) International classification :G06Q0050220000, A47B0067020000, G07F0017000000, A61J0007000000, G06Q0010080000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr. M. VIJAY KUMAR (Professor& HOD)**  
Address of Applicant :DEPARTMENT OF MANAGEMENT STUDIES GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) RAJAHMUNDY ANDHRA PRADESH, INDIA.533294 Email: Phone:8978474999 -----  
**2)Dr. P. SUBBA RAO (Professor& HOD)**  
**3)Dr. P R K RAJU (Professor)**  
**4)Mrs. CH. NAGESWARI (Assistant Professor)**  
**5)Mr. K. VINOD VARMA (Assistant Professor)**  
**6)Mr. R. RAJA (Assistant Professor)**  
**7)Mr. K. MAHESH (Assistant Professor)**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr. M. VIJAY KUMAR (Professor& HOD)**  
Address of Applicant :DEPARTMENT OF MANAGEMENT STUDIES GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) RAJAHMUNDY ANDHRA PRADESH, INDIA.533294 Email: Phone:8978474999 -----  
**2)Dr. P. SUBBA RAO (Professor& HOD)**  
Address of Applicant :DEPARTMENT OF MANAGEMENT STUDIES GIET ENGINEERING COLLEGE, RAJAHMUNDY ANDHRA PRADESH, INDIA.533294 Email: Phone:9502952929 -----  
**3)Dr. P R K RAJU (Professor)**  
Address of Applicant :DEPARTMENT OF MANAGEMENT STUDIES GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A)RAJAHMUNDY ANDHRA PRADESH, INDIA.533294 Email: Phone:7799772599 -----  
**4)Mrs. CH. NAGESWARI (Assistant Professor)**  
Address of Applicant :DEPARTMENT OF MANAGEMENT STUDIES GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A)RAJAHMUNDY ANDHRA PRADESH, INDIA.533294 Email: Phone:7702060046 -----  
**5)Mr. K. VINOD VARMA (Assistant Professor)**  
Address of Applicant :DEPARTMENT OF MANAGEMENT STUDIES GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A)RAJAHMUNDY ANDHRA PRADESH, INDIA.533294 Email: Phone:9849035309 -----  
**6)Mr. R. RAJA (Assistant Professor)**  
Address of Applicant :DEPARTMENT OF MANAGEMENT STUDIES GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A)RAJAHMUNDY ANDHRA PRADESH, INDIA.533294 Email: Phone:9490326764 -----  
**7)Mr. K. MAHESH (Assistant Professor)**  
Address of Applicant :DEPARTMENT OF MANAGEMENT STUDIES GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A)RAJAHMUNDY ANDHRA PRADESH, INDIA.533294 Email: Phone:8985273752 -----

(57) Abstract :  
METHOD FOR PREDICTING CONSUMER BUYING BEHAVIOUR TOWARDS MEDICINE MANAGEMENT SYSTEM ABSTRACT The present invention provides an approach for predicting consumer buying behavior towards medicine management system. The method and system relate to predicting consumer behavior and medicine management and identification system including a portable rigid ferromagnetic substrate, a periodic daily event color-code sheet, a plurality of medicine exemplar containers, one or more malleable substrates, a medicine management cabinet, a mounting platform, an actual medicine product daily organizer, a mobile communications device, a medicine management notebook, for the management and identification of a plurality of actual medicine products of one or more medical regimens of a specific patient. Another aspect of the disclosure includes a medicine management and identification kit, and a medicine management and identification method.

No. of Pages : 23 No. of Claims : 5

(54) Title of the invention : A PROCESS FOR PREPARATION AN READY TO DRINK FLAVOURED PORRIDGE WITH NATURAL AND CHEMICAL PRESERVATIVES AND PRODUCT THEREOF

(51) International classification :A23L0007100000, A61K0036899000, A23L0033000000, A23B0007100000, A23L0019000000  
 (86) International Application No :NA  
 Filing Date :NA  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

**1)MR. VEERAPANDI L**

Address of Applicant :DEPARTMENT OF FOOD TECHNOLOGY, SAINTGITS COLLEGE OF ENGINEERING, KOTTAYAM (DT), KERALA-686532. -----

**Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)MR. VEERAPANDI L**

Address of Applicant :DEPARTMENT OF FOOD TECHNOLOGY, SAINTGITS COLLEGE OF ENGINEERING, KOTTAYAM (DT), KERALA-686532. -----

**2)MS. NIVETHA T**

Address of Applicant :DEPARTMENT OF FOOD TECHNOLOGY, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE (DT), TAMIL NADU 641032. -----

**3)MS. FATHIMA FARZANA**

Address of Applicant :DEPARTMENT OF FOOD TECHNOLOGY, SAINTGITS COLLEGE OF ENGINEERING, KOTTAYAM (DT), KERALA-686532. -----

**4)MR. SURESH KUMAR J**

Address of Applicant :DEPARTMENT OF FOOD TECHNOLOGY, SAINTGITS COLLEGE OF ENGINEERING, KOTTAYAM (DT), KERALA-686532. -----

## (57) Abstract :

Abstract: The present invention relates to a preparing Ready to drink Porridge and product thereof. A novel method for producing Ready to drink Porridge from different types of fermented millets with different flavours and Natural and permitted preservatives and product thereof. The food was prepared by the combination of four different types of millet viz., Eleusine coracana: Finger millet (Keshvaragu) - 30%, Setaria italica: Foxtail millet (Thinai) - 30%, Paspalum scrobiculatum: Kodo millet (Varagu) - 20% and Echinochloa frumentacea: Barnyard millet(Kuthiraivali) - 20%. The millets and the composition were selected based on the nutritional profile and sensory parameters of the final product. The final product was formulated by initial fermentation of millet sample for about 12 - 15 hrs at room temperature followed by cooking for 20 - 25 minutes at 100 - 120°C and cooled at room temperature. Then Different flavours (Chocolate, Mango, Pineapple) and natural (tamarind juice) and permitted preservatives (sodium benzoate) are added. The final product was Filled in Tetra pack and stored at ambient conditions.

No. of Pages : 13 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045153 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A NOVEL METHOD AND SYSTEM TO REDUCE STRESS ON THE MAIN POWER SWITCHES OF DC TO AC CONVERTER CIRCUIT DURING SHOOT THROUGH PERIOD

(51) International classification	:H02M0001380000, H02J0003380000, H03K0017040000, H01R0013703000, H04N0101000000	(71)Name of Applicant : <b>1)DR. KANAPATHY GOPALAKRISHNAN</b> Address of Applicant :ACADEMIC COUNCIL MEMBER, NETTUR TECHNICAL TRAINING FOUNDATION (NTTF) ELECTRONICS CITY CENTRE, 40/40A, ELECTRONIC CITY POST, HOSUR ROAD, BANGALORE, KARNATAKA, INDIA 562100. -----
(86) International Application No	:NA	Name of Applicant : NA
Filing Date	:NA	Address of Applicant : NA
(87) International Publication No	: NA	(72)Name of Inventor : <b>1)DHARMAMBAL V</b> Address of Applicant :COURSE HEAD - COMPUTER ENGINEERING & IT INFRASTRUCTURE, INFORMATION TECHNOLOGY & DATA SCIENCE AND PHD RESEARCH SCHOLAR, NHCE RESEARCH CENTRE, VTU, NTTF ELECTRONICS TRAINING CENTRE, ELECTRONICS CITY, BANGALORE, KARNATAKA, INDIA 562100. -----
(61) Patent of Addition to Application Number	:NA	---
Filing Date	:NA	<b>2)DR.NISHA K C R</b> Address of Applicant :PHD RESEARCH SUPERVISOR, DEPARTMENT OF ECE, NEW HORIZON COLLEGE OF ENGINEERING, BANGALORE-560103. -----
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT OF THE INVENTION The patent disclosure covers A Novel Method and System to reduce stress on the main power switches of DC to AC converter circuit during shoot through period. Shoot through is a technique used in power converters to increase the boost ability. During the shoot through period the upper leg and the lower leg devices shorted to boost the input supplied DC voltage. During this shoot through period the power devices are made to carry high short circuit current (shorting of load). The novel method uses separate shunt switch across the load. The shunt switch will be turned on during the shoot through period which will have special characteristics of fast switching and high current carrying capacity.

No. of Pages : 5 No. of Claims : 5

(54) Title of the invention : SWITCHED CAPACITOR BASED HYBRID THREE-PHASE MULTILEVEL INVERTER

<p>(51) International classification :H02M0007483000, H02M0007493000, H02M0001000000, H02M0001120000, H02J0003380000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)MEPCO SCHLENK ENGINEERING COLLEGE (AUTONOMOUS)</b> Address of Applicant :THE PRINCIPAL, MEPCO SCHLENK ENGINEERING COLLEGE (AUTONOMOUS) SIVAKASI, MEPCO SCHLENK ENGINEERING COLLEGE POST, SIVAKSI-626005, TAMILNADU STATE, INDIA. ----- -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)MR.B.SAKTHISUDHURUN</b> Address of Applicant :DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING, MEPCO SCHLENK ENGINEERING COLLEGE (AUTONOMOUS) SIVAKASI, MEPCO SCHLENK ENGINEERING COLLEGE POST, SIVAKSI-626005, TAMILNADU STATE, INDIA. ----- -----</p> <p><b>2)DR.S.MURALIDHARAN</b> Address of Applicant :DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING, MEPCO SCHLENK ENGINEERING COLLEGE (AUTONOMOUS) SIVAKASI, MEPCO SCHLENK ENGINEERING COLLEGE POST, SIVAKSI-626005, TAMILNADU STATE, INDIA. ----- -----</p> <p><b>3)MR.S.AROCKIARAJ</b> Address of Applicant :DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING, MEPCO SCHLENK ENGINEERING COLLEGE (AUTONOMOUS) SIVAKASI, MEPCO SCHLENK ENGINEERING COLLEGE POST, SIVAKSI-626005, TAMILNADU STATE, INDIA. ----- -----</p>
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(57) Abstract :

ABSTRACT Switched Capacitor based hybrid three-phase multilevel inverter To keep the Total Harmonic Distortion (THD) under control, traditional two-level inverters for solar PV-based water pumping applications must be operated at a high switching frequency and require large filters at the output. Multilevel inverters have been presented in the literature to alleviate the shortcomings of standard two-level inverters. However, as the number of levels increases, the multilevel inverters principal restriction is the significant increase in component count as the level increases. A switching capacitor based three phase hybrid multilevel inverter with boosting capability with a maximum voltage gain of 2 is suggested in the current invention to address the disadvantage of increasing component count. To increase the number of output voltage levels, the proposed topology can be extended using two distinct ways. Extension method-1 might be used to integrate many renewable energy sources, while extension method-2 could be used to boost the inverter's gain. A MATLAB simulation is performed to verify the performance of the suggested multilevel inverter, and the results are promising enough to be employed in conjunction with solar PV fed water pumping applications.

No. of Pages : 16 No. of Claims : 7



(54) Title of the invention : AUTOMATIC SHOE USING ULTRASONIC SENSORS

<p>(51) International classification :H04W0004021000, H04W0004029000, F16H0061120000, B60W0030090000, G06F0030394000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to :NA Application Number :NA Filing Date :NA</p> <p>(62) Divisional to :NA Application Number :NA Filing Date :NA</p>	<p>(71)<b>Name of Applicant :</b>  <b>1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE</b>  Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR Chennai-600127 Chennai -----  <b>Name of Applicant : NA</b>  <b>Address of Applicant : NA</b></p> <p>(72)<b>Name of Inventor :</b>  <b>1)Prof .P. V. Hemavathy</b>  Address of Applicant :Associate Professor, Department of Computer Science Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar,Chennai-600127 Chennai -----  <b>2)Ashmitha. R</b>  Address of Applicant :Department of Computer Science Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar,Chennai-600127 Chennai -----  <b>3)Akshaya. M</b>  Address of Applicant :Department of Computer Science Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar,Chennai-600127 Chennai -----  <b>4)Arthima.A</b>  Address of Applicant :Department of Computer Science Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar,Chennai-600127 Chennai -----</p>
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(57) Abstract :

The project focuses on reducing the air pollution significantly by avoidance of fuel consuming vehicles. This is also brought out to assist the older community and disabled people to travel without physical caretaker. The shoes set with wheels have motors to bring motion. The user can control these motions with the help of their mobile or a remote. There's a GPS installed in case of automatic routing to the desired location. Ultrasonic sensors are used in this to locate nearby objects and other components in road traffic. Manual control can be used in case of emergency braking and traffic signal situations.

No. of Pages : 6 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045220 A

(19) INDIA

(22) Date of filing of Application :08/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : MOBILE OPERATED BOAT TRASH COLLECTOR

(51) International classification :G06Q0010060000, G06Q0050280000, B08B0005040000, E02B0015100000, H04W0004400000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)PRATHYUSHA ENGINEERING COLLEGE**

Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA 602025.

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)MR. R KARTHICK**

Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA 602025.

**2)KAKARLA MAHESH**

Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA 602025.

**3)MANOJ KUMAR P**

Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA 602025.

**4)PADMA VENKATA SHARATH**

Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA 602025.

**5)DR.P.RAJA**

Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA 602025.

**6)MR.N.GOPINATH**

Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA 602025.

**7)MR.AMIRTHALINGAM**

Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA 602025.

(57) Abstract :

ABSTRACT The Boat cleaning robot is a vehicle that may be used to collect debris from riverbanks, therefore maintaining the cleanliness of the river. A large number of individuals frequently attend for leisure and pleasure. . People frequently discard plastics without understanding the repercussions. This causes environmental contamination, which impacts the marine ecosystem and raises the danger of contracting infections. In order to address this issue, we have created and constructed a boat cleaning machine that will remove rubbish from the water with minimum human intervention. Here, we have added an Adriano board and designed a software that will let us to manage the' machine's activities within a 10-meter Bluetooth range. A prototype to gather waste from water bodies has been created.

No. of Pages : 7 No. of Claims : 3

(54) Title of the invention : SMART RAILWAY LEVEL CROSSING SYSTEM USING PNEUMATIC CYLINDER

(51) International classification :B61L0027000000, B61L0029280000, B61L0029300000, B61L0029080000, B61L0029000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)PRATHYUSHA ENGINEERING COLLEGE**

Address of Applicant :ARANVOYALKUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. -----

**Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1) Dr. V. JAYASEELAN**

Address of Applicant :ARANVOYALKUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. -----

**2)KANCHAMREDDY MAHESH**

Address of Applicant :ARANVOYALKUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. -----

**3)NAVEEN KUMAR D**

Address of Applicant :ARANVOYALKUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. -----

**4)TABJUL NAVANEETH**

Address of Applicant :ARANVOYALKUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. -----

**5)Mr. R. RAGAVENDIRAN**

Address of Applicant :ARANVOYALKUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. -----

**6)Mr. N. RAMASAMY**

Address of Applicant :ARANVOYALKUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. -----

**7)Mr. M. SATHYAPRAKASH**

Address of Applicant :ARANVOYALKUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. -----

## (57) Abstract :

The objective of this project is to develop an automatic railway level crossing system to replace the gate controlled by a gatekeeper in order to save time consumption and increase road user safety. The railway is the finest means to travel between states across long distances in India, as it is the most popular mode of transportation. According to the current method, when a train departs the station and there is a level crossing, the station master notifies the gatekeeper by telecommunication, and the gatekeeper locks the gate until the train departs. As a result, if the train is late for a variety of reasons, the gates will remain closed for an extended period of time, resulting in increased traffic around the gates. Additionally, since the operation is automated, human mistake is avoided. Using a microcontroller, this project aims to manage and operate the railway gate system as well as other electronic components. The suggested prototype includes a train detection sensor, an obstacle detection sensor, a GSM module, signal lights, a pneumatic cylinder-based railway gate controller, and a processor.

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/08/2022

(21) Application No.202241045234 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : CLOUD 3D PRINTER

<p>(51) International classification :B33Y0010000000, G06Q0010060000, B33Y0030000000, B33Y0040000000, H04L0029080000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1) PRATHYUSHA ENGINEERING COLLEGE</b> Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Mr. GOPINATH NARAYANAN</b> Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. ----- <b>2)ARAVIND SS</b> Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. ----- <b>3)VAIKUNTH M</b> Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. ----- <b>4)NANDHAKUMAR KT</b> Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. ----- <b>5)Mr. R. KARTHICK</b> Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. ----- <b>6)Dr. P. RAJA</b> Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. ----- <b>7)Mr. AMIRTHALINGAM</b> Address of Applicant :ARANVOYAL KUPPAM, POONAMALLEE-TIRUVALLUR ROAD, TIRUVALLUR, TAMILNADU, INDIA, 602025. -----</p>
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(57) Abstract :

Using cloud services in combination with Additive Manufacturing Technology to create 3D models, To make the supply chain of creating the 3D object and distributing the product easier, where quick modelling and prototyping of engineering, dental and medical industries are in demand. This project's use case is to make the printer accessible to a wide number of people, through our cloud service platform. To meet our project's use case, we must accept trustworthy resources which could be quite accessible and also comparatively less in cost. The customer can place the order through our website, and can also monitor the printing process through the service we provide .through the website. In case of the development of new features in the 3D printer, we have added auto-levelling of printing bed, continuous filament support in demand, increase in the speed of printing and 24/7 working by job scheduler through the cloud platform

No. of Pages : 7 No. of Claims : 4

(54) Title of the invention : An investigation into the influence that the use of digital technology has on the outcomes of the marketing efforts of the organization.

<p>(51) International classification :G06Q0030020000, G06Q0010060000, G06Q0050000000, G06Q0050180000, G06Q0010000000</p> <p>(86) International Application No :PCT//</p> <p>Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to :NA</p> <p>Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application :NA</p> <p>Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Dr.Manoj Kumara N V</b>  Address of Applicant :Associate Professor Maharaja Institute of Technology-Mysore Behind KR mills, Belwadi, Srirangapatna Taluk, Mandya, Karnataka, India Pin:571477 District: Mandya State: Karnataka  Country: India -----  <b>2)Mr. Mankeshva saini</b>  <b>3)Dr. A. Nagalaxmi</b>  <b>4)Mr. SRIDHARA G</b>  <b>5)Dr. T. Dhanalakshmi</b>  <b>6)Dr.P.Maheswari</b>  <b>7)Dr. Jayasree Krishnan</b>  <b>8)Dr.R.Karthick</b>  <b>9)Dr.D.Joel Jebadurai</b>  <b>10)Dr.M.Manikandan</b>  <b>11)Dr. Harikumar Pallathadka</b>  <b>12)Dr. K. Sivaperumal</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Dr.Manoj Kumara N V</b>  Address of Applicant :Associate Professor Maharaja Institute of Technology-Mysore Behind KR mills, Belwadi, Srirangapatna Taluk, Mandya, Karnataka, India Pin:571477 District: Mandya State: Karnataka  Country: India -----  <b>2)Mr. Mankeshva saini</b>  Address of Applicant :Assistant professor Department of commerce and management, Maharaja Ganga Singh University, Bikaner, Rajasthan Pin:334003 District: Bikaner State: Rajasthan Country: India -----  <b>3)Dr. A. Nagalaxmi</b>  Address of Applicant :Assistant Professor Dr. SNS Rajalakshmi College of Arts and Science, Coimbatore Pin: 641 049. District: Coimbatore State: Tamil Nadu Country: India -----  <b>4)Mr. SRIDHARA G</b>  Address of Applicant :Assistant professor Post Graduate Department of commerce Sheshadripuram First Grade College Yelahanka Pin: 560064 District: Bangalore urban State: Karnataka Country: India -----  <b>5)Dr. T. Dhanalakshmi</b>  Address of Applicant :Asst. Professor Ayya Nadar Janaki Ammal College, Sivakasi. Pin: 626124 District: Virudhunagar State: Tamil Nadu Country: India -----  <b>6)Dr.P.Maheswari</b>  Address of Applicant :Assistant Professor SRM institute of science and technology Pin:600089 District: Chennai State: Tamilnadu Country: India -----  <b>7)Dr. Jayasree Krishnan</b>  Address of Applicant :Professor St Joseph's College of Engineering Old Mahabalipuram Road, Chennai PIN 600119 District : Chengalpattu State Tamil Nadu Country India -----  <b>8)Dr.R.Karthick</b>  Address of Applicant :Assistant Professor Department of MBA St.Joseph's College of Engineering, OMR, Chennai, Pin.600119 District : Chengalpattu State: Tamilnadu Country. India -----  <b>9)Dr.D.Joel Jebadurai</b>  Address of Applicant :Assistant Professor Department of MBA St.Joseph's College of Engineering, OMR, Chennai Pin. 600119 District : Chengalpattu State. Tamilnadu Country. India -----  <b>10)Dr.M.Manikandan</b>  Address of Applicant :Assistant Professor Department of MBA St.Joseph's College of Engineering, OMR, Chennai, Pin.600119 District : Chengalpattu State: Tamilnadu Country: India -----  <b>11)Dr. Harikumar Pallathadka</b>  Address of Applicant :Director and Professor Manipur International University, Ghari, Imphal, Imphal West, Pin: 795140 District : Imphal State: Manipur Country: India -----  <b>12)Dr. K. Sivaperumal</b>  Address of Applicant :Assistant Professor Vel Tech Ranga Sanku Arts College, Avadi, Chennai- 62. District: Chennai State: TamilNadu Country: India -----</p>
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## (57) Abstract :

An investigation into the influence that the use of digital technology has on the outcomes of the marketing efforts of the organization Abstract: It is anticipated that business practises and technologies related to digital technology would dramatically alter both the existing competitive landscape and society. The way in which digital technologies are redefining the practise of marketing, which in turn is transforming the character of markets internationally, is one of the most important aspects of the changes that are occurring in business practises. The purpose of this paper is to discuss the impact of the digital transformation of marketing at both the industry level and the macroeconomic level. As a guide, this paper will discuss the literature concerning the wave of digital disruption brought about by new technology, changes in consumer demand, and new forms of business competition. The forces that are driving the digital transformation in marketing, the vital importance of having a grasp of the consumer value chain in relation to marketing practise, and the influence that shifting business practises have on the economy as a whole are all discussed. It is possible to acquire new insights for innovation and marketing by making use of a new model that was established by Teixeira (2019) to measure customer demand. This model is described as a marketing practise innovation that may be applied. The consequences of these breakthroughs in collecting market information and in marketing tactics for both industry and macroeconomic policy are examined. The authors advocate for more research to be conducted utilising this methodology so that a greater understanding may be gained regarding the ways in which digital disruption is anticipated to affect the competitiveness of firms and the nature of the economy on a bigger scale worldwide. Making the shift to a digital economy is a prerequisite that must be met in the present day. The digitalization of the economy makes it possible for people to simplify a significant number of the activities that are associated with their jobs, such as the search for information that they are required to perform on a regular basis. Additionally, the digitalization of the economy opens up numerous opportunities for people to expand their businesses. The objective of this article is to analyse the fundamentals of digital marketing, including its essence, its purpose, the methods, channels, and instruments it employs, its strengths and weaknesses, and the strategy that should be implemented to bring about the next stage in the evolution of marketing.

No. of Pages : 7 No. of Claims : 6

(54) Title of the invention : Forced Convection Hybrid Solar Cabinet Dryer with Heat Storage Materials For Drying Of Agricultural Crops

(51) International classification :F24S0060000000, A23B0007020000, F01K0003000000, F24F0005000000, F26B0003280000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

1)Dr. K. Sowmiya

Address of Applicant :Assistant Professor Department of Physics, Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur, Pin : 621212 District: Perambalur State : Tamilnadu Country: India -----

2)E. Veeramanipriya

3)Dr. Uma Devi Pongiya

4)Dr. C. Surya

5)Dr. T. Sheela

6)R.Shanmugapriya

7)Dr. Anchana V.V

8)Dr. P. Shobana Devi

9)Dr. K. Subasankari

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

1)Dr. K. Sowmiya

Address of Applicant :Assistant Professor Department of Physics, Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur, Pin : 621212 District: Perambalur State : Tamilnadu Country: India -----

2)E. Veeramanipriya

Address of Applicant :Assistant Professor Department of Physics, Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur, Pin : 621212 District: Perambalur State : Tamilnadu Country: India -----

3)Dr. Uma Devi Pongiya

Address of Applicant :Professor Department of Biochemistry, Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur, Pin : 621212 District: Perambalur State : Tamilnadu Country: India -----

4)Dr. C. Surya

Address of Applicant :Assistant Professor Department of Biochemistry, Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur, Pin : 621212 District: Perambalur State : Tamilnadu Country: India -----

5)Dr. T. Sheela

Address of Applicant :Assistant Professor Department of Biotechnology, Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur, Pin : 621212 District: Perambalur State : Tamilnadu Country: India -----

6)R.Shanmugapriya

Address of Applicant :Assistant Professor Department of Chemistry, Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur, Pin : 621212 District: Perambalur State : Tamilnadu Country: India -----

7)Dr. Anchana V.V

Address of Applicant :Assistant Professor Department of Microbiology, Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur, Pin : 621212 District: Perambalur State : Tamilnadu Country: India -----

8)Dr. P. Shobana Devi

Address of Applicant :Assistant Professor Department of Biochemistry, Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur, Pin : 621212 District: Perambalur State : Tamilnadu Country: India -----

9)Dr. K. Subasankari

Address of Applicant :Assistant Professor Department of Biotechnology, Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur, Pin : 621212 District: Perambalur State : Tamilnadu Country: India -----

## (57) Abstract :

Forced Convection Hybrid Solar Cabinet Dryer with Heat Storage Materials For Drying Of Agricultural Crops Abstract The present invention relates to an enhanced solar cabinet dryer with improved efficiency of drying. In particular, the present invention relates to an improved solar dryer with enhanced solar radiation incident on the heat storage materials for increasing efficiency. Thermal Energy Storage (TES) is the efficient technology to rectify the energy demand through energy redistribution. Heat energy obtained from the sun radiation can be stored (redistributed) during the sun shine hours and can be used often the off sun light or night hours. The advantage of using TES in solar dryer is increasing the overall efficiency and reliability also reducing the pollution and CO2 emission and lead to the better economics. It will therefore be convenient to describe the invention with reference to that example application; it should be understand however that the invention is intended for broader application and use.

No. of Pages : 14 No. of Claims : 9

(54) Title of the invention : Determination of Antibiotic Susceptibility of Bacteria by Flow Cytometric Method

(51) International classification :G01N0015140000, C07D0477200000, C12Q0001689000, A61K0031407000, C12Q0001180000

(86) International Application No :PCT// /  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Dr. C. Baskaran**

Address of Applicant :Research Associate, Nova Southeastern University, Davie, Florida-33314 Ph: 9544106046, E-mail: baskar.murali@gmail.com -----

**2)Dr. K. Ashok****3)Dr. M. Babu****4)Dr. A. Parthasarathy**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Dr. C. Baskaran**

Address of Applicant :Research Associate, Nova Southeastern University, Davie, Florida-33314 Ph: 9544106046, E-mail: baskar.murali@gmail.com -----

**2)Dr. K. Ashok**

Address of Applicant :Assistant Professor, Department of Microbiology and Biotechnology, Faculty of Arts and Science, Bharath Institute of Higher Education and Research, Chennai-600073 -----

**3)Dr. M. Babu**

Address of Applicant :Assistant Professor, Department of Microbiology and Biotechnology, Faculty of Arts and Science, Bharath Institute of Higher Education and Research, Chennai-600073 -----

**4)Dr. A. Parthasarathy**

Address of Applicant :Assistant Professor, Department of Microbiology and Biotechnology, Faculty of Arts and Science, Bharath Institute of Higher Education and Research, Chennai-600073 -----

## (57) Abstract :

The aim of this innovation is to determine the antibiotic susceptibility of bacterial strains using flow cytometric methods by comparison with current standardized methods. 11 clinical isolates and 6 standard bacterial strains were included in the study. MIC values were determined by broth microdilution method (BMD), automated VITEK 2® system, and flow cytometry method (FCM). FCM was performed using an Accuri C6 flow cytometer. VITEK 2-FCM:  $r = 0.529$  ( $p = 0.063$ ), *E. faecalis* ATCC 29212 [BMD-FCM:  $r = 0.393$  ( $p = 0.295$ )]; BMD-VITEK 2:  $r = 0.393$  ( $p = 0.295$ ) and vancomycin-resistant *E. faecium* clinical isolate [BMD-FCM:  $r = 0.452$  ( $p = 0.063$ )] BMD-FCM  $r$ -values 0.802-0.969 ( $p < 0.001$ ), BMD-VITEK 2  $r$ -values 0.655-0.941 ( $p < 0.005$ ) and 0.667-0.953. The synergistic effect of carbapenem combinations on different types of carbapenemase-producing Enterobacteriaceae was studied using different approaches: flow cytometry and computational analysis. Ten well-characterized Enterobacteriaceae (KPC, Verona integrin-encoded metallo- $\beta$ -lactamase-VIM and OXA-48-like enzyme) were selected for study. Cells were incubated with a combination of ertapenem and imipenem, meropenem, or doripenem, and kill rate curves were run with and without drug enhancement. Cephalosporins have also been used in combination with Ertapenem.

No. of Pages : 11 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :09/08/2022

(21) Application No.202241045327 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : HIGH QUALITY NEW HOME AIR VENTILATOR FOR AIR PURIFICATION

(51) International classification :A61M0016000000, H01L0021020000, G05B0015020000, G06F0040284000, C12M0001120000  
(86) International Application No :PCT// /  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Francis Xavier Engineering College | Tirunelveli**

Address of Applicant :Francis Xavier Engineering College, Vannarpettai, Tirunelveli-627003 -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. R. Suman**

Address of Applicant :Dr. R. Suman, Associate Professor, Department of Chemistry, Francis Xavier Engineering College, Vannarpettai, Tirunelveli-627003, India. -----

**2)Dr. P.S. Suja Ponmini**

Address of Applicant :Dr. P.S. Suja Ponmini, Professor, Department of Chemistry, Francis Xavier Engineering College, Vannarpettai, Tirunelveli-627003, India. -----

**3)Mr. M. Robinson**

Address of Applicant :Mr. M. Robinson, Assistant Professor, Department of Chemistry, Francis Xavier Engineering College, Vannarpettai, Tirunelveli-627003, India. -----

**4)Dr. P. Jona**

Address of Applicant :Dr. P. Jona, Assistant Professor, Department of Chemistry, Francis Xavier Engineering College, Vannarpettai, Tirunelveli-627003, India. -----

(57) Abstract :

Due to not getting enough air inside the houses, there is a lot of heat inside the house, and due to less oxygen, people's health starts getting worse. In this way we see that there are many types of problems in the construction of houses, but in the right environment where there is continuous flow of air in the right amount, such possibilities are very less. To solve the above problems, we consider a new technology, in which we make the ventilator system installed on the houses on the new technology, and on the basis of this technology, the air flow in the ventilator system is continuously continuous. Lives, and people's health is also good. We describe this new technique as shown in drawing number 1, 2; Based on the complete specification, this technique can be understood completely.

No. of Pages : 17 No. of Claims : 4



(54) Title of the invention : DEEP LEARNING BASED EARLY SEVERITY DETECTION FRAMEWORK FOR DIAGNOSIS OF COVID19 BY USING LONG NON CODING RNA SEQUENCE

<p>(51) International classification :C12N0015113000, C12Q0001688600, G16B0030000000, G16H0050200000, G16B0040000000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)REVATHI ANNEM</b>  Address of Applicant :Research scholar, Department of Computer Science, Sri Padmavati Mahila Visvavidyalyam, Tirupati -----  <b>2)Dr. JYOTHI SINGARAJU</b>  <b>Name of Applicant : NA</b>  <b>Address of Applicant : NA</b>  (72)Name of Inventor :  <b>1)REVATHI ANNEM</b>  Address of Applicant :Research scholar, Department of Computer Science, Sri Padmavati Mahila Visvavidyalyam, Tirupati -----  -----  <b>2)Dr. JYOTHI SINGARAJU</b>  Address of Applicant :Professor, Department of Computer Science, Sri Padmavati Mahila Visvavidyalyam, Tirupati -----  -----</p>
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(57) Abstract :

ABSTRACT DEEP LEARNING BASED EARLY SEVERITY DETECTION FRAMEWORK FOR DIAGNOSIS OF COVID19 BY USING LONG NON CODING RNA SEQUENCE The whole world is suffering from millions of Covid-19 patients. The main challenging task is to manage the situation with limited resources of medical and find the severity of disease to reduce the death rate. previously many systems with artificial intelligence developed for severity assessment, but not able to predict correctly due to lack of data and other unknow symptoms. The pandemic situation due to Covid19, some of the patients are symptomless and others have many varying symptoms of the disease. The severe symptom cases are leading to damage of multiorgan and death. The mechanism to indicate severity of the disease is still unknow. Early detection of the infected patients of Covid19 is very important to control the spreading of diseases and also severity level of the disease helps to decrease the mortality rate. So, a deep learning framework is proposed to predict the severity of the Covid19 disease by using lncRNA sequence which is novel approach. The transcripts which do not produce proteins and longer than 200 nucleotides are known to be long non- coding RNAs (lncRNAs). In bioinformatics, detecting Long non-coding RNAs is very challenging task due to its biological functions which play very important role in human disorders and diseases. At the beginning it is treated as junk data, as it doesn't produce proteins, but many research shown that mutation or disfunction of lncRNAs are involved in a wide range of diseases. Mutations associated with disease is often studied to know about disease and its prevention. The mutations also help to diagnosis the diseases and develop new drug for the treatment of the diseases. Various computational methods have been developed to study about the lncRNAs functions and mutations associated with diseases but still, it is an unknown task. As a lncRNA is novel class of RNAs the mutations of it are not yet studied. The mutations in lncRNA sequence play an important role in the disease development, so which can also be used as a strong biomarker of the diseases. Previous studies identified the mutations using high throughput DNA sequencing technologies. This proposed framework is focused on the mutation identification in Covid19 long non-coding RNA sequence using Deep Learning Approach. The proposed system is a novel Deep Learning approach for identifying the possible mutations in the long non-coding RNA sequence and predict the severity level of Covid19 patients to reduce death rate.

No. of Pages : 7 No. of Claims : 5

(54) Title of the invention : A SYSTEM AND METHOD FOR REMOTE CONTROLLING A PLURALITY OF APPLIANCES

<p>(51) International classification :H04N0005232000, G06F0003010000, G06Q0020120000, G06F0003048100, H04N0001210000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)B.S. ABDUR RAHMAN CRESCENT INSTITUTE OF SCIENCE AND TECHNOLOGY</b> Address of Applicant :Seethakathi Estate G.S.T Main Road Chennai Tamil Nadu INDIA Chennai -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Yuvanshankar Azhagumurugan</b> Address of Applicant :Department of Computer Science and Engineering, B.S. Abdur Rahman Crescent Institute of Science &amp; Technology Chennai -----</p> <p><b>2)Mohamed Mukthar</b> Address of Applicant :Department of Computer Science and Engineering, B.S. Abdur Rahman Crescent Institute of Science &amp; Technology Chennai -----</p> <p><b>3)Madhina Banu D</b> Address of Applicant :Department of Computer Science and Engineering, B.S. Abdur Rahman Crescent Institute of Science &amp; Technology Chennai -----</p> <p><b>4)Dr. E. Syed Mohamed</b> Address of Applicant :Department of Computer Science and Engineering, B.S. Abdur Rahman Crescent Institute of Science &amp; Technology Chennai -----</p>
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(57) Abstract :

The present subject matter is a system and method for controlling a plurality of appliances. The system comprises a user interface for receiving user inputs, a camera configured to capture a QR code. The camera is configured to focus along the line of sight of the user to capture the QR code. An unique QR code is provided to each of the plurality of appliances with a clear line of sight available to the user. A QR module retrieves details corresponding to the QR code from a database module. A processor is configured to control the operations of the components of the system. The processor communicates a PIN ID and a status, corresponding to the QR code, to a router through a wireless protocol which transmits the status to a controller which activates a relay to perform an on / off control of the appliance.

No. of Pages : 22 No. of Claims : 9

(54) Title of the invention : Treatment of Bamboo with polypropylene for use in structural concrete

(51) International classification :C04B0028040000, E04C0005010000, E04C0005070000, C04B0014480000, C04B0111000000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to :NA  
 Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application :NA  
 Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Shashishankar A**  
 Address of Applicant :Professor and Head, Department of Civil Engineering, AMC Engineering College (Affiliated to VTU), Bannerghatta Road, Bengaluru-560083 Bengaluru -----  
**2)Dr. Rakesh Kumar Pandey**  
**3)Dr. Aniket Bhanudas Kolekar**  
**4)Ms. Aaliya Quraishi**  
**5)Dr. Abhijeet Ganguly**  
**6)Mrs. Anjali Gupta**  
**7)Dr. Harish Kumar Banga**  
**8)Dr. Vinayaka N**  
**9)Mr. R. G. Padmanabhan**  
**10)Mr. A. Joseph Arockiam**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Dr. Shashishankar A**  
 Address of Applicant :Professor and Head, Department of Civil Engineering, AMC Engineering College (Affiliated to VTU), Bannerghatta Road, Bengaluru-560083 Bengaluru -----  
**2)Dr. Rakesh Kumar Pandey**  
 Address of Applicant :Associate Professor, Department of Civil Engineering, MATS University Raipur, India-493441 Raipur -----  
**3)Dr. Aniket Bhanudas Kolekar**  
 Address of Applicant :Associate Professor, Department of Mechanical Engineering, Dr. D Y Patil Institute of Engineering Management and Research, Akurdi, Pune 411044 Pune -----  
**4)Ms. Aaliya Quraishi**  
 Address of Applicant :Assistant Professor, Department of Civil Engineering, Chouksey Engineering College, Bilaspur, Chhattisgarh 495001 Bilaspur -----  
**5)Dr. Abhijeet Ganguly**  
 Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Chhatrapati Shivaji Institute of Technology, Durg, Chhattisgarh Durg -----  
**6)Mrs. Anjali Gupta**  
 Address of Applicant :Assistant Professor, Department of Civil Engineering, Chouksey Engineering College, Bilaspur, Chhattisgarh 495001 Bilaspur -----  
**7)Dr. Harish Kumar Banga**  
 Address of Applicant :Assistant Professor, Department of Fashion and Lifestyle Accessory Design, National Institute of Fashion Technology, Mumbai 410210 Mumbai -----  
**8)Dr. Vinayaka N**  
 Address of Applicant :Associate Professor, Department of Aeronautical Engineering, Nitte Meenakshi Institute of Technology, Yelahanka, Bengaluru - 560064 Bengaluru -----  
**9)Mr. R. G. Padmanabhan**  
 Address of Applicant :Assistant Professor, Department of Automobile Engineering, Arasu Engineering College, Kumbakonam Kumbakonam -----  
**10)Mr. A. Joseph Arockiam**  
 Address of Applicant :Assistant Professor, Department of Automobile Engineering, Arasu Engineering College, Kumbakonam Kumbakonam -----

(57) Abstract :  
 [013] In this work, the properties of structural concrete reinforced with bamboo fibers treated with polypropylene were studied and compared with the properties of structural concrete without the addition of fibers and with the addition of steel fibers. Much has been studied on reinforced concrete with different fibers. Among natural fibers, bamboo fibers are among those with good mechanical performance and can be compared with steel. One of the factors that prevents its indication for use in civil construction is due to the fiber's water absorption capacity, which translates into the loss of the mechanical properties of the fiber and, consequently, of the concrete. To reduce the absorption of water by the fibers, they were treated with polypropylene (PP) in solution, to waterproof the fiber and ensure resistance to the stresses required by structural concrete. Three types of structural concrete were obtained: structural concrete without the addition of fibers, structural concrete with the addition of 8% by volume of bamboo fibers, and structural concrete with the addition of 8% by volume of steel fibers. The different types of concrete were characterized by mechanical, morphological and microstructural tests. The partial results showed that the different types of concrete can be classified as excellent and that the concrete containing steel fibers is more resistant, although the reinforcement matrix interaction was higher for the concrete obtained with PP-coated bamboo fibers. Accompanied Drawing [FIG. 1] [FIG. 2][FIG. 3] [FIG. 4][FIG. 5] [FIG. 6]

No. of Pages : 28 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045340 A

(19) INDIA

(22) Date of filing of Application :09/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : INTELLIGENT RECOGNITION & AVOIDANCE OF CYBER CRIME BY USING MACHINE LEARNING ALGORITHMS

(51) International classification :G06F0021560000, H04L0029060000, G06N0020000000, G06F0021530000, G06K0009620000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)N. Indumathi**

Address of Applicant :Assistant Professor, Department of Computer Applications, SRM Institute of Science and Technology, Ramapuram Campus, Chennai Chennai -----

**2)Dr. Mohit Kumar**

**3)Dr. Archana Kumar**

**4)M.K.Soundarya**

**5)Dr. S.Vijayaraj**

**6)D.Prabhu**

**7)Dr. Shrikant Upadhyay**

**8)Dr. V L Raja**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)N. Indumathi**

Address of Applicant :Assistant Professor, Department of Computer Applications, SRM Institute of Science and Technology, Ramapuram Campus, Chennai Chennai -----

**2)Dr. Mohit Kumar**

Address of Applicant :Associate Professor, Computer Science & Engineering, Cambridge Institute of Technology, Ranchi Ranchi -----

**3)Dr. Archana Kumar**

Address of Applicant :Professor / CSE, Dr. Akhilesh Das Gupta Institute of Technology and Management, Affiliated To GGSIPU, Delhi, Shastri Park, New Delhi 110053 New Delhi -----

**4)M.K.Soundarya**

Address of Applicant :Assistant Professor / Civil Engineering, Vels Institute of Science, technology and Advanced Studies, Chennai Chennai -----

**5)Dr. S.Vijayaraj**

Address of Applicant :Assistant Professor / EEE, Vels Institute of Science, Technology and Advanced Studies, Pallavaram, Chennai Chennai -----

**6)D.Prabhu**

Address of Applicant :Information Technology, Loyola Institute of Technology, Palanchur, Nazarethpet (Po), Chennai -600123 Chennai -----

**7)Dr. Shrikant Upadhyay**

Address of Applicant :Assistant Professor / ECE, Cambridge Institute of Technology, Ranchi-835103 Ranchi -----

**8)Dr. V L Raja**

Address of Applicant :Professor / Department of Mechanical Engineering Loyola institute of technology, Chennai Chennai -----

(57) Abstract :

An initial set of characteristics may be determined from a binary file and used to identify malware. If the binary file is evaluated using a machine learning model, the model may classify the file as malware based on the file's delectability. It's possible that the capacity to spot malware in a binary file varies between two distinct categories, with the first having a lower delectability and the second having a better delectability. Analysis of the binary and a model for analyzing the first class of malware are then possible next steps. It's possible to use the model to do the analysis. The binary file might then be assigned a confidence score thereafter. If the binary file is known to be malicious or safe, the confidence score may indicate the level of certainty with which this determination may be made. If the confidence score is high enough, malware may be discovered.

No. of Pages : 22 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045341 A

(19) INDIA

(22) Date of filing of Application :09/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SYSTEM AND METHOD FOR BREAST CANCER DETECTION USING IMAGE PROCESSING TECHNIQUES

(51) International classification	:G06T0007000000, A61B0006000000, G06K0009620000, G01R0033565000, G06T0007120000	(71)Name of Applicant : <b>1)Mr. Ravi Sha</b> Address of Applicant :Consultant, Department of Computer Systems, Tata Consultancy Services, 8/479 St Kilda Rd, Melbourne, Pincode-3004, Victoria, Australia -----
(86) International Application No	:PCT//	<b>2)Dr. Tapas Guha</b>
Filing Date	:01/01/1900	<b>Name of Applicant : NA</b>
(87) International Publication No	: NA	<b>Address of Applicant : NA</b>
(61) Patent of Addition to Application Number	:NA	(72)Name of Inventor :
Filing Date	:NA	<b>1)Mr. Ravi Sha</b>
(62) Divisional to Application Number	:NA	Address of Applicant :Consultant, Department of Computer Systems, Tata Consultancy Services, 8/479 St Kilda Rd, Melbourne, Pincode-3004, Victoria, Australia -----
Filing Date	:NA	<b>2)Dr. Tapas Guha</b>
		Address of Applicant :Associate Professor, Department of AI and ML, Nitte Meenakshi Institute of Technology, Bangalore, Karnataka 560064, India Bangalore -----

(57) Abstract :

The present invention discloses a system and method for breast cancer detection using image processing techniques. The system includes, but not limited to, a memory which stores instructions; one or more processors attached to the memory wherein the one or more processors, when executing the instructions which are stored, are configured to: an AI based data accumulation unit a motion compensation means wherein due to the relaxation of the pectoral muscle or patient movements, motion artifacts are resulted which make breast segmentation and lesion detection to be invalid, wherein in the present invention, automatic motion correction is an important step for a correct automated breast segmentation and lesion detection. Further, a motion correction method based on registration, and further the application interfaces is performed by registering all the contrast enhanced images with reference to the unenhanced sequence. Accompanied Drawing [FIG. 1]

No. of Pages : 19 No. of Claims : 9

(54) Title of the invention : ANTI-CANCER PROPERTIES OF 1,1'-(1,3-PHENYLENEBIS(METHYLENE))BIS(4-METHYLPYRIDINUM)BROMIDE

(51) International classification :C07D0413140000, A61P0035000000, C07D0401040000, G01N0033500000, G11C0029020000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Presidency College (Autonomous)**

Address of Applicant :100, Kamarajar Promenade, PWD Estate, Chepauk, Triplicane, Chennai, Tamil Nadu - 600005, India. Chennai -----

**Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)KILIVELU GANESAN**

Address of Applicant :Associate Professor, PG & Research Department of Chemistry, Presidency College (Autonomous), Chennai - 600005, Tamil Nadu, India. Chennai -----

**2)RAMAN LAKSHMISUNDARAM**

Address of Applicant :Assistant Professor (Research), Sri Ramachandra Faculty of Pharmacy, Sri Ramachandra Institute of Higher Education and Research (DU), Porur, Chennai - 600116, Tamil Nadu, India. Chennai -----

**3)SENTHILNATHAN GOVINDARAJ**

Address of Applicant :Research Scholar, PG & Research Department of Chemistry, Presidency College (Autonomous), Chennai - 600005, Tamil Nadu, India. Chennai -----

**4)MAHENDIRAN DHARMA SIVAM**

Address of Applicant :GU Postdoctoral Fellow, Griffith University Science-2, N34, Office 1.13 Brisbane, QLD 4111, Australia. Brisbane -----

**5)SURESH KANNAN SUBRAMANIAN SHANMUGAM**

Address of Applicant :S/o Sp. Shanmugam, 5H2, Bashyam Happy Windows, 49, AR Nagar, CTA Garden Kattupakkam, Chennai - 600056, Tamil Nadu, India. Chennai -----

**6)VELMURUGAN JANAKIDEVI**

Address of Applicant :Associate Professor, Department of Microbiology and Biotechnology, Bharath Institute of Higher Education and Research, Tambaram, Chennai - 600073, Tamil Nadu, India. Chennai -----

**7)RAMACHANDRAN VASUKIDEVI**

Address of Applicant :Professor and Head, Department of Microbiology and Biotechnology, Bharath Institute of Higher Education and Research, Tambaram, Chennai - 600073, Tamil Nadu, India. Chennai -----

**8)JANARTHANAN SENTHIL**

Address of Applicant :Associate Professor, Department of Microbiology and Biotechnology, Bharath Institute of Higher Education and Research, Tambaram, Chennai - 600073, Tamil Nadu, India. Chennai -----

**9)NAMBIRAJAN GAYATHRI**

Address of Applicant :Assistant Professor, Department of Microbiology and Biotechnology, Bharath Institute of Higher Education and Research, Tambaram, Chennai - 600073, Tamil Nadu, India. Chennai -----

**10)MALAIRAJ SANTHANAKRISHNAN**

Address of Applicant :Guest Faculty, Department of Marine and Coastal Studies, School of Energy, Environment and Natural Resources, Madurai Kamaraj University, Madurai - 625021, Tamil Nadu, India. Madurai -----

## (57) Abstract :

Anti-cancer activity of flexible 4-methyl, 3 amino-2-methyl substituted dimeric pyridinium bromides against human breast adenocarcinoma (MCF-7), (MDA-MB-231), ductal carcinoma (T47D and one human mammary epithelial (MCF-10A) cell line. 1,1'-(1,3-Phenylenebis(methylene))bis(4-methylpyridinium)bromide 2 showed excellent anti-cancer activity against the test cells than the 1,1'-(pentane -1,5-diyl)bis(4-methylpyridin-1-ium)bromide 1. However, 1,1'-(pentane-1,5-diyl)bis(2-amino-3-methylpyridin-1-ium)bromide 3 and 1,1'-(1,3-phenylenebis(methylene))bis(3-methyl-1,4-pyridin-2-amin), bromide 4 showed moderate anti-cancer response against test cells.

No. of Pages : 14 No. of Claims : 5

(54) Title of the invention : A DIGITAL DEPOSIT RETURN SYSTEM AND A METHOD FOR COLLECTION OF USED PRODUCTS

<p>(51) International classification :G06Q0020040000, G07F0007060000, G06Q0030000000, G06Q0020200000, G06Q0030060000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)RAPIDUE TECHNOLOGIES PRIVATE LIMITED</b> Address of Applicant :LUMBINI ENCLAVE, JANARDHAN PLAZA, PLOT NO. 120/121, GACHIBOWLI, HYDERABAD, 500032, TELANGANA, INDIA HYDERABAD ----- -- Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)ABHAY DESHPANDE</b> Address of Applicant :RAPIDUE TECHNOLOGIES PRIVATE LIMITED, LUMBINI ENCLAVE, JANARDHAN PLAZA, PLOT NO. 120/121, GACHIBOWLI, HYDERABAD, 500032, TELANGANA, INDIA HYDERABAD ----- <b>2)KEDAR CHOUDHARY</b> Address of Applicant :RAPIDUE TECHNOLOGIES PRIVATE LIMITED, LUMBINI ENCLAVE, JANARDHAN PLAZA, PLOT NO. 120/121, GACHIBOWLI, HYDERABAD, 500032, TELANGANA, INDIA HYDERABAD ----- <b>3)SNEHA BUDHIA</b> Address of Applicant :RAPIDUE TECHNOLOGIES PRIVATE LIMITED, LUMBINI ENCLAVE, JANARDHAN PLAZA, PLOT NO. 120/121, GACHIBOWLI, HYDERABAD, 500032, TELANGANA, INDIA HYDERABAD ----- <b>4)VIKRAM PRABAKAR</b> Address of Applicant :RAPIDUE TECHNOLOGIES PRIVATE LIMITED, LUMBINI ENCLAVE, JANARDHAN PLAZA, PLOT NO. 120/121, GACHIBOWLI, HYDERABAD, 500032, TELANGANA, INDIA HYDERABAD -----</p>
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(57) Abstract :

A digital deposit return system (100) for collection of used products is disclosed. A container identification module (110) identifies each instance of a container of the product purchased by a consumer through scanning of a unique identification code affixed on the container. A packaging return processing module (120) receives the container of the product purchased by the consumer, upon consumption, at a collection center, obtains scanning detail of the container of the product received at the collection center, determines validation of the container of the product to ascertain for eligibility of deposit refund. A refund initiation module (130) authenticates the consumer from the collection center, maps the consumer with the container of the product received at the collection center for the deposit refund, identifies a consumer bank account associated with the consumer, initiates a transaction for refunding the deposit to the consumer bank account associated with the consumer. FIG. 1

No. of Pages : 31 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045386 A

(19) INDIA

(22) Date of filing of Application :09/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A system for non-invasive termite detection and method thereof for non-invasive termite detection

(51) International classification :A61B0005000000, A01M0001020000, A01M0001200000, A61B0005053000, G06K0009000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram**

Address of Applicant :Melakottaiyur Village, Off Vandalur-Kelambakkam Road, Chennai, 600 127 Chennai -----  
--

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Sudhir Varadarajan**

Address of Applicant :No. 18-19, Umanagar, Irumbuliyur West Chennai 600063 Chennai -----

**2)Mansi Kandukuri**

Address of Applicant :Plot no. 19, Sanjeeviah Cooperative Housing Society Sikh Village, Secunderabad Hyderabad 500009 Hyderabad -----

(57) Abstract :

A SYSTEM FOR NON-INVASIVE TERMITE DETECTION AND METHOD THEREOF FOR NON-INVASIVE TERMITE DETECTION The novel method comprises detecting termites by means of detection of response to vibrational situation created by a motor. The system comprising a vibration motor (4), connected to a potentiometer (3) generates vibration on the surface of the termite site to agitate the termites hidden below the surface. The termites when disturbed, produce a specific reaction signal which is sensed through a dual axis accelerometer (2). The method exploits the unique characteristic and social behavior of termites, i.e., the termite head-banging when agitated by external disturbance, to determine the presence of termites. This method is different from other methods of detecting termites that use factors like movement, temperature and humidity. These factors are not unique to termites and hence may not always produce accurate results. Since the system uses the unique natural behavior of termites, it increases the accuracy of detection. Fig 1 and 2

No. of Pages : 12 No. of Claims : 5



(54) Title of the invention : Framework for the protection of the cyber-physical system of electric vehicle charging stations and the electricity grid

(51) International classification :H04L0029060000, B60L0053300000, B60L0053140000, H04L0009320000, B60L0053650000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

## (71)Name of Applicant :

1)Dr.R. Aruna

Address of Applicant :Associate Professor, Department of Electronic and Communication Engineering, AMC Engineering College, Bengaluru-560083 Bengaluru -----

2)Dr.R. Premalatha

3)Mr.S.Deepankumar

4)Mr. Saravanan B

5)Mrs. G. Meeri Matha

6)Dr. B. Loveswara Rao

7)Dr.Amuthan Nallathambi

8)Dr. Abhijeet Ganguly

9)Mr. C Kaviarasu

10)Mr. G. B. Sathish Kumar

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

1)Dr.R. Aruna

Address of Applicant :Associate Professor, Department of Electronic and Communication Engineering, AMC Engineering College, Bengaluru-560083 Bengaluru -----

2)Dr.R. Premalatha

Address of Applicant :Professor, Department of Electrical and Electronics Engineering, S.A Engineering College, 159, Bharathidasan street, Baskar colony, Virugambakkam, Chennai 600092 Chennai -----

3)Mr.S.Deepankumar

Address of Applicant :Assistant Professor - Senior Grade, Department of Automobile Engineering, Bannari Amman Institute of Technology, Sathyamangalam - 638 401, Erode District, Tamil Nadu, India Erode -----

4)Mr. Saravanan B

Address of Applicant :Assistant Professor - Senior Grade, Department of Automobile Engineering, Bannari Amman Institute of Technology, Sathyamangalam - 638 401, Erode District, Tamil Nadu, India Erode -----

5)Mrs. G. Meeri Matha

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Srinivasa Ramanujan Institute of Technology, Rotarypuramu, Anantapur, Andhra Pradesh, India - 515 701 Anantapur -----

6)Dr. B. Loveswara Rao

Address of Applicant :Professor, Department of Electrical and Electronics Engineering, Koneru Lakshmaiah Education Foundation (KL Deemed to be University), Vaddeswaram, Vijayawada, Andhra Pradesh, India -522 502 Vijayawada -----

7)Dr.Amuthan Nallathambi

Address of Applicant :Professor, Department of Electrical and Electronics Engineering, Amc Engineering College, (Affiliated to VTU), Bannerghatta Road, Bengaluru, Karnataka-560083 Bengaluru -----

8)Dr. Abhijeet Ganguly

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Chhatrapati Shivaji Institute of Technology, Durg, Chhattisgarh Durg -----

9)Mr. C Kaviarasu

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Arasu Engineering College, Kumbakonam Kumbakonam -----

10)Mr. G. B. Sathish Kumar

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Arasu Engineering College, Kumbakonam Kumbakonam -----

## (57) Abstract :

[013] Some modalities provide a system to protect an electric vehicle charging infrastructure. An electric vehicle charging point can receive AC power from an electrical grid and supply DC power to electric vehicles. The charging location may include a plurality of monitoring nodes, each generating a series of current monitoring node values over time that represent a current operation of the electric vehicle charging infrastructure. A fueling equipment communication controller may receive an access request from an access requester associated with an electric vehicle, the access request being associated with a platform certificate. A secondary actor policy decision point at the billing location can assess the access requester's identity and respond with an action message allowing high-level communication with the access requester to continue. Note that the information associated with the current monitoring node values and/or the access request may be stored in a secure distributed transaction ledger (e.g., a chain of attestation blocks). Accompanied Drawing [FIG. 1] [FIG. 2][FIG. 3] [FIG. 4][FIG. 5] [FIG. 6][FIG. 7] [FIG. 8]

No. of Pages : 29 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045392 A

(19) INDIA

(22) Date of filing of Application :09/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : ROBOTIC BASED APPLICATION TO ADDRESS THE FLAWS THAT ARE INHERENT IN THE DELIVERY ADDED COST MODEL IN PUBLIC RELATION

(51) International classification :G05B0013040000, A61K0039395000, G06F0011360000, H04J0011000000, G06F0008700000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)RAMKUMAR SINGARAM**

Address of Applicant :CEO, CATALYST PUBLIC

RELATIONS PVT LTD Chennai -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)RAMKUMAR SINGARAM**

Address of Applicant :CEO, CATALYST PUBLIC RELATIONS  
PVT LTD Chennai -----

(57) Abstract :

Robotic based application to address the flaws that are inherent in the delivery added cost model in public relation is the proposed invention. The proposed invention focuses on implementing a robotic application-based framework to address the flaws that are inherent in delivery added cost model. The invention aims at comparing and contrasting the existing techniques for delivery modules and come out with a revolutionary solution.

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :09/08/2022

(21) Application No.202241045393 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : DESIGNING AN ARTIFICIAL INTELLIGENCE MODULE FOR ANALYZING SIX SIGMA BASED APPROACHES TO BUSINESS PRACTICES IN MANUFACTURING, SERVICES, AND PRODUCTION

(51) International classification :G06K0009620000, C12N0015740000, G06Q0010060000, G06Q0050180000, A61M0001000000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr N PRIYADHARSHINI**  
Address of Applicant :ASSISTANT PROFESSOR , DEPARTMENT OF COMPUTER SCIENCE, SRI GVG VISHALAKSHI COLLEGE FOR WOMEN, UDUMALPET 642126 Udumalpet -----  
**2)DIPESH DADDELAL UIKE**  
**3)Dr.K.KALAIVANI**  
**4)KALPANADEVI D**  
**5)BHOLA KHAN**  
**6)R. VEERAPPAN**  
**7)PROF. SURENDRA RAMESH SAWARDEKAR**  
**8)Dr.A.SUMITHRA**  
**9)JONNALA SUBBA REDDY**  
**10)Dr.A.SASI KUMAR**  
**11)Dr. ANIMESH KUMAR SHARMA**  
**12)MR. SHYAMAL MANDAL**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr N PRIYADHARSHINI**  
Address of Applicant :ASSISTANT PROFESSOR , DEPARTMENT OF COMPUTER SCIENCE, SRI GVG VISHALAKSHI COLLEGE FOR WOMEN, UDUMALPET 642126 Udumalpet -----  
**2)DIPESH DADDELAL UIKE**  
Address of Applicant :PROFESSOR / MBA, Dr. AMBEDKAR INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH, NAGPUR - 440010 Nagpur -----  
**3)Dr.K.KALAIVANI**  
Address of Applicant :ASSOCIATE PROFESSOR/COMPUTER SCIENCE AND ENGINEERING,VIGNANA BHARATHI INSTITUTE OF TECHNOLOGY,AUSHAPUR, GHATKESAR, NEAR HPCL, HYDERABAD, TELANGANA 501301. , Hyderabad -----  
**4)KALPANADEVI D**  
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER APPLICATIONS, KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION, KRISHNANKOIL, 626126 Virudhunagar -----  
**5)BHOLA KHAN**  
Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF ECONOMICS, YOBE STATE UNIVERSITY -----  
**6)R. VEERAPPAN**  
Address of Applicant :HEAD, DEPARTMENT OF BUSINESS ADMINISTRATION Tirupattur -----  
-----  
**7)PROF. SURENDRA RAMESH SAWARDEKAR**  
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF BOTANY KIRTI M. DOONGURSEE COLLEGE, KASHINATH DHURU ROAD, DADAR, MUMBAI :400028 Mumbai -----  
-----  
**8)Dr.A.SUMITHRA**  
Address of Applicant :ASSOCIATE PROFESSOR/CSE,SNS COLLEGE OF TECHNOLOGY, COIMBATORE-641035 Coimbatore -----  
**9)JONNALA SUBBA REDDY**  
Address of Applicant :ASSOCIATE PROFESSOR, LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING, MYLAVARAM (P), NTR (DT), ANDHRA PRADESH. PIN 521230 Krishna -----  
-----  
**10)Dr.A.SASI KUMAR**  
Address of Applicant :PROFESSOR (MENTOR-IT- INURTURE EDUCATION SOLUTIONS PVT LTD), DEPARTMENT OF CLOUD TECHNOLOGY AND DATA SCIENCE, INSTITUTE OF ENGINEERING AND TECHNOLOGY, SRINIVAS UNIVERSITY, MUKKA-574146, MANGALORE, KARNATAKA STATE, INDIA Mangalore -----  
**11)Dr. ANIMESH KUMAR SHARMA**  
Address of Applicant :ASSOCIATE PROFESSOR, DEPT OF MATHEMATICS, RAIPUR INSTITUTE OF TECHNOLOGY ,MANDIR HASAUD, 492101 Raipur -----  
**12)MR. SHYAMAL MANDAL**  
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF BIOMEDICAL ENGINEERING, NORTH EASTERN HILL UNIVERSITY, SHILLONG -793022 Shillong -----

(57) Abstract :  
Designing an Artificial Intelligence module for analyzing Six Sigma based Approaches to Business Practices in Manufacturing, Services, and Production is the proposed invention. The invention focuses on analyzing the six-sigma module-based approaches that are implemented in business practices through the algorithms of Artificial Intelligence. The proposed invention includes the aspects of manufacturing services and production of a particular industry for the purpose of study and analysis.

No. of Pages : 14 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :09/08/2022

(21) Application No.202241045444 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : Design system of IoT Driven Smart Carbon Monitoring Using AI

(51) International classification :G08G0001010000, G01N0021350400, B01D0053220000, A01G0009180000, C10L0009100000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr.G.Vishnupriya, Easwari Engineering College**  
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Easwari Engineering College, Ramapuram, Chennai Chennai -----  
**2)Mr. Prabakaran K, Veltech Rangarajan Dr. Sagunthula R & D Institute of Science and Technology**  
**3)Dr M.Ramalingam, Takshashila University**  
**4)Mrs.A Sangeerani Devi, Sri Sairam Engineering College**  
**5)Mr.M Balamurugan, Sri Sairam Engineering College**  
**6)Dr Rajesh. E, Galgotias University**  
**7)Dr.S.Sridhar Easwari Engineering College**  
**8)Mr. Boobalan. A, Galgotias University**  
**9)Dr.N.Partheeban, Galgotias University**  
**10)Mr.Elumalai J, Sri Venkateswaraa College Of Technology**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr.G.Vishnupriya, Easwari Engineering College**  
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Easwari Engineering College, Ramapuram, Chennai Chennai -----  
**2)Mr. Prabakaran K, Veltech Rangarajan Dr. Sagunthula R & D Institute of Science and Technology**  
Address of Applicant :Assistant Professor, Department of CSE, School of Computing, Veltech Rangarajan Dr. Sagunthula R & D Institute of Science and Technology Chennai -----  
**3)Dr M.Ramalingam, Takshashila University**  
Address of Applicant :Deputy Registrar Cum Professor, Department of Computer Science and Engineering, School of Engineering and Technology, Takshashila University, Tindivanam, Tamilnadu - 604305 Tindivanam -----  
**4)Mrs.A Sangeerani Devi, Sri Sairam Engineering College**  
Address of Applicant :Associate Professor, Dept of CSE, Sri Sairam Engineering College, Sai Leo Nagar, West Tambaram Poonthandalam, Village, Chennai, Tamil Nadu 602109 Chennai --  
**5)Mr.M Balamurugan, Sri Sairam Engineering College**  
Address of Applicant :Assistant Professor, Computer Science and Engineering, Sri Sairam Engineering College, Sai Leo Nagar, West Tambaram Poonthandalam, Village, Chennai, Tamil Nadu 602109 Chennai -----  
**6)Dr Rajesh. E, Galgotias University**  
Address of Applicant :Professor, School of Computing Science and Engineering, Galgotias University, Greater Noida. Greater Noida -----  
**7)Dr.S.Sridhar Easwari Engineering College**  
Address of Applicant :Professor/DCOE, Easwari Engineering College, Chennai Chennai -----  
**8)Mr. Boobalan. A, Galgotias University**  
Address of Applicant :Assistant Professor, School of Computing Science and Engineering, Galgotias University, Greater Noida. Greater Noida -----  
**9)Dr.N.Partheeban, Galgotias University**  
Address of Applicant :Professor, School of Computing Science and Engineering, Department of CSE, Galgotias University Greater Noida Delhi-NCR Greater Noida -----  
**10)Mr.Elumalai J, Sri Venkateswaraa College Of Technology**  
Address of Applicant :Associate Professor, Computer Science & Engineering, Sri Venkateswaraa College of Technology, Chennai Chennai -----

(57) Abstract :

The development of smart cities worldwide is a key area of study for low-carbon city research due to the rapid growth of the Internet of Things (IoT) in the 5G era. Small cities usually have more carbon dioxide emissions than large and medium ones. The creation of a small city smart carbon monitoring platform is still in its early stages due to the vast differences in data settings between small and medium-sized cities, insufficient IoT hardware, and expensive inputs. Burning fossil fuels produces large amounts of CO2 emissions, which significantly contribute to atmospheric changes and climate changes. by considering each individual vehicle's emissions factor, time spent, distance travelled, and weight transported. Since vehicles emit CO2 in several ways depending on their efficiency, producer, fuel, weight, driving style, road conditions, seasons, and other factors, these methods are ineffective for determining the impact of automobiles on CO2 in cities. Modern technology makes it feasible to gather real-time traffic data to gain crucial data that might be used to track changes in carbon emissions. The study investigated the air's sources of CO2 emissions under various traffic scenarios. We outline a model and approach for calculating CO2 emissions using data on traffic flow in both free-flowing and congested areas. Each of these traffic situations emits a unique amount of CO2 into the atmosphere, which results in a unique emissions factor. Calculating the CO2 distribution in the smart city might be done using the model and solution supplied.

No. of Pages : 10 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :09/08/2022

(21) Application No.202241045445 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SYSTEMATIC APPROACH TO STUDY AND ANALYSE THE HUMAN RESOURCE MANAGEMENT IN LIBRARY SCIENCES

(51) International classification :G06Q0010060000, C12N0015100000, G06Q0010100000, G01N0033920000, C12Q0001681100  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

1)M.SENAPATHY

Address of Applicant :PART TIME PHD SCHOLAR, DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE, MADURAI KAMARAJ UNIVERSITY, MADURAI-625 021,TAMIL NADU, INDIA. Madurai -----

2)SUMAN DEVI

3)VIJAYAKRISHNA RAPAKA E

4)SANJEEV KUMAR KM

5)AMARAVATHI V

6)Dr. RUPA KHANNA MALHOTRA

7)ARVIND KUMAR

8)THULASIMANI T

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)M.SENAPATHY

Address of Applicant :PART TIME PHD SCHOLAR, DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE, MADURAI KAMARAJ UNIVERSITY, MADURAI-625 021,TAMIL NADU, INDIA. Madurai -----

2)SUMAN DEVI

Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF BUSINESS, SUSHANT UNIVERSITY, GURGAON - 122003 Gurugram -----

3)VIJAYAKRISHNA RAPAKA E

Address of Applicant :ADJUNCT PROFESSOR, MECHANICAL ENGINEERING, GOKULA KRISHNA COLLEGE OF ENGINEERING, SULLURPETA, 524 121 Nellore ----

4)SANJEEV KUMAR KM

Address of Applicant :ASSISTANT PROFESSOR/ DEPARTMENT OF TIE-UPS/LOVELY PROFESSIONAL UNIVERSITY, JALANDHAR 144004 Jalandhar -----

5)AMARAVATHI V

Address of Applicant :DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE,BANGALORE UNIVERSITY, BANGALORE 560056 Bengaluru -----

6)Dr. RUPA KHANNA MALHOTRA

Address of Applicant :PROFESSOR, DEPARTMENT OF COMMERCE, GRAPHIC ERA DEEMED TO BE UNIVERSITY, DEHRADUN, UTTARAKHAND, INDIA 248002 Dehradun -----

7)ARVIND KUMAR

Address of Applicant :MAHARAJA AGRASEN SCHOOL OF PHARMACY, MAHARAJA AGRASEN UNIVERSITY, ATAL SHIKSHA KUNJ, VILLAGE KALUJHANDA, NEAR BAROTIWALA, 174103 Baddi -----

8)THULASIMANI T

Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF MATHEMATICS, BANNARI AMMAN INSTITUTE OF TECHNOLOGY, SATHYAMANGALAM-638401 Sathyamangalam -----

(57) Abstract :

A systematic approach to study and analyse the human resource management in Library sciences is the proposed invention. The invention focuses on implementing systematic approach for studying the importance of Human Resource Management. The proposed invention aims at embedding the aspects of rectification in the field of library sciences.

No. of Pages : 14 No. of Claims : 6

(54) Title of the invention : A SYSTEM AND A METHOD FOR DETERMINING AN OPTIMAL PATH TO COMMUNICATE DATA BETWEEN NODES

<p>(51) International classification :H04L0012460000, H04W0040020000, H04L0029060000, H04W0084180000, H04W0040100000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)SRM Institute of Science and Technology</b> Address of Applicant :Kattankulathur, Chennai-603203, Tamil Nadu, India Kattankulathur -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)JOTHI KUMAR CHENGUTTUVAN</b> Address of Applicant :CSE Department, SRM IST, Kattankulathur, Chennai-603203, Tamil Nadu, INDIA Kattankulathur -----</p> <p><b>2)PRADEEP MOHAN KUMAR</b> Address of Applicant :CSE Department, SRM IST, Kattankulathur, Chennai-603203, Tamil Nadu, INDIA Kattankulathur -----</p>
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(57) Abstract :

**ABSTRACT A SYSTEM AND A METHOD FOR DETERMINING AN OPTIMAL PATH TO COMMUNICATE DATA BETWEEN NODES** The present disclosure discloses a system (100) and a method (200) for determining an optimal path to communicate data between nodes. The system (100) comprises a routing controller (102) implementing a routing platform by means of Internet of Things (IoT); a repository (104) stores a predefined command, nodes details, a minimum spanning tree approach, and optimization techniques; a broadcast module (106) broadcasts cue signals from a base node to every slave node and receives energy and distance responded by slave nodes, the base node computes a fitness function depending on the energy and size of clusters to select cluster head (CH) from the slave nodes by employing the optimization techniques, and broadcast module (106) dynamically changes the selection of CH based on the fitness function; a transmission and forwarding module(108) performs data communication between the slave nodes to the CH and CH-to-CH till data reaches base node; a communication module (110) generates the optimal path for data. Figure 1

No. of Pages : 23 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :09/08/2022

(21) Application No.202241045453 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING BASED APPROACH TO PREDICT THE PREFERENCES OF TARGET CUSTOMERS FOR VARIOUS MARKETING STRATEGIES

(51) International classification :G06Q0030020000, G06N0020000000, G06N0003080000, G06N0003040000, G06Q0030060000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)A.PRIYADHARSHINI**  
Address of Applicant :KONERU LAKSHMAIAH EDUCATION FOUNDATION Guntur -----  
---  
**2)SUMAN DEVI**  
**3)Dr. SYED ASADULLAH HUSSAINI**  
**4)Dr. VIKAS TRIPATHI**  
**5)Dr.MOHAMMED AZAM**  
**6)Dr URMILA SARKAR**  
**7)Dr.GURUMEET WADHAWA**  
**8)JONNALA SUBBA REDDY**  
**9)Dr. G. SUDHAGAR**  
**10)PROF( Dr.) NITIN GIRDHARWAL**  
**11)PROF. JITENDRA CHARAN**  
**12)Dr.A.SASI KUMAR**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)A.PRIYADHARSHINI**  
Address of Applicant :KONERU LAKSHMAIAH EDUCATION FOUNDATION Guntur -----  
---  
**2)SUMAN DEVI**  
Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF BUSINESS, SUSHANT UNIVERSITY, GURGAON-122003 Gurugram -----  
**3)Dr. SYED ASADULLAH HUSSAINI**  
Address of Applicant :ASSOCIATE PROFESSOR, MVSR ENGINEERING COLLEGE Hyderabad -----  
---  
**4)Dr. VIKAS TRIPATHI**  
Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, GRAPHIC ERA DEEEMED TO BE UNIVERSITY, DEHRADUN Dehradun -----  
---  
**5)Dr.MOHAMMED AZAM**  
Address of Applicant :ASSOCIATE PROFESSOR, ELECTRONIC AND COMMUNICATION ENGINEERING,ISL ENGINEERING COLLEGE, HYDERABAD, 500005 Hyderabad -----  
**6)Dr URMILA SARKAR**  
Address of Applicant :ASST PROF DEPT OF BOTANY KIRTI M DOONGURSEE COLLEGE DADAR MUMBAI 400028 Dadar -----  
**7)Dr.GURUMEET WADHAWA**  
Address of Applicant :KARMAVEER BHAAURAO PATIL COLLEGE VASHI Vashi -----  
**8)JONNALA SUBBA REDDY**  
Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF MECHANICAL ENGINEERING, LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING, MYLAVARAM (P), NTR (DT), ANDHRA PRADESH. PIN 521230 Mylavaram -----  
**9)Dr. G. SUDHAGAR**  
Address of Applicant :ASSOCIATE PRIFESSOR/ECE BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH Chennai -----  
**10)PROF( Dr.) NITIN GIRDHARWAL**  
Address of Applicant :PROFESSOR & HEAD , MEDI-CAPS UNIVERSITY ,INDORE Indore -----  
---  
**11)PROF. JITENDRA CHARAN**  
Address of Applicant :ASSISTANT PROFESSOR ,MEDI-CAPS UNIVERSITY ,INDORE Indore -----  
---  
**12)Dr.A.SASI KUMAR**  
Address of Applicant :PROFESSOR (MENTOR-IT - INURTURE EDUCATION SOLUTIONS PVT LTD), DEPARTMENT OF CLOUD TECHNOLOGY AND DATA SCIENCE, INSTITUTE OF ENGINEERING AND TECHNOLOGY, SRINIVAS UNIVERSITY, MUKKA-574146, Mangalore -----

(57) Abstract :  
Artificial Intelligence and Machine Learning based approach to Predict the preferences of target customers for various Marketing Strategies is the proposed invention. The invention aims at analyzing the previous shopping data of customers to predict the preferences of target customers through Artificial Intelligence modules. The algorithms of machine learning will help to improve the marketing strategies of online shopping sites.

No. of Pages : 14 No. of Claims : 5

(54) Title of the invention : ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING BASED INTELLIGENT ELECTRONIC DEVICES TO ENHANCE POWER SYSTEM RESILIENCE AND ENSURE THE RELIABLE AND SECURE OPERATION OF POWER SYSTEMS

<p>(51) International classification : G06N0020000000, G06N0003080000, G06Q0010060000, H02J0003380000, H02J0013000000</p> <p>(86) International Application No : PCT// Filing Date : 01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number : NA Filing Date : NA</p> <p>(62) Divisional to Application Number : NA Filing Date : NA</p>	<p>(71)Name of Applicant :  <b>1)Dr. I. KATHIR</b>  Address of Applicant :PROFESSOR, ELECTRICAL AND ELECTRONICS ENGINEERING DEPARTMENT, V. S. B. ENGINEERING COLLEGE, KARUR - 639111. Karur -----  <b>2)Dr SARIKA SHRIVASTAVA</b>  <b>3)ROHIT KUMAR</b>  <b>4)PROF RAVI MOHAN</b>  <b>5)Dr. VIKRAMJEET SINGH</b>  <b>6)MOHD ESA</b>  <b>7)Dr.RUPINDER KAUR</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Dr. I. KATHIR</b>  Address of Applicant :PROFESSOR, ELECTRICAL AND ELECTRONICS ENGINEERING DEPARTMENT, V. S. B. ENGINEERING COLLEGE, KARUR - 639111. Karur -----  <b>2)Dr SARIKA SHRIVASTAVA</b>  Address of Applicant :PROFESSOR, ELECTRICAL ENGINEERING, ASHOKA INSTITUTE OF TECHNOLOGY &amp; MANAGEMENT, VARANASI, 221007 Varanasi -----  <b>3)ROHIT KUMAR</b>  Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, ARNI UNIVERSITY, PIN CODE -176401 Indora -----  <b>4)PROF RAVI MOHAN</b>  Address of Applicant :HEAD OF DEPARTMENT ELECTRONICS AND COMMUNICATION ENGINEERING SHRI RAM INSTITUTE OF TECHNOLOGY JABALPUR, MP 482004 Jabalpur -----  <b>5)Dr. VIKRAMJEET SINGH</b>  Address of Applicant :ASSISTANT PROFESSOR, MATHEMATICS, I. K. GUJRAL PUNJAB TECHNICAL UNIVERSITY AMRITSAR CAMPUS,143105 Amritsar -----  <b>6)MOHD ESA</b>  Address of Applicant :CHARTERED ENGINEER, ELECTRICAL ENGINEERING DIVISION, THE INSTITUTION OF ENGINEERS (INDIA) - TELANGANA STATE CENTRE, HYDERABAD, 500004 Hyderabad -----  <b>7)Dr.RUPINDER KAUR</b>  Address of Applicant :ASSISTANT PROFESSOR, UNIVERSITY SCHOOL OF BUSINESS, CHANDIGARH UNIVERSITY MOHALI Mohali -----</p>
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## (57) Abstract :

Artificial Intelligence and Machine Learning based Intelligent Electronic Devices to enhance Power System Resilience and ensure the reliable and secure operation of Power systems is the proposed invention. The invention focuses on designing a framework where the Artificial Intelligence module is used along with algorithms of machine learning. The proposed invention aims at enhancing the security and reliability of power systems along with operations of power grid.

No. of Pages : 14 No. of Claims : 6



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045461 A

(19) INDIA

(22) Date of filing of Application :09/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : LITHIUM-ION CELL UTILIZING ELECTRODES MADE FROM AQUEOUS SLURRY

(51) International classification :H01M0010052500, H01M0004139000, G02F0001133500, H01M0004360000, H01M0004139300

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date

(62) Divisional to :NA  
Application Number :NA  
Filing Date

(71)Name of Applicant :

**1)GODI INDIA PVT. LTD.**

Address of Applicant :12(p), 13, 14(p), Road No:2, Hardware Park, Near International Airport, Hyderabad – 500005, India -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Akkisetty, Bhaskar**

Address of Applicant :GODI INDIA PVT. LTD., 12(p), 13, 14(p), Road No:2, Hardware Park, Near International Airport, Hyderabad – 500005, India -----

**2)Murugan, Viji**

Address of Applicant :GODI INDIA PVT. LTD., 12(p), 13, 14(p), Road No:2, Hardware Park, Near International Airport, Hyderabad – 500005, India -----

**3)Bellie, Hariprakash**

Address of Applicant :GODI INDIA PVT. LTD., 12(p), 13, 14(p), Road No:2, Hardware Park, Near International Airport, Hyderabad – 500005, India -----

(57) Abstract :

Please see the attached specification.

No. of Pages : 27 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045534 A

(19) INDIA

(22) Date of filing of Application :09/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A CHLORINE ESTIMATING AND STABILIZING APPARATUS AND METHOD THEREOF

<p>(51) International classification :E03C0001050000, A01G0025160000, G06Q0020180000, G06F0003048000, A63B0071060000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)LAMS AUTOMATION PRIVATE LIMITED</b> Address of Applicant :49/A, BISHOPDOWN, OOTY – 643001, THE NILGIRIS TAMILNADU, INDIA Nilgiris ----- ----- <b>2)M. Anand B.E., M.E., PGDIPRA</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)M. Anand B.E., M.E., PGDIPRA</b> Address of Applicant :Director / Scientist LAMS Automation Private Limited, 49/A, Bishopdown, Ooty- 643001, The Nilgiris, Tamilnadu, India Ooty ----- <b>2)Dr. R. KALIRAJAN</b> Address of Applicant :Associate Professor, JSS College of Pharmacy. ( JSS Academy of Higher Education &amp; Research - Deemed University, Mysore) Ooty - 643001, The Nilgiris, Tamilnadu, India Ooty ----- <b>3)POTLAPATI VARAKUMAR</b> Address of Applicant :Research Scholar, Department of Pharmaceutical Chemistry, JSS College of Pharmacy, Ooty [JSS Academy of Higher Education and Research, Mysuru] Mysore ---- ----- <b>4)KANNAN R.</b> Address of Applicant :Research Scholar, Department of Pharmaceutical Chemistry, JSS College of Pharmacy, Ooty [JSS Academy of Higher Education and Research, Mysuru] Mysore ---- -----</p>
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(57) Abstract :

The present invention discloses a chlorine estimating and stabilizing apparatus, comprising: a chlorine feeder assembly; a reservoir chamber; a master chamber; a reagent feeder assembly; an electronic unit, and the said electronic unit consists of: a first LED, a second set of plurality of LEDs; Particularly a touch screen display to pre-set volume of liquid flow, timer value of a micro stirrer and a solenoid valve; Particularly plurality of liquid flow controller will send the pre-set volume of water to the chloroscope tube; micro stirrer rinse the chloroscope tube, and a solenoid valve outlets the rinsed liquid; a control unit, wherein the said control unit consists a microcontroller, a GSM module and a GPS module. More particularly a said microcontroller configured to control the operation of the said chlorine estimating and stabilizing apparatus; the said electronic unit is connected to the chlorine feeder unit; a solar panel comprising of a plurality of photovoltaic cells, wherein the said plurality of photovoltaic cells further charges a battery, and the said battery is connected to the said electronic unit for power supply when electricity cut off; and a plurality of sensors; and a server unit, wherein the said server unit is connected to the electronic unit wirelessly. Even more particularly status and the process of said apparatus can be controlled by user interface application which connected to electronic unit through server.

No. of Pages : 21 No. of Claims : 12

(54) Title of the invention : A SYSTEM FOR PRODUCING ANTI-PARASITIC COMPOUNDS AND DERIVATIVES FROM MARINE HYPOTRICHIOUS CILIATES

<p>(51) International classification :C12M0001060000, A23C0009120000, C12M0001260000, B65D0051000000, G01N0033240000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr. N. Anandakumar</b> Address of Applicant :Assistant Professor, Department of Education, The Gandhigram Rural Institute, Gandhigram Dindigul-Dt. 624302 Dindigul -----</p> <p><b>2)Dr. N. Thajuddin</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr. N. Anandakumar</b> Address of Applicant :Assistant Professor, Department of Education, The Gandhigram Rural Institute, Gandhigram Dindigul-Dt. 624302 Dindigul -----</p> <p><b>2)Dr. N. Thajuddin</b> Address of Applicant :Professor and Head, Department of Microbiology, Bharathidasan University, Tiruchirappalli 620024 Tiruchirappalli -----</p>
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## (57) Abstract :

The present invention generally relates to a system for producing anti-parasitic compounds and derivatives from marine hypotrichous ciliates comprises a centrifuge for centrifuging 200-300mL sieved faeces extract slurry at 30000rpm for 20-40mins at room temperature; a treating unit for filtering or sterilizing the supernatant fraction; a main flask for mixing 4-6g of fresh equine faeces and 30-40mL of the respective mineral salt solutions, wherein the cultures are fed every day and saturated with CO<sub>2</sub> for 5-10min at a flow velocity of 60 cm<sup>3</sup> gas min<sup>-1</sup>; an agitator for receiving the 15-30g fresh culture into fresh medium after a predetermined time for agitating it before adding 15-30mL aliquots of existing culture medium; and a water bath assembly for performing all manipulations at 40°C in the presence of CO<sub>2</sub> thereby storing in an inoculated flask and sealing with a rubber stopper, wherein the inoculated flask is further stored in an incubator at 40oC.

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045555 A

(19) INDIA

(22) Date of filing of Application :09/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : ARTIFICIAL INTELLIGENCE AND DEEP LEARNING BASED TECHNIQUE FOR UNDERSTANDING THE VARIOUS THERMOELECTRIC MATERIALS

<p>(51) International classification :G06K0009620000, G06N0003080000, H01L0035340000, H01L0035160000, H01L0035180000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)<b>Name of Applicant :</b> <b>1)Rajib Guhathakurta</b> Address of Applicant :Assistant professor, Department of Computer Science and Application (CSA), REVA University, Rukmini Knowledge Park, Kattigenahelli, Yelahanka, Bangalore - 560064 ----- <b>2)Dr. Ramesh Babu M.</b> <b>3)C. Venkatesh kumar</b> <b>4)Dr. Shikha Kumari pandey</b> <b>5)Dr. Kailash Patidar</b> <b>6)Dr. Suveg Moudgil</b> <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b> (72)<b>Name of Inventor :</b> <b>1)Rajib Guhathakurta</b> Address of Applicant :Assistant professor, Department of Computer Science and Application (CSA), REVA University, Rukmini Knowledge Park, Kattigenahelli, Yelahanka, Bangalore - 560064 ----- <b>2)Dr. Ramesh Babu M.</b> Address of Applicant :Professor, EEE, St. Joseph's College of Engineering, OMR Chennai - 600119 ----- <b>3)C. Venkatesh kumar</b> Address of Applicant :Assistant Professor, EEE, St. Joseph's College of Engineering, OMR, Chennai - 600119 ----- <b>4)Dr. Shikha Kumari pandey</b> Address of Applicant :Assistant Professor, Department of environmental science, Institute of Aeronautical Engineering, Hyderabad ----- ---- <b>5)Dr. Kailash Patidar</b> Address of Applicant :Assistant Professor, Bansal Institute of Science and Technology, Bhopal ----- <b>6)Dr. Suveg Moudgil</b> Address of Applicant :Associate professor, IMS Engineering College, Ghaziabad (AKTU), Uttar Pradesh -----</p>
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(57) Abstract :

The present invention relatesartificial intelligence and deep learning-based technique for understanding the various thermoelectric materials. The proposed system comprises of database, cloud storage, clustered thermoelectric material, comparative unit.The database which includes data regarding various thermoelectric materials. The artificial intelligence and deep learning unit will cluster the thermoelectric materials using the k-means clustering unit.The data is stored on cloud storage.

No. of Pages : 13 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :10/08/2022

(21) Application No.202241045671 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : ARTIFICIAL INTELLIGENCE ENABLED MULTIPLE SENSOR DATA FUSION-BASED WEARABLE SYSTEM FOR WOMAN SAFETY

(51) International classification :A61B0005000000, A61B0005024000, A41D0001000000, G08B0021020000, A61B0005110000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
1)VIGNAN'S LARA INSTITUTE OF TECHNOLOGY & SCIENCE  
Address of Applicant :VIGNAN'S LARA INSTITUTE OF TECHNOLOGY & SCIENCE, VADLAMUDI-522213, GUNTUR, A.P, INDIA. -----  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
1)DR. K. S. BALAMURUGAN  
Address of Applicant :IIC PRESIDENT & PROFESSOR, DEPARTMENT OF ECE, VIGNAN'S LARA INSTITUTE OF TECHNOLOGY & SCIENCE, VADLAMUDI-522213, GUNTUR, A.P, INDIA. -----  
2)DR. K. PHANEENDRA KUMAR  
Address of Applicant :PRINCIPAL, VIGNAN'S LARA INSTITUTE OF TECHNOLOGY & SCIENCE, VADLAMUDI-522213, GUNTUR, A.P, INDIA. -----  
3)DR. M. KALAMUTHUMARI  
Address of Applicant :FOUNDER & CEO, RURALCARE INNOVATORS LLP, HO: OOMATCHIKULAM, MADURAI-625014, TN, INDIA. BO: ROBERTSONPET, KGF, KARNATAKA-563122. -----  
4)S. M. ANU  
Address of Applicant :PROJECT MANAGER, RURALCARE INNOVATORS LLP, HO: OOMATCHIKULAM, MADURAI-625014, TN, INDIA. -----  
5)R. RAJALAKSHMI  
Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF ECE, VIGNAN'S NIRULA INSTITUTE OF TECHNOLOGY AND SCIENCE FOR WOMEN, PEDAPALAKALURU-522009, GUNTUR, AP, INDIA. -----  
6)C. THANGAM  
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF ECE, ST. MOTHER THERESA ENGINEERING COLLEGE, VAGAICKULAM, THOOTHUKUDI, TN, INDIA. ---  
7)K. VIJAYALAKSHMI  
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF ECE, CHALAPATHI INSTITUTE OF ENGINEERING & TECHNOLOGY, LAM- 522034, GUNTUR, A.P, INDIA. -----  
8)U. LENIN MARKSIA  
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF ECE, SARDAR RAJA COLLEGE OF ENGINEERING, TENKASI, TN, INDIA. -----  
9)DR.CHINMAYA KUMAR PRADHAN  
Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF ECE, CHALAPATHI INSTITUTE OF ENGINEERING & TECHNOLOGY, LAM- 522034, GUNTUR, A.P, INDIA. -----  
10)DR. S. SUGUMARAN  
Address of Applicant :PROFESSOR, DEPARTMENT OF ECE, CHALAPATHI INSTITUTE OF ENGINEERING & TECHNOLOGY, LAM- 522034, GUNTUR, A.P, INDIA. -----

(57) Abstract :

Abstract: The presented invention is a system consisting of a set of wearable units that sense and raise an alarm to identify if a woman is in danger from anti-social people. This system includes a heart rate sensor to detect palpitations caused by dangerous situations. This heart rate sensor is coupled with a Bluetooth transmitter. A pair of 6 axis gyroscopes is integrated into two wearable bands that are worn one on each leg. These two MEMS gyroscope sensors are also integrated with their corresponding Bluetooth sensors. This gyroscope detects when a woman wearing it is running. It also detects when the legs of the woman are spread for rape violation. A microphone sensor is attached in a wearable belt in order to activate the alert system when the woman screams. Generic exclamations including 'help' and others are detected by the local computing unit which is also attached to the wearable belt along with the integrated GPS module. GPS module is present to get the person's location when the alert signal is generated. The embedded system to which all sensors are connected has an inbuilt IoT module. Machine learning techniques are used to train the IoT based embedded unit for accurate detection of dangerous scenarios by training with real world data.

No. of Pages : 6 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045838 A

(19) INDIA

(22) Date of filing of Application :11/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : DEVELOPMENT AND FORMULATION OF ECO-FRIENDLY MOSQUITO REPELLENT FROM ORGANIC BASED MATERIALS

<p>(51) International classification :A01N0065000000, A61K0036540000, A01N0065260000, C05F0003000000, A01N0065360000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)DR. G. SRINIVASAN</b> Address of Applicant :S/O L. GOVINDHAN, 8/59, KADANTHAPATTI COLONY, PACHAL (PO), NAMAKKAL (DT) - 637018, TAMILNADU. -----</p> <p><b>2)MR. S. GOWTHAM KUMAR</b> <b>3)MR. L. SANTHOSH KUMAR</b> <b>4)MR. M. KARTHIKEYAN</b> <b>5)MR. M. GNANASEKAR</b> <b>6)MR. B. YOGESHWARAN</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)DR. G. SRINIVASAN</b> Address of Applicant :S/O L. GOVINDHAN, 8/59, KADANTHAPATTI COLONY, PACHAL (PO), NAMAKKAL (DT) - 637018, TAMILNADU. -----</p> <p><b>2)MR. S. GOWTHAM KUMAR</b> Address of Applicant :S/O M. SEKAR, 30, A/1, E.B MAIN ROAD, PYKARA, MADURAI — 625004, TAMILNADU. -----</p> <p><b>3)MR. L. SANTHOSH KUMAR</b> Address of Applicant :11/359 Z1, V.O.C NAGAR, SAMUSIGAPURAM (PO), RAJAPALAYAM (TK), VIRUDHUNAGAR (DT) -626102, TAMIL NADU. -----</p> <p><b>4)MR. M. KARTHIKEYAN</b> Address of Applicant :1530/8, KATTRAN KULAM STREET, DEVIKAPURAM, CHETPET (TK), THIRUVANNAMALAI (DT) - 606902, TAMIL NADU. -----</p> <p><b>5)MR. M. GNANASEKAR</b> Address of Applicant :5/196, MELA VELLUR (PO), MUSIRI (TK), TRICHY -621 202, TAMIL NADU. -----</p> <p><b>6)MR. B. YOGESHWARAN</b> Address of Applicant :31/1, NORTH STREET, AVVAIYARPATTI, NEERPALANI, PUDUKKOTTAI - 622515, TAMIL NADU. -----</p> <p><b>7)MR. E. RAMESH</b> Address of Applicant :MELA THERU, KOLLAKKANATHAM (PO), ALATHUR (TK), PERAMBALUR. -----</p>
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(57) Abstract :

ABSTRACT Development and Formulation of Eco-friendly Mosquito Repellent from organic based materials The present invention provides a novel composition of mosquito repellent. The present invention specifically relates to an organic based mosquito repellent containing extract of orange peel, lemon peel, Neem leaves, Cinnamon barks and kaffir lime peel.

No. of Pages : 9 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045839 A

(19) INDIA

(22) Date of filing of Application :11/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMATED SKIN DISEASES DETECTION USING MACHINE LEARNING APPROACH

(51) International classification :G06N0003040000, G06T0007000000, G06N0003080000, G06K0009620000, G16H0050200000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

**(71)Name of Applicant :**

**1)Ms. Neethu Krishna**  
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, SCMS School of Engineering and Technology, Ernakulam, Kerala, Pin Code: 683582 -----

**2)Mr. Utkarsh Arun Avalekar**

**3)Dr. P Ramesh Naidu**

**4)Ms. Kirti Rahul Kadam**

**5)Dr Anil Trimbakrao Gaikwad**

**6)Ms Snigdha Rani Behera**

**7)Mr Gowri Sankar Chintapalli**

**8)Dr Kirtimaya Mishra**

**Name of Applicant : NA**

**Address of Applicant : NA**

**(72)Name of Inventor :**

**1)Ms. Neethu Krishna**

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, SCMS School of Engineering and Technology, Ernakulam, Kerala, Pin Code: 683582 -----

**2)Mr. Utkarsh Arun Avalekar**

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, D.Y.Patil Agriculture and Technical University, Talsande, Kolhapur, Maharashtra, Pin Code: 416112 -----

**3)Dr. P Ramesh Naidu**

Address of Applicant :Assistant Professor, department of Computer Science and Engineering, Nitte Meenakshi Institute of Technology, Bangalore, Pincode: 560064 -----

**4)Ms. Kirti Rahul Kadam**

Address of Applicant :Assistant Professor, Department of Management Department , Bharati Vidyapeeth Deemed to be University institute of Management, Kolhapur, Maharashtra, Pincode:416003 -----

**5)Dr Anil Trimbakrao Gaikwad**

Address of Applicant :Associate Professor and HOD, Department of Computer Applications, Bharati Vidyapeeth Deemed to be University institute of Management, Kolhapur, Maharashtra, Pincode:416003 -----

**6)Ms Snigdha Rani Behera**

Address of Applicant :Associate Professor, Department of Pharmacy, School of Pharmacy, ARKA JAIN University, Jamshedpur, Jharkhand, Pincode: 832108 -----

**7)Mr Gowri Sankar Chintapalli**

Address of Applicant :Assistant Professor, Department of Pharmacy, School of Pharmacy, ARKA JAIN University, Jamshedpur, Jharkhand, Pin Code: 832108 -----

**8)Dr Kirtimaya Mishra**

Address of Applicant :Professor, Department of Pharmacy, School of Pharmacy, ARKA JAIN University, Jamshedpur, Jharkhand, Pin Code: 832108 -----

**(57) Abstract :**

Automated Skin Diseases Detection Using Machine Learning Approach ABSTRACT Dermatology is the area of biology that deals with the diagnosis and treatment of conditions that primarily affect the skin. Due to temperature, humidity, and other environmental conditions, the vast spectrum of dermatologic illnesses varies geographically as well as seasonally. Because of its unevenness, tone, hairiness, and other mitigating factors, human skin is one of the most unexpected and difficult surfaces to mechanically synthesise and analyse. Only a small number of studies have focused on the medical perspective of the problem, despite the fact that many studies use PC Vision techniques to identify and model human skin victimisation. Patients typically disregard early symptoms because there aren't any medical services in distant places, which could make the condition worse over time. Consequently, there is a growing need for high accuracy automatic skin disease detection systems. In order to distinguish between healthy skin and skin that has a disease, as well as to classify skin diseases into their main classes, such as melanocytic nevi, melanoma, benign keratoses-like lesions, basal cell carcinoma, actinic keratoses, vascular lesions, and dermatofibroma, we develop a multiclass deep learning model. We utilised Deep Learning to train our model. Deep Learning is a subset of machine learning, however unlike machine learning, it makes use of big datasets, which significantly reduces the number of classifiers. The machine self-learns, divides the supplied data into levels of prediction, and provides accurate findings in a very short amount of time, encouraging and supporting the growth of dermatology. Convolutional Neural Network (CNN) is one of the most used algorithms for picture categorization, thus that is the one we utilised.

No. of Pages : 16 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION  
(19) INDIA  
(22) Date of filing of Application :11/08/2022

(21) Application No.202241045851 A  
(43) Publication Date : 19/08/2022

(54) Title of the invention : A SENSOR-BASED INDUSTRY AUTOMATION SYSTEM TO MONITOR THREE-PHASE INDUCTION MOTORS

(51) International classification :G05B0019042000, E21B0047140000, B29C0070320000, A61N0001360000, H03L0007180000  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No :NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
1)Dr. M. SUDHA  
Address of Applicant :PROFESSOR AND HEAD, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL- 637408, TAMIL NADU, INDIA. -----  
2)MRS.VIJAYAKUMAR  
3)ABINAYAAR  
4)PRIVANKAS  
5)NITHYA NANDHITHAAR  
6)DHANAVARSHINLV  
7)KEERTHANALP  
8)SUMITHRALV  
9)ARVIND LAXMANJ  
10)ARAVIND.G  
11)JEEVAP  
12)MERCY.J  
13)PAVEENRAJM  
14)RAJAGURUJ  
15)SANTHOSH KUMARS  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
1)Dr. M. SUDHA  
Address of Applicant :PROFESSOR AND HEAD, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL- 637408, TAMIL NADU, INDIA. -----  
2)MRS.VIJAYAKUMAR  
Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
3)ABINAYAAR  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
4)PRIVANKAS  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
5)NITHYA NANDHITHAAR  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
6)DHANAVARSHINLV  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
7)KEERTHANALP  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
8)SUMITHRALV  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
9)ARVIND LAXMANJ  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
10)ARAVIND.G  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
11)JEEVAP  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
12)MERCY.J  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
13)PAVEENRAJM  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
14)RAJAGURUJ  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL-637408, TAMIL NADU, INDIA. -----  
15)SANTHOSH KUMARS  
Address of Applicant :STUDENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING, PAAVAI ENGINEERING COLLEGE (AUTONOMOUS), NH-44, PAAVAI NAGAR, PAACHAL, NAMAKKAL- 637408, TAMIL NADU, INDIA. -----

(57) Abstract :  
An Embedded system is a controller programmed and controlled by a real time operating system (RTOS) with a dedicated function within a larger mechanical or electrical system, often with real time computing constraints. Embedded systems control many devices in common use today. The aim of the proposed method is to design an efficient smart automation system for industrial applications using Bluetooth technology. The project is carried out in Siby Solvent Extraction Pvt Ltd. It is a small-scale industry where white petroleum transmission has been performed. Since white petroleum is overly sensitive, it will burst when high frequency is applied. In Siby Solvent, 60 motors have been running for ON/OFF purposes. They must travel 500 meters for that we are using low frequency Bluetooth module to ON/OFF motor. In case of an emergency purpose, we can shut down entire motors. The main objective of the project is to control the 3- phase induction motor (ON/OFF function) in white petroleum transmission industry automatically using Bluetooth technology. Bluetooth HC-12 module covers up to 1 distance. It can be used in two ways. The first method is giving input using switch in transmitter side and another method uses android applications to give input. This system is implemented by using Bluetooth terminal HC-12.

No. of Pages : 10 No. of Claims : 4



(54) Title of the invention : A PRODUCT DEVELOPMENT OF ORGANIC HERBAL TEA POWDER WITH NOVEL SYNERGISTIC APPROACH

<p>(51) International classification :A61K0036610000, A61K0036185000, A61K0036530000, A61K0036820000, A61K0036906600</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)<b>Name of Applicant :</b>  <b>1)Dr. G. Srinivasan</b>  Address of Applicant :S/o L. Govindhan, 8/59, Kadanthapatti Colony, Pachal (Po), Namakkal (Dt) — 637018, Tamilnadu. -----  <b>2)Mr. S. Gowtham Kumar</b>  <b>3)Mr.M.SIVA HARISH</b>  <b>4)Mr.A.SACINTHRA</b>  <b>5)Mr.G.IMAYAVAN</b>  <b>6)Ms S.S.SAMITHA RAJ</b>  <b>7)Ms D.NAVEENA</b>  <b>Name of Applicant : NA</b>  <b>Address of Applicant : NA</b>  (72)<b>Name of Inventor :</b>  <b>1)Dr. G. Srinivasan</b>  Address of Applicant :S/o L. Govindhan, 8/59, Kadanthapatti Colony, Pachal (Po), Namakkal (Dt)-637018, Tamilnadu. -----  <b>2)Mr. S. Gowtham Kumar</b>  Address of Applicant :S/o M. Sekar, 30, A/1, E.B Main Road, Pykara, Madurai - 625004, Tamilnadu. -----  <b>3)Mr.M.SIVA HARISH</b>  Address of Applicant :19/53, Pooviyoor west, Agastheeswaram (pt), Kanyakumari-629 701, Tamil Nadu -----  <b>4)Mr.A.SACINTHRA</b>  Address of Applicant :4/18, Reddiyer street, Navaladipatti, Senthamangalam, Namakkal -63802, Tamil Nadu -----  <b>5)Mr.G.IMAYAVAN</b>  Address of Applicant :Ganapathi nagar(vill), Palacode(tk) ,Jerthalave(po), Dharmapuri-636 808, Tamil Nadu -----  <b>6)Ms S.S.SAMITHA RAJ</b>  Address of Applicant :3/39, Siva nagar, Naraikkinaru (po), Rasipuram, Namakkal -636 118, Tamil Nadu -----  <b>7)Ms D.NAVEENA</b>  Address of Applicant :6/184 Konanguttaiyur, Thangayur(po), Edappadi(Tk), Salem -637 102,Tamil Nadu -----</p>
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(57) Abstract :

The present invention provides organic herbal food product. Specifically, the present invention pertains to Guava green tea. Guava leaf (Psidium guajava) is used as the main ingredient. Tea is fortified with nutritional benefits of Holy basil (Tulsi) ocmium tenuiflorum and Moringa (Moringa oleifera).

No. of Pages : 19 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :11/08/2022

(21) Application No.202241045857 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : A NEW TECHNIQUE FOR SOLID DUST REMOVAL USING TWO INLET CYCLONE SEPARATOR

(51) International classification :B01D0045160000, B04C0009000000, B01D0045120000, B04C0005081000, B04C0005280000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

1)Mr. J. SATHISH

Address of Applicant :Assistant Professor, Chemical Engineering, Hindusthan College of Engineering & Technology, Malumichampatti, Coimbatore District, Tamil Nadu, India-641032

2)Dr.S.SAHAYA AROCKIA SELVI

3)Dr. S.GEETHA

4)Dr.S.VIJAYALAKSHMI

5)Dr. P. MARIMUTHU

6)Mr.S. PREM

7)Dr. R. MAGUTEESWARAN

8)Mrs. P. MATHUMATHI

9)Mrs.A.THAMARAI MUTHUMANI

10)Dr. M RAJESHWARAN

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Mr. J. SATHISH

Address of Applicant :Assistant Professor, Chemical Engineering, Hindusthan College of Engineering & Technology, Malumichampatti, Coimbatore District, Tamil Nadu, India-641032

2)Dr.S.SAHAYA AROCKIA SELVI

Address of Applicant :Associate Professor, Mathematics, St.Michael College of Engineering and Technology, Kalayarkoil, Sivaganga District, Tamilnadu, India-630551

3)Dr. S.GEETHA

Address of Applicant :Associate Professor, Mathematics, St.Michael College of Engineering and Technology, Kalayarkoil, Sivaganga District, Tamilnadu, India-630551

4)Dr.S.VIJAYALAKSHMI

Address of Applicant :Associate Professor, Mathematics, St.Michael College of Engineering and Technology, Kalayarkoil, Sivaganga District, Tamilnadu, India-630551

5)Dr. P. MARIMUTHU

Address of Applicant :Principal & Professor, Mechanical Engineering, Varuvan Vadivelan Institute of Technology, Gundalapatti, Dharmapuri, Tamil Nadu, India-636701

6)Mr.S. PREM

Address of Applicant :Assistant Professor, Mechanical Engineering, Sri Raaja Raajan College of Engineering and Technology, Amaravathipudur, Sivaganga District, Tamil Nadu, India-630301

7)Dr. R. MAGUTEESWARAN

Address of Applicant :Principal & Professor, Mechanical Engineering, Suguna College of Engineering, Coimbatore, TamilNadu, India-641014

8)Mrs. P. MATHUMATHI

Address of Applicant :Associate Professor, Electrical & Electronics Engineering, St. Michael College of Engineering & Technology, Kalayarkoil, Sivaganga District, TamilNadu, India-630551

9)Mrs.A.THAMARAI MUTHUMANI

Address of Applicant :Associate Professor, Computer Science & Engineering, St. Michael College of Engineering & Technology, Kalayarkoil, Sivaganga District, TamilNadu, India-630551

10)Dr. M RAJESHWARAN

Address of Applicant :Principal & Professor, Mechanical Engineering, Mother Terasa college of Engineering and Technology, Illuppur, Pudukottai District, TamilNadu, India-622102

(57) Abstract :

Cyclone separator is the device used for dust removal. In contrast to the conventional design, which only has one feed intake, the cyclone separator in this study has two inlets. The effectiveness of the cyclone separator's particle collection was examined in relation to the inclusion of a secondary intake. By giving the cyclone separator twin inlets, the centrifugal force acting on the particles was changed, changing the effectiveness of particle collection. It was created as a cyclone separator with two inlets. Its performance was examined by experiments using the particle-to-air ratio (particle concentration), the gas flow rate ratio between the two inlets, and the individual gas flow rates in each of the inlets as the parameters. The real performance of the suggested cyclone separator was seen after conducting testing, and it differed in how well it performed in collecting the particles from a gas-solid combination. The entrance gas velocity, collecting efficiency, airflow measurements, and flow rate of air were calculated to investigate the operation of a cyclone separator. The two inlet cyclone separator reveals that the dust is easily removed, centrifugal force is increased, particle collection efficiency becomes eventually quicker and so the time taken for the entire process is reduced.

No. of Pages : 14 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045859 A

(19) INDIA

(22) Date of filing of Application :11/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN EARLY DETECTION OF NIPAH INFECTIOUS DISEASE BASED ON INTEGRATED MEDICAL FEATURES FOR HUMAN USING ENSEMBLE RBM TECHNIQUES

(51) International classification	:G06Q0050220000, G06N0020000000, G16H0050800000, G16H0050700000, G06N0003080000	(71)Name of Applicant : <b>1)M. KANNAN</b> Address of Applicant :RESEARCH SCHOLAR, DEPARTMENT OF COMPUTER SCIENCE, VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS), PV VAITHIYALINGAM RD, VELAN NAGAR, KRISHNAPURAM, PALLAVARAM, CHENNAI, TAMIL NADU, 600117, INDIA. -----
(86) International Application No	:NA	<b>2)DR. C. PRIYA</b> Name of Applicant : NA
Filing Date	:NA	Address of Applicant : NA
(87) International Publication No	: NA	(72)Name of Inventor :
(61) Patent of Addition to Application Number	:NA	<b>1)M. KANNAN</b>
Filing Date	:NA	Address of Applicant :RESEARCH SCHOLAR, DEPARTMENT OF COMPUTER SCIENCE, VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS), PV VAITHIYALINGAM RD, VELAN NAGAR, KRISHNAPURAM, PALLAVARAM, CHENNAI, TAMIL NADU, 600117, INDIA. -----
(62) Divisional to Application Number	:NA	<b>2)DR. C. PRIYA</b>
Filing Date	:NA	Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE, SAVEETHA COLLEGE OF LIBERAL ARTS AND SCIENCES, SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, CHENNAI-77, TAMIL NADU, INDIA. -----

(57) Abstract :

The importance of early diagnosis of a hazardous illness cannot be overstated. The transmission rate is extremely high, especially in the current pandemic condition. The ability to predict epidemics will aid public health in reducing mortality and morbidity. Machine Learning (ML) approaches are used in the construction of an effective disease prognosis model. Furthermore, only if the model learns good associated features from the data is it possible to generate a speedy outcome.

No. of Pages : 11 No. of Claims : 2

(54) Title of the invention : TO IDENTIFY BRAIN TUMOR BY LEARNING WITH RGB COLOR, PHOG AND JPEG COEFFICIENT FILTERS THROUGH DEVIAT

<p>(51) International classification :G01S0005020000, G01S0005140000, A61B0005000000, G05B0011420000, G06T0007900000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)<b>Name of Applicant :</b>  <b>1)Dr. KAVITHA P</b>  Address of Applicant :ASSOCIATE PROFESSOR, ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, PANIMALAR ENGINEERING COLLEGE, CHENNAI, INDIA. -----  <b>2)Dr. MALATHI S</b>  <b>3)Dr. ANNI PRINCY B</b>  <b>4)Dr. JAYASHREE K</b>  <b>5)Dr. TAMILSELVI T</b>  <b>6)VIVEK C</b>  <b>Name of Applicant : NA</b>  <b>Address of Applicant : NA</b>  (72)<b>Name of Inventor :</b>  <b>1)Dr. KAVITHA P</b>  Address of Applicant :ASSOCIATE PROFESSOR, ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, PANIMALAR ENGINEERING COLLEGE, CHENNAI, INDIA. -----  <b>2)Dr. MALATHI S</b>  Address of Applicant :PROFESSOR, ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, PANIMALAR ENGINEERING COLLEGE, CHENNAI, INDIA -----  <b>3)Dr. ANNI PRINCY B</b>  Address of Applicant :PROFESSOR, COMPUTER AND COMMUNICATION ENGINEERING, PANIMALAR ENGINEERING COLLEGE, CHENNAI, INDIA -----  <b>4)Dr. JAYASHREE K</b>  Address of Applicant :PROFESSOR, ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, PANIMALAR ENGINEERING COLLEGE, CHENNAI, INDIA -----  <b>5)Dr. TAMILSELVI T</b>  Address of Applicant :PROFESSOR, COMPUTER SCIENCE AND ENGINEERING, PANIMALAR ENGINEERING COLLEGE, CHENNAI, INDIA -----  <b>6)VIVEK C</b>  Address of Applicant :ASSISTANT PROFESSOR, ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, PANIMALAR ENGINEERING COLLEGE, CHENNAI, INDIA -----</p>
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## (57) Abstract :

A Brain Tumor is a mass or growth of abnormal cells in your brain. Many different types of brain tumor exist. Some brain tumors are noncancerous, and some brain tumors are cancerous. Hence there is a need for fast, automated, efficient and reliable technology for accurate detection of tumors. This research work finds that Random Committee using JPEG Coefficient Filter model is producing an optimal results. The least Mean absolute error value is 0.33 which is produced by Ada Boost MI with RGB Color Histogram Filter. The Highest Mean absolute error value is 0.48 which is having Random Committee by implementing RGB Color Histogram Filter. The least Root mean squared error value is 0.40 which is produced by Random Committee with JPEG Coefficient Filter. The Highest root mean squared error value is 0.56 which is having Random Committee by implementing RGB Color Histogram Filter. The least relative absolute error value is 51.66% of relative absolute error value which is produced by Ada Boost MI with RGB Color Histogram Filter.

No. of Pages : 15 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :11/08/2022

(21) Application No.202241045887 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : An AI Enabled Prosthetic Arm for Rehabilitation and advanced arm Dynamics

(51) International classification :A61B0005000000, G06F0003010000, A61F0002580000, A61F0002720000, A61B0005047600  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Mahantesh K**  
Address of Applicant :Dept. of ECE, SJBIT, BGSHEC, Kengeri -----  
**2)Dr. Lakshminarayana M**  
**3)Preeti Karanji**  
**4)Rishi K**  
**5)R Siddushree Taralabalu**  
**6)Suman M N**  
**7)Mr. Bhaskar Belavadi**  
**8)Dr. Manjunath Managuli**  
**9)Mr. Darshan B D**  
**10)Dr. D N Chandrappa**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr. Mahantesh K**  
Address of Applicant :Dept. of ECE, SJBIT, BGSHEC, Kengeri -----  
**2)Preeti Karanji**  
Address of Applicant :Student, Dept. of ECE SJBINSTITUTE OFTECHNOLOGY#67, BGS Health& Education City, Dr. Vishnuvardhan Road, Kengeri Bangalore -----  
**3)Rishi K**  
Address of Applicant :Student, Dept. of ECE SJBINSTITUTE OFTECHNOLOGY#67, BGS Health& Education City, Dr. Vishnuvardhan Road, Kengeri Bangalore -----  
**4)R Siddushree Taralabalu**  
Address of Applicant :Student, Dept. of ECE SJBINSTITUTE OFTECHNOLOGY#67, BGS Health& Education City, Dr. Vishnuvardhan Road, Kengeri Bangalore -----  
**5)Suman M N**  
Address of Applicant :Student, Dept. of ECE SJBINSTITUTE OFTECHNOLOGY#67, BGS Health& Education City, Dr. Vishnuvardhan Road, Kengeri Bangalore -----  
**6)Mr. Bhaskar Belavadi**  
Address of Applicant :Assistant Professor, Dept. of ECE SJBINSTITUTE OFTECHNOLOGY#67, BGS Health& Education City, Dr. Vishnuvardhan Road, Kengeri Bangalore -----  
**7)Dr. Manjunath Managuli**  
Address of Applicant :Assistant Professor, Dept. of ECE SJBINSTITUTE OFTECHNOLOGY#67, BGS Health& Education City, Dr. Vishnuvardhan Road, Kengeri Bangalore -----  
**8)Mr. Darshan B D**  
Address of Applicant :Assistant Professor, Dept. of ECE SJBINSTITUTE OFTECHNOLOGY#67, BGS Health& Education City, Dr. Vishnuvardhan Road, Kengeri Bangalore -----  
**9)Dr. D N Chandrappa**  
Address of Applicant :Professor, Dept. of ECE SJBINSTITUTE OFTECHNOLOGY#67, BGS Health& Education City, Dr. Vishnuvardhan Road, Kengeri Bangalore -----  
**10)Dr. Lakshminarayana M**  
Address of Applicant :Assistant Professor, Dept. of ECE SJBINSTITUTE OFTECHNOLOGY#67, BGS Health& Education City, Dr. Vishnuvardhan Road, Kengeri Bangalore -----

(57) Abstract :

ABSTRACT: By using the brain's output pathway, BCI allows commands and messages to be sent to the arm. Numerous different physiological signals can be used to run BCI devices. Many BCI systems have intricate architectures that need lengthy processing. The most common input for BCI applications is the Motor Imagery-EEG signal, however EEG is frequently tainted with noise. Few research has shown actual BCI control of a prosthetic device, despite suggestions that this control can be used for neuroproteins. In this experiment, a motor imagery BCI that uses an electroencephalogram (EEG) to guide the movement of a prosthetic hand is demonstrated. To give haptic feedback and local machine control, the hand was instrumented with force and angle motors. Motor Imagery (MI) is now highly adapted to control machine or computer by interfacing with brain or mind. This proposes a method to differentiate elbow, wrist, and finger motor imagery movement according to two and three class classification using statistical features of the EEG signal of the subjects. For this purpose, the collected EEG signals of TWO subjects are segmented and feed to classification methods, which decomposes each EEG segmented signal to collect the relevant features and classifies the movement class trials data. Comparing the classifiers' efficiency allows us to determine the best method for a given number of features.

No. of Pages : 6 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045904 A

(19) INDIA

(22) Date of filing of Application :11/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN OCEAN THERMAL ENERGY CONVERSION (OTEC) SYSTEM AND METHOD THEREOF

(51) International classification :F03G0007050000, F24S0010130000, F24S0010100000, H02S0010100000, F24S0010170000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Godavari Institute of Engineering & Technology(Autonomous)**

Address of Applicant :Head Of The Department, Electrical & Electronics Engineering Department, Godavari Institute of Engineering & Technology (A) , NH 16,Chaitanya Knowledge City, Rajamahendravaram-533296, Andhra Pradesh, India.  
Rajamahendravaram -----

**2)Dr.Dondapati Ravi Kishore**

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr.Dondapati Ravi Kishore**

Address of Applicant :H-No:85-46-17/16, Flat No 501, Rukmini Nilayam Apartments, Opp: J K Gardens Function Hall, Model Colony, Rajahmundry-533103, Andhra Pradesh, India.  
Rajahmundry -----

(57) Abstract :

Exemplary embodiments of the present disclosure are directed to an ocean thermal energy conversion (OTEC) system and method thereof. The ocean thermal energy conversion (OTEC) system comprising: an OTEC-solar pond hybrid, wherein the solar pond (SP) is located offshore and is a flexible floating structure of synthetic materials; a power block configured to facilitate thermal conversion; a floating salt gradient solar collector configured to increase temperature difference as per requirement; an artificial protective embankment of shore for the floating salt gradient solar collector; a cold water pipe present at about 1000m below sea-surface, to increase temperature; and a sand filter configured to maintain the offshore solar pond. FIG.1

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045906 A

(19) INDIA

(22) Date of filing of Application :11/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SOLAR PHOTOVOLTAIC TRAFFIC LIGHT SIGNAL SYSTEM AND METHOD THEREOF

(51) International classification :H02J0007000000, H02J0007350000, H02J0003380000, H02M0001000000, G08G0001095000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Godavari Institute of Engineering & Technology(Autonomous)**

Address of Applicant :Head Of The Department, Electrical & Electronics Engineering Department, Godavari Institute of Engineering & Technology (A) , NH 16,Chaitanya Knowledge City, Rajamahendravaram-533296, Andhra Pradesh, India.  
Rajamahendravaram -----

**2)Dr.Dondapati Ravi Kishore**

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr.Dondapati Ravi Kishore**

Address of Applicant :H-No:85-46-17/16, Flat No 501, Rukmini Nilayam Apartments, Opp: J K Gardens Function Hall, Model Colony, Rajahmundry-533103, Andhra Pradesh, India.  
Rajahmundry -----

(57) Abstract :

Exemplary embodiments of the present disclosure are directed to a Solar Photovoltaic Traffic Light Signal System and method thereof. The system comprising: a solar panel comprising an array of solar cells connected in parallel or series to produce dc electricity; a luminescence unit and a charge controller/ dc-dc converter device, which is a two in one component and is configured to protect the battery from overcharging and deep discharging, and wherein the charge controller is configured to obtain a voltage supplied by the solar panel at 25 V and drops it down to 12 volts so that it supplies both the battery and the stop light; and a load component of the circuit which is a traffic light signal and wherein the circuit is configured to build a standalone photovoltaic traffic light signal that is able to function for long periods of time with no grid connection. FIG.6B

No. of Pages : 20 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045914 A

(19) INDIA

(22) Date of filing of Application :11/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : Internet of Things (IoT) Enabled Inventive Real Time System for Smart Classroom Environment.

(51) International classification	:H04L0029080000, H04W0048180000, G05B0019418000, H04L0012861000, H04L0012120000	(71)Name of Applicant : <b>1)Daniel Lawrence I</b> Address of Applicant :2/83, Kottagaimeedu, Arumbanur (Post), Madurai-625104. ----- <b>2)Dr.P.Uma Maheswari</b> <b>3)Dr.V.Sivananth</b> <b>4)Dr.K.Karthikeyan</b> <b>5)Dr.G.Parkavi</b> <b>6)Mr.V .Karthikeyan</b> Name of Applicant : NA Address of Applicant : NA
(86) International Application No	:PCT//	(72)Name of Inventor :
Filing Date	:01/01/1900	<b>1)Daniel Lawrence I</b> Address of Applicant :2/83, Kottagaimeedu, Arumbanur (Post), Madurai-625104. ----- <b>2)Dr.P.Uma Maheswari</b> Address of Applicant :Assistant Professor, Department of Computer Applications, Anna University Regional Campus, Madurai, Tamilnadu, India -625019. Madurai ----- <b>3)Dr.V.Sivananth</b> Address of Applicant :Lecturer, Mechanical and Industrial Engineering section, University of Technology and Applied science- Ibri, Sultanate of Oman. ----- <b>4)Dr.K.Karthikeyan</b> Address of Applicant :Assistant professor, Department of Computer Applications, Anna University Regional Campus, Madurai, Tamilnadu, India - 625019 Madurai ----- <b>5)Dr.G.Parkavi</b> Address of Applicant :Assistant professor, Department of Computer Science, Mangayarkarasi College of Arts & Science for Women, Paravai, Madurai, Tamilnadu, India - 625402 Madurai ----- <b>6)Mr.V .Karthikeyan</b> Address of Applicant :Assistant professor, Electrical and Electronics Engineering, Loyola Institute of Technology, Chennai, Tamilnadu, India – 600123. Chennai -----
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In general, smart systems are becoming very much familiar in certain real time applications. The particular systems are organized in considerably practical in our regular lives respectively. On the other side, the tremendous development of Internet of Things (IoT) technology sometimes termed as Internet of Everything has progressively an emerging resource and has been widely used in many real time functions like education, medical, industries and other relevant fields. Among these, smart classroom are the essential requirements of the current education system. Recently, different innovation in the regularly used technologies which can make the classroom be effective and smarter. In addition to this, the proposed research work composed of Node MCU, Arduino UNO, smart phone, IR and ultrasonic sensor nodes further all these devices are interconnected which in turn to regulate light and fan in the classroom. With relevance to this, smart classroom minimize an electric short circuits, fire accidents thereby it reduce electricity consumption. Finally, it enhances overall classroom in secured manner.

No. of Pages : 12 No. of Claims : 4



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :11/08/2022

(21) Application No.202241045961 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : ChiKitFan for Moms

<p>(51) International classification :F04D0025080000, B01D0053020000, F24C0015200000, A47J0027000000, A47B0077080000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Kavitha Karthikeyan</b> Address of Applicant :Flat No.14, Second Floor, Block - 1B, DABC Begonia Apartments, Polachery, Medavakkam-Mambakam Road -----</p> <p><b>2)Karthikeyan S</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Nithin Karthikeyan</b> Address of Applicant :Maharishi Vidya Mandir School, Polachery, Chennai - 600 127 Chennai -----</p> <p><b>2)Karthikeyan S</b> Address of Applicant :Flat No.14, Second floor, Block 1B, DABC Apartments, Near MVM School, Polachery Chennai -----</p> <p><b>3)Kavitha Karthikeyan</b> Address of Applicant :Associate professor, Department of Civil Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai Chennai -----</p>
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(57) Abstract :

Moms struggle always in the kitchen. May it be summer or winter, she sweats a lot while cooking, due to the radiations. Though we have provided with the modular kitchen facilities at home, still she isn't comfortable while cooking. She sweats, drains her energy and becomes exhausted after cooking. This is a scene at all home in the early morning where both parents go for work. Cooking is loved by all women, but if the process is isn't pleasant one, it may stress the whole day and also for the lifetime of moms. Even if the ceiling fan is provided in the kitchen, it cannot be kept on, while cooking as it will not aid the stove to burn which will result in wastage of fuel. A pedestal fan can be kept at any suitable location, but again it will not ease the person's face while cooking. Air coolers or air conditioners can be provided but it will increase the electricity bill of the fathers, which is again a concern. Mom should feel glad while cooking without sweat and the solution should be a cheaper one for the simple problem. The chimney provided with a low-cost detachable fan can be a solution for this problem of moms in the kitchen.

No. of Pages : 5 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241045989 A

(19) INDIA

(22) Date of filing of Application :12/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : FACIAL EMOTION FEATURES EXTRACTION METHOD ON HARDWARE USING DEEP LEARNING FRAMEWORK FOR REAL-TIME

(51) International classification	:G06K0009000000, G06K0009620000, G06N0003040000, G06T0001200000, G06N0003063000	(71)Name of Applicant : <b>1)VIT-AP UNIVERSITY</b> Address of Applicant :VIT-AP UNIVERSITY, BESIDE AP SECRETARIAT, NEAR VIJAYAWADA, ANDHRA PRADESH-INDIA - 52237. -----
(86) International Application No	:NA	<b>Name of Applicant : NA</b>
Filing Date	:NA	<b>Address of Applicant : NA</b>
(87) International Publication No	: NA	(72)Name of Inventor :
(61) Patent of Addition to Application Number	:NA	<b>1)Mr. USENDUDEKULA</b>
Filing Date	:NA	Address of Applicant :VIT-AP UNIVERSITY, BESIDE AP SECRETARIAT, NEAR VIJAYAWADA, ANDHRA PRADESH-INDIA - 52237, 9533507143 basha.834@gmail.com. -----
(62) Divisional to Application Number	:NA	<b>2)Dr. PURNACHAND NALLURI</b>
Filing Date	:NA	Address of Applicant :VIT-AP UNIVERSITY, BESIDE AP SECRETARIAT, NEAR VIJAYAWADA, ANDHRA PRADESH-INDIA - 52237, 9182410617 chandunece@gmail.com. -----

(57) Abstract :

A facial emotion features extraction method on hardware using deep learning framework for real-time emotion detection, wherein CNN building framework for designing real-time CNN's, therein focuses on implementing face detection, face recognition and face emotion recognition through Facial emotion features based algorithms on GPU, and FPGA frame work.Three phases that is features extraction on FPGA, features extraction on GPU, and is a real-time computer vision applications matching features which are created by models.

No. of Pages : 10 No. of Claims : 2

(54) Title of the invention : ONLINE AUTOMATED IDENTITY DOCUMENT VERIFICATION SYSTEM

(51) International classification :G06F0016930000, G07F0007120000, G06K0009000000, G07F0007080000, G06Q0010100000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE**

Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032. -----

**Name of Applicant : NA**

**Address of Applicant : NA**

## (72)Name of Inventor :

**1) Dr. J. JAYA**

Address of Applicant :PROFESSOR/ECE, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032. -----

**2)Dr. S. SHANKAR**

Address of Applicant :PROFESSOR & HEAD-CSE, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032. -----

**3)Dr. LAKSHMANA KUMAR RAMASAMY**

Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032. -----

**4)SHRIRAM S**

Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032. -----

## (57) Abstract :

Most of the Organizations face difficulties in verifying the Documents for Identity Verification for the users of those organizational (Like the users of Products provided by the Organization or any services provided by the Organization which are used by the users) since they are in need of Human Force and also it takes very long time taking in Traditional method of Document Verification the Organizations which needs the Human Force to check each and every document uploaded by the users and it involves tiring process for the Organizational members and also takes more time to check all the documents submitted by the users for their Identity Verification. Due to this disadvantage there may be a lag in processing and verifying the Identity Documents of the users. The Proposed system has been developed by using Java Programming Language, JSP and Tesseract OCR for doing Optical Character Recognition. The Web Interface has been built using HTML, CSS and JavaScript. MySQL has been used as the Database. The Proposed Online Document Verification System is a Web Application Portal where the user can register to the website and get login to the system and the user has options to verify his/her Documents for Identity verification online and also he/she has the options to view the previously verified Documents. Then the user can verify his/her Identity documents online by giving the details of the document and uploading a valid image proof and the proposed system uses Optical Character . Recognition (OCR) Algorithm in backend to check for the Authenticity / Credibility of the Uploaded Image Proof by doing a Verification Process and then notifies the user whether the Document is Successfully verified or not. If the Document is successfully verified it is stored in the particular user database as Verification success for the Particular Document for Identity Verification. Also the user can print that successfully verified Identity Document page for any other purposes also. The proposed system can be used to verify the Identity Documents of the user online without the intervention of any Human Force and thus reduces the time involved in manual verification of the documents uploaded by the user since it automatically verifies the document. The previously verified documents option gives a view of all the previously verified Documents by the user and also date of verification. The future scope of this proposed system is that the Organizations can use this system by integrating the developed system in their Products thus making the Document Verification for their users easier.

No. of Pages : 5 No. of Claims : 5

(51) International classification :A61H0003060000, G09B0021000000, A61F0009080000, G01S0015930000, G01S0015870000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE**

Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR Chennai-600127 Chennai -----

**Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)Prof. A. S. Valarmathy**

Address of Applicant :Associate Professor, Department of Electrical and Electronics Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai -----

**2)Prof. P. Chandrakala**

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai -----

**3)S. Karan**

Address of Applicant :Department of Electrical and Electronics Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai -----

**4)S. Monish Kumar**

Address of Applicant :Department of Electrical and Electronics Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai -----

**5)V. Sanjay**

Address of Applicant :Department of Electrical and Electronics Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai -----

**6)P. Krishna**

Address of Applicant :Department of Electrical and Electronics Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai -----

**7)N. Ragavendra prasath**

Address of Applicant :Department of Electrical and Electronics Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Medavakkam-Mambakkam Road Ponmar, Chennai-600127. Chennai -----

## (57) Abstract :

Basically it is difficult for blind people to pass their day to day life with their disabilities. To make their stick smarter, we interfaced some system with their walking stick. In this system we interfaced some smart functions with their stick .The obstacle is detected on the way through ultrasonic sensor placed on the stick; Based on the distance of the obstacle a different sound is made using the buzzer. Lesser the distance high frequency sound is made by this technique and thus blind people can avoid obstacles and differentiate the distance of the obstacle. On hearing the buzzer sound the blind people can interpret that obstacles are present in front of them and they divert their path. The sighted stick is also provided with a touch sensor .The main intention behind the need of touch sensor is to make the stick operative only when the blind person touches the sighted stick. This is mainly added to avoid unnecessary beep sounds whenever obstacles are identified and the user actually not needs it.

No. of Pages : 6 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241046199 A

(19) INDIA

(22) Date of filing of Application :12/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : CENTRALIZED DRAINAGE SYSTEM DETECTION AND MONITORING

<p>(51) International classification :G01F0023000000, H04Q0009000000, G08B0021180000, H04W0004380000, G01N0033000000</p> <p>(86) International Application No Filing Date :PCT// :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number Filing Date :NA :NA</p> <p>(62) Divisional to Application Number Filing Date :NA :NA</p>	<p>(71)Name of Applicant : <b>1)PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE</b> Address of Applicant :MEDAVAKKAM-MAMBAKKAM ROAD PONMAR Chennai-600127 Chennai -----</p> <p>Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr.K.K.Senthil kumar</b> Address of Applicant :Professor, Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----</p> <p><b>2)Vaishnavi M</b> Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----</p> <p><b>3)Varshini V P</b> Address of Applicant :Department of Electronics and Communication Engineering, Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai – 600127 Chennai -----</p> <p><b>4)Prof.K Selvi</b> Address of Applicant :Assistant Professor, Department of Commerce, Prince Shri Balaji Arts and Science College, Medavakkam-Mambakam Road, Ponmar, Chennai - 600127 Chennai -----</p> <p><b>5)Prof.B Latha</b> Address of Applicant :Associate Professor, Department of Computer Science &amp; Engineering, Prince Dr K Vasudevan College of Engineering and Technology, Ponmar, Chennai - 600127 Chennai -----</p>
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(57) Abstract :

Drainage system monitoring is incompetent. Proposed system represents the application and design function of a smart and real-time Drainage and Manhole Monitoring System with the help of Internet of Things. The drainage system will have a module which is having microcontroller interfaced with gas sensor (MQ-4), level indicator, GPS and IOT (ESP8266). This system monitors the water level, methane level and flow of the water. If any of the above level exceeds the threshold value then it will trigger an alarm and will provide those information to the health departments from which the particular action will be taken.

No. of Pages : 6 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :12/08/2022

(21) Application No.202241046215 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : A Secure block-chain based Medical Internet of Things (MIoT) for Healthcare Data Management

(51) International classification :G06Q0050220000, G16H0010600000, G16H0050200000, G16H0010200000, G16H0040200000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr.Arulprakash.A , Bharath Institute of higher education and Research**  
Address of Applicant :Assistant Professor, school of computing, Department of Computer Science and Engineering, Bharath Institute of higher education and Research, Tiruvanchery, Selayur, Chennai, Tamil Nadu 600126 Chennai -----  
**2)Mr.Deependra Rastogi, Galgotias University**  
**3)Mrs.Aanchal Vij, Galgotias University**  
**4)Mr.Sathiyaprasad, Sathyabama Institute of Science and Technology (Deemed to be University)**  
**5)Mr.K. Babu, Sathyabama Institute of Science and Technology (Deemed to be University)**  
**6)Mr. Tamilselvan.T, Shri Ramasamy Memorial University Sikkim**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr.Arulprakash.A , Bharath Institute of higher education and Research**  
Address of Applicant :Assistant Professor, school of computing, Department of Computer Science and Engineering, Bharath Institute of higher education and Research, Tiruvanchery, Selayur, Chennai, Tamil Nadu 600126 Chennai -----  
**2)Mr.Deependra Rastogi, Galgotias University**  
Address of Applicant :Assistant Professor, Computer Science and Engineering, Galgotias University, Plot No. 2, Yamuna Express Way, Opposite, Buddha International Circuit, Sector 17A, Greater Noida, Uttar Pradesh - 203201 Greater Noida -----  
**3)Mrs.Aanchal Vij, Galgotias University**  
Address of Applicant :Assistant Professor, Computer Science and Engineering, Galgotias University, Plot No. 2, Yamuna Express Way, Opposite, Buddha International Circuit, Sector 17A, Greater Noida, Uttar Pradesh - 203201 Greater Noida -----  
**4)Mr.Sathiyaprasad, Sathyabama Institute of Science and Technology (Deemed to be University)**  
Address of Applicant :Assistant Professor, School of Computing, Department of Computer Science and Engineering, Sathyabama Institute of Science and Technology (Deemed to be University), Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai-600 119, Tamilnadu, India Chennai - -----  
**5)Mr.K. Babu, Sathyabama Institute of Science and Technology (Deemed to be University)**  
Address of Applicant :Assistant Professor, School of Computing, Department of Computer Science and Engineering, Sathyabama Institute of Science and Technology (Deemed to be University), Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai-600 119, Tamilnadu, India Chennai - -----  
**6)Mr. Tamilselvan.T, Shri Ramasamy Memorial University Sikkim**  
Address of Applicant :Assistant Professor (Sr) Grade, School of Information Technology, Shri Ramasamy Memorial University Sikkim (SRM Sikkim), Upper Tadong, Tadong, Gangtok, Sikkim 737102 Tadong -----

(57) Abstract :  
There are many healthcare applications for the Internet of Health Things (IoHT). To provide patients with more intelligent and effective health diagnostics, modern IoHT incorporates health-related items such as sensors and remotely monitored medical devices for the assessment and management of a patient's record. With the integration of 5G services and blockchain technologies, we presented an IoT with a cloud-based clinical decision support system in this study for the prediction and monitoring of disease along with its severity level. Because of its transparency, a block-chain provides a method for storing and exchanging information that is secure. Blockchain technology has several uses in the healthcare industry and can enhance mobile health applications, monitoring tools, the sharing and preservation of electronic media records, clinical trial data, and the storage of insurance information. The proposed framework will use medical devices attached to the patient to collect patient data, which will then be saved in a cloud server along with pertinent medical records. The use of 5G with blockchain technology enables the secure transmission of patient data at high transmission rates with short reaction times. In addition, a Neural Network (NN) classifier is employed to forecast diseases and the degree of their severity. The suggested model is tested using a variety of classifiers. To determine which classifier is best for the dataset, the performance of various classifiers is compared by comparing the values. Additionally, the dataset is used to train the NN so that it can forecast the outcome of the dataset class that is not labeled.

No. of Pages : 10 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :13/08/2022

(21) Application No.202241046279 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN AI BASED MOTION ESTIMATION SYSTEM USING DEEP LEARNING

(51) International classification :G06N0003040000, G06N0003080000, G06K0009620000, G06K0009000000, G06N0020000000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to :NA  
Application Number :NA  
Filing Date :NA  
(62) Divisional to Application :NA  
Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Mr. Vijaya Bhaskar Sadu**  
Address of Applicant :Research Scholar, Department of Mechanical Engineering, Jawaharlal Nehru Technological University, Kakinada, Andhra Pradesh, India, Pincode: 533003 EAST GODAVARI -----  
**2)Dr. S. Mani Naidu**  
**3)Dr. Satvika**  
**4)Mr. Venkateswarlu Mannepally**  
**5)Dr. Akhil Kaushik**  
**6)Mr. Kuldip Kumar Sahu**  
**7)Dr. Chilukoti Varaha Narasimha Raja**  
**8)Dr. T. Narasimhulu**  
**9)Dr. D. V. Lokeswar Reddy**  
**10)Dr. Pambala Nageswara Rao**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Mr. Vijaya Bhaskar Sadu**  
Address of Applicant :Research Scholar, Department of Mechanical Engineering, Jawaharlal Nehru Technological University, Kakinada, Andhra Pradesh, India, Pincode: 533003 EAST GODAVARI -----  
**2)Dr. S. Mani Naidu**  
Address of Applicant :Professor of Physics, Department of Physics, Vel Tech, Rangarajan Dr. Sagunthala R & D Institute of Science and Technology, Deemed to be University, Avadi, Chennai, Tamil Nadu, India Pincode- 600062 Chennai -----  
**3)Dr. Satvika**  
Address of Applicant :Assistant Professor, Information Technology Department, TIT&S Bhiwani, Bhiwani, Haryana, India, Pincode: 127021 Bhiwani -----  
**4)Mr. Venkateswarlu Mannepally**  
Address of Applicant :Associate Professor, Department of ECE, Aditya College of Engineering, Surampalem, Kakinada, Andhra Pradesh, India, Pincode: 533437 EAST GODAVARI -----  
**5)Dr. Akhil Kaushik**  
Address of Applicant :Assistant Professor, Department of CSE, TIT&S Bhiwani, Bhiwani, Haryana, India, Pincode: 127021 Bhiwani -----  
**6)Mr. Kuldip Kumar Sahu**  
Address of Applicant :Assistant Professor, School of Engineering and IT, Arka Jain University, Jharkhand, Jamshedpur, Jharkhand, India, PIN code - 832108 Seraikela Kharsawan -----  
**7)Dr. Chilukoti Varaha Narasimha Raja**  
Address of Applicant :Assistant Professor, Department of EEE, Anil Neerukonda Institute of Technology & Sciences (A), Vishakapatnam, Andhra Pradesh, India, Pincode: 531162 Vishakapatnam -----  
**8)Dr. T. Narasimhulu**  
Address of Applicant :Assistant Professor, Department of EEE, Anil Neerukonda Institute of Technology & Sciences (A), Vishakapatnam, Andhra Pradesh, India, Pincode: 531162 Vishakapatnam -----  
**9)Dr. D. V. Lokeswar Reddy**  
Address of Applicant :Assistant Professor, Humanities and Social Sciences Department, JNTU College of Engineering, Pulivendula, Kadapa, Andhra Pradesh, India, Pincode: 516390 Kadapa -----  
**10)Dr. Pambala Nageswara Rao**  
Address of Applicant :Assistant Professor, Department of CSE, ELLENKI College of Engineering & Technology, Patelguda, Ameenpur, Patancheru, Sangareddy, Telangana, India, Pincode: 502319 MEDAK -----

(57) Abstract :

Within a physics-based tracking framework, training data from multiple types of sensors and data captured in previous capture sessions can be combined and used to train motion priors using a variety of deep learning techniques, such as convolutional neural networks (CNN) and Recurrent Temporal Restricted Boltzmann Machines(RBM). This allows the framework to track motion more accurately. It is possible to utilize two streams of filters in implementations that make use of one or more CNNs. One stream of the filters may be used in those embodiments to learn temporal information, while the other stream of the filters can be used to learn spatial information. In implementations that make use of one or more RTRBMs, it is possible to clamp all visible nodes of the RTRBMs with values derived from the training data or with data that is synthesized based on the training data. In situations when there is a lack of available sensor data, the input nodes may be unclamped so that one or more RTRBMs may create the sensor data that is lacking.

No. of Pages : 25 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241046280 A

(19) INDIA

(22) Date of filing of Application :13/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SMART DEVICE FOR THE DETECTION OF THE RHEUMATOID ARTHRITIS USING THERMAL IMAGE AND METHOD THEREOF

(51) International classification	:G06N0003080000, G06N0020000000, H04N0005330000, G10L0019000000, A61N0001040000	(71)Name of Applicant : <b>1)Mr. Mahesh Kumar A S</b> Address of Applicant :Research Scholar, JSS Science and Technology University, Mysuru, India Mysuru ----- <b>2)Dr. Mallikarjunaswamy M S</b> <b>3)Dr. Chandrashekara S</b>
(86) International Application No	:PCT//	Name of Applicant : NA
Filing Date	:01/01/1900	Address of Applicant : NA
(87) International Publication No	: NA	(72)Name of Inventor :
(61) Patent of Addition to Application Number	:NA	<b>1)Mr. Mahesh Kumar A S</b>
Filing Date	:NA	Address of Applicant :Research Scholar, JSS Science and Technology University, Mysuru, India Mysuru -----
(62) Divisional to Application Number	:NA	<b>2)Dr. Mallikarjunaswamy M S</b>
Filing Date	:NA	Address of Applicant :Sri Jayachamarajendra Colleges of Engineering, JSS Science and Technology University, Mysuru, India Mysuru -----
		<b>3)Dr. Chandrashekara S</b>
		Address of Applicant :ChanRe Rheumatology & Immunology Center & Research, Bengaluru, India Bengaluru -----
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(57) Abstract :

The present invention discloses a smart device for the detection of the rheumatoid arthritis using thermal image and method thereof. The system includes, but not limited to, a processing unit processing through Machine learning modules provided for processing the medical thermal images and providing a weight function format; and a plurality of weight function formats, receiving as an input through the Machine learning modules for reduction the weight function formats through a plurality of optimization techniques and normalization processes, which is further provided with a neuro-stick or memory chips module for implementation of a portable executable weight function formats for a plurality of virtual devices. Accompanied Drawing [FIG. 1]

No. of Pages : 22 No. of Claims : 10



(54) Title of the invention : ON DEMAND PERFORMANCE SCALABLE COOLING SOLUTION VIA A RECONFIGURABLE THERMAL ASSEMBLY

<p>(51) International classification :H05K0007200000, H01L0023427000, H01L0023373000, G06F0001200000, H01L0023340000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Prabhakar Subrahmanyam</b>  Address of Applicant :E-32, Doshi Gardens, Vadapalani, Chennai – 600026, Tamil Nadu, India Chennai -----  <b>2)Dr. B. K. Gnanavel</b>  <b>3)Dr. R. Velraj</b>  <b>4)G. Keerthi Sree</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Prabhakar Subrahmanyam</b>  Address of Applicant :E-32, Doshi Gardens, Vadapalani, Chennai – 600026, Tamil Nadu, India Chennai -----  <b>2)Dr. B. K. Gnanavel</b>  Address of Applicant :Eswari Engineering College, Chennai - 600089, Tamil Nadu, India Chennai -----  <b>3)Dr. R. Velraj</b>  Address of Applicant :Anna University, Chennai - 600025, Tamil Nadu, India Chennai -----  <b>4)G. Keerthi Sree</b>  Address of Applicant :Plot No.15, Door No. 3A, Indira Gandhi First Street, Choolaimedu, Chennai – 600094, Tamilnadu, India Chennai -----</p>
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(57) Abstract :

Modular reconfigurable cooling assemblies for thermal management of heat dissipating devices are provided. These modular assemblies facilitate scalable thermal performance with respect to increasing power dissipation demands. In some embodiments, a modular and reconfigurable cooling solutions can be reversibly configured to adjust reversibly the cooling capacity of such assemblies for defined power dissipating requirements. As power dissipated on the primary package increases, the primary heat sink or cooling assembly can be fitted with winged cooling assembly structures that enhances the cooling capacity of the thermal solution. Such winged structures are modular and can be attached to the primary cooling assembly such that the complete assembly structure now enhances the overall cooling capacity for increased power dissipation requirements. This makes the entire cooling assembly performance enhancement on-demand.

No. of Pages : 26 No. of Claims : 9

(54) Title of the invention : IOT BASED ENHANCED SMART HOME AUTOMATION

<p>(51) International classification :H04L0012280000, G05B0015020000, G05B0019418000, H04L0029080000, H04L0012120000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Francis Xavier Engineering College   Tirunelveli</b> Address of Applicant :Francis Xavier Engineering College, Vannarpettai, Tirunelveli – 627 003 -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. R. Ravi</b> Address of Applicant :Dr. R. Ravi, Professor, Department of Computer Science and Engineering, Vannarpettai, Tirunelveli – 627 003. -----</p> <p><b>2)Dr. R. Suman</b> Address of Applicant :Dr. R. Suman, Associate Professor, Department of Chemistry, Francis Xavier Engineering College, Vannarpettai, Tirunelveli – 627 003. -----</p> <p><b>3)Mr. A. Sudhan Raj Babu</b> Address of Applicant :Mr. A. Sudhan Raj Babu, Cyberforensics Applied Lab Student, IInd Year Computer Science and Engineering, Francis Xavier Engineering College, Vannarpettai, Tirunelveli – 627 003 -----</p> <p><b>4)Mr. S. Muthu @ Ramkumar</b> Address of Applicant :Mr. S. Muthu @ Ramkumar, Cyberforensics Applied Lab Student, IInd Year Computer Science and Engineering, Francis Xavier Engineering College, Vannarpettai, Tirunelveli – 627 003. -----</p>
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## (57) Abstract :

Automation has become important in today's world as it helps in completing a task with less human assistance and smarter way. Homes are becoming smart and evolving these days with the help of automation devices. Home electrical appliances are using remote-controlled switches instead of traditional switches. In today's world, most of the people have a smart phone and its use has become very popular and necessary in our life. We can use smart phone to control home appliances with just one click or a message. Home appliances can be controlled remotely with the help of controllers and communication devices. In this project, we will be using the Arduino UNO board for developing a smart home automation project with the HC-05 blue tooth module, which is controlled remotely by a smart phone.

No. of Pages : 23 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :14/08/2022

(21) Application No.202241046305 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : CONSUMER ADOPTION AND BEHAVIOUR TOWARDS ONLINE SHOPPING - AN EMPIRICAL STUDY

(51) International classification :G06Q0030020000, G06Q0030000000, G06Q0030060000, G06Q0010060000, G06Q0050000000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Dr.T.S.BHUVANESWARI**  
Address of Applicant :Assistant Professor of Commerce, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600 089 Chennai -----  
**2)Dr.S.MANI**  
**3)Dr.V.DEEPA**  
**4)Dr.P.SUSEELA**  
**5)Dr. A. JESINTHA RANI**  
**6)Mrs.Y.ESTHER REETA**  
**7)Mr. K. MURUGAN**  
**8)Dr.T.V. AMBULI**  
**9)Mr. R. RAKESH**  
**10)Dr.C. KAVITHA**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr.T.S.BHUVANESWARI**  
Address of Applicant :Assistant Professor of Commerce, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600 089 Chennai -----  
**2)Dr.S.MANI**  
Address of Applicant :Assistant Professor of Commerce, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600 089 Chennai -----  
**3)Dr.V.DEEPA**  
Address of Applicant :Associate Professor of Commerce, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600 089 Chennai -----  
**4)Dr.P.SUSEELA**  
Address of Applicant :Associate Professor of Commerce, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600 089 Chennai -----  
**5)Dr. A. JESINTHA RANI**  
Address of Applicant :Assistant Professor of Commerce(SLG), SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600 089 Chennai -----  
**6)Mrs.Y.ESTHER REETA**  
Address of Applicant :Assistant Professor of Commerce, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600 089 Chennai -----  
**7)Mr. K. MURUGAN**  
Address of Applicant :Assistant Professor of Commerce, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600 089 Chennai -----  
**8)Dr.T.V. AMBULI**  
Address of Applicant :Associate Professor of Commerce, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600 089 Chennai -----  
**9)Mr. R. RAKESH**  
Address of Applicant :Assistant Professor of Commerce, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600 089 Chennai -----  
**10)Dr.C. KAVITHA**  
Address of Applicant :Assistant Professor, PG & Research Department of Commerce, Salem Sowdeswari College, Salem 636 010 Salem -----

(57) Abstract :

Customer satisfaction means when products and services meet consumers' expectations. Customer satisfaction is the result of meeting consumer expectations regarding product performance. If the consumer is satisfied, he will repurchase the product and have a future purchase intention. In the online environment, consumers form expectations about the product they see, the retailer, the service provided and the quality of the online site before making online purchases that influence their attitudes and intentions to buy online. There are few crucial factors that determine customer satisfaction and therefore online businesses should be well reviewed with customer satisfaction track record in the industry. Consumer satisfaction depends on several factors that influence consumers to adopt online shopping, such as convenience, product quality, better prices, etc. Satisfied customers will become loyal to the business and also create more customers for the business. Thus, consumer satisfaction is very important for companies. Few statements were made in the questionnaire to know the level of consumer satisfaction in relation to online purchases. All these statements were rated on a 5-point Likert scale. Consumers were asked to what extent they agreed or disagreed with the statements. Accompanied Drawing [FIG. 1]

No. of Pages : 24 No. of Claims : 4

(54) Title of the invention : Super-Hydrophobicity of Areca leaf sheath used for water repellent and other related applications thereby

(51) International classification :A61K0036889000, D06M0015227000, B32B0027200000, A61L0027100000, D04H0001435000

(86) International Application No :PCT// /  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Dhanush D B**

Address of Applicant :#32/7, Arkanatha Road, Anjuneya Block,K R Nagar Taluk,Mysore District -----

**2)Lokesh K S****3)Varuna T****4)Thandra Paavan Kumar****5)Dr. Shrinivasa Mayya.D****6)Deepak M Kurubar**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Lokesh K S**

Address of Applicant :Dept of Aeronautical Engg, Srinivas Institute of Technology, Valachil, Manglore Mangalore -----

## (57) Abstract :

Areca Leaf sheath is well known to the mankind since early ages due to its availability as agro waste, flexibility to bend and shape in to any dimension with ease of processing and relatively inexpensive. Further to proper chemical treatment which helps to make the suitability of areca leaf sheath by improving its life as well as better weatherability of the sheath. Keeping the ground fact, checking the best proportion for checking the fact that optimal surface clearance and resistance to fungal growth has been reported. The present experimentation extracted with two set of samples which are surface treated, one with the outer layer of areca sheath (OLAS) and the other with areca core leaf sheath (ACLS). Obtained two set of samples are successfully developed with two set of carry bags of single time usage and multiple usage bags from ACLS and OLAS respectively proving the most economical, bio degradable and easily processible areca leaf sheath bags which could be the best alternative to single use plastics and other comparably expensive carry bags available in the market. Further to this the thin flexible inner layer termed as areca core leaf sheath (ACLS) sheath reports high flexible enough to use as fabric layer but soft nature of ACLS restricts its use for long term due to its soft surface property which prone to random surface damage if small scratch or break occurs. In order to achieve the present requirement an experimentation has been made to showcase the non-polar nature of the surface by modifying the surface by series of coating operations. Surface coating not only improves non-polar nature but also improves the roughness of the sheath which in turns make the material better suitable for Super-hydrophobic application. In order to prove the fact, water repellent rain water fabric has been developed and tested for prolong exposure to sunlight and moist environment in order to prove the durability of the material developed which could be the replacement for other non-degradable water repellent materials with comparably high cost.

No. of Pages : 11 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241046337 A

(19) INDIA

(22) Date of filing of Application :15/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A PROCESS FOR SHARING PERSONAL IDENTITY DOCUMENTS ON BLOCKCHAIN USING SECURE TOKEN VIA TWO-WAY ORCHESTRATION

(51) International classification :H04L0029060000, G06F0021620000, H04L0009320000, G06Q0020380000, G07F0007100000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Mohamed Riaz Amjath Ibrahim**  
Address of Applicant :No.8, Bhakthavachalam Nagar, 1st Cross, Adyar, Chennai-600020. Chennai -----  
**2)Damodaran Jayasankar**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Mohamed Riaz Amjath Ibrahim**  
Address of Applicant :No.8, Bhakthavachalam Nagar, 1st Cross, Adyar, Chennai-600020. Chennai -----  
**2)Damodaran Jayasankar**  
Address of Applicant :No.12, Kotampalayam Street, Kanchipuram-631501 Kanchipuram -----

(57) Abstract :

A PROCESS FOR SHARING PERSONAL IDENTITY DOCUMENTS ON BLOCKCHAIN USING SECURE TOKEN VIA TWO-WAY ORCHESTRATION The present invention relates to a process for sharing personal identity documents on private blockchain using global secure token via two-way orchestration to protect data privacy. Presently, physical presentation and sharing of personal identity documents are required to complete essential transactions in places such as airport, hotel check-in and other restricted places that require personal identity authentication as per Statutory regulations. This has increased digital security threats and vulnerability to the personally identifiable documents resulting in exploitation of personal identity presented physically to highly organized cyber-crimes in recent times. This invention protects data privacy threat and security of personal identity documents by sharing over a transient global secure token via two-way orchestration that will enable viewing for verification with proof of verification, traceability of transaction and statutory scrutiny by authorized regulatory agencies using blockchain technology.

No. of Pages : 15 No. of Claims : 6

(54) Title of the invention : SYSTEM FOR INTELLIGENT NET TERMINAL RELOCATION IN DMFB AND METHOD THEREOF

<p>(51) International classification :B01L0003000000, G06F0030394000, G01C0021000000, B25J0009160000, H01L0021000000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr. Sarit Chakraborty</b> Address of Applicant :Dept. of CSE, Government College of Engineering and Leather Technology (GCELT), Kolkata, India 700106 West Bengal -----</p> <p><b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor : <b>1)Dr. Pranab Roy</b> Address of Applicant :School of VLSIT, IEST-Shibpur, West Bengal, India 711103 West Bengal -----</p> <p><b>2)Dr. Sarit Chakraborty</b> Address of Applicant :Dept. of Computer Science Engineering, Government College of Engineering and Leather Technology, Kolkata, India 700106 West Bengal -----</p> <p><b>3)Mr. Tanmoy Biswas</b> Address of Applicant :Dept. of Computer Science, Syamaprasad College (Affiliated to University of Calcutta), 92 SP Mukherjee Road, Kolkata – 700026. West Bengal -----</p>
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(57) Abstract :

The present disclosure generally relates to the field of for Microfluidics enable Digital Microfluidic Biochip (DMFB). More particularly, the present invention relates to techniques for reallocation of terminals of nets in the DMFB to minimize the crossovers among the nets with minimum degradation of routing performance, such that the resource binding constraints defined during synthesis are preserved. The present disclosure provides a system comprising a a position identifying unit (802) configured to identify positions of the source and the target for each net included in a layout of a bioassay, the layout comprises a plurality of nets; a path estimation unit (804) configured to estimate a shortest collision-free path between the source position and target position for each net; a processing unit (806) configured to arrange the plurality of nets in a non-decreasing order of minimum value of the shortest collision-free paths, and identify dependencies existing in the layout.

No. of Pages : 30 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :02/07/2022

(21) Application No.202231038167 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : A LOCKING DEVICE

(51) International classification :B60R0009060000, B62K0019460000, A42B0003040000, A45C0013240000, A45C0013180000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Surjeet Singh Gour**

Address of Applicant :KIIT Campus 8, Fashion Tech Rd, Chandaka Industrial Estate, Chandrasekharpur, Bhubaneswar, Odisha 751024 -----

**2)Dr. Anish Pandey**

**3)Mr. Tarun dhar diwan**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Surjeet Singh Gour**

Address of Applicant :KIIT Campus 8, Fashion Tech Rd, Chandaka Industrial Estate, Chandrasekharpur, Bhubaneswar, Odisha 751024 -----

**2)Dr. Anish Pandey**

Address of Applicant :School of Mechanical Engineering, Campus-8 Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, An Institute of Eminence, Bhubaneswar-751024, India Bhubaneswar -----

**3)Mr. Tarun dhar diwan**

Address of Applicant :Government E. Raghvendra Rao Science College, Sarkanda, Bilaspur-495001, India -----

**4)Abhisek Omkar Prasad**

Address of Applicant :School of Mechanical Engineering, Campus-8 Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, An Institute of Eminence, Bhubaneswar-751024, India Bhubaneswar -----

**5)Mr. Kamlesh Thakkar**

Address of Applicant :Govt. Bilasa Girls PG college Bilaspur Bilaspur -----

**6)Mr. Siddharth Choudhury**

Address of Applicant :School of Mechanical Engineering, Campus-8 Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, An Institute of Eminence, Bhubaneswar-751024, India Bhubaneswar -----

**7)Harsh More**

Address of Applicant :School of Mechanical Engineering, Campus-8 Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, An Institute of Eminence, Bhubaneswar-751024, India Bhubaneswar -----

**8)Dr. Ashwani Kumar**

Address of Applicant :School of Mechanical Engineering, Campus-8 Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, An Institute of Eminence, Bhubaneswar-751024, India Bhubaneswar -----

(57) Abstract :

The Multipurpose Mechanical Locking Device(1000) is to lock the multiple things at their respective position. The device involves a numeric lock(200) with a small locking cable(108). The whole locking mechanism is attached to the top layer (102) of a base (100). The bottom layer(104) with Superglue layer(106) is permanently attached to the helmet(300) or other kind of luggage. The helmet(300) or any other belongings is locked by a locking cable(108) with any rigid part of the bike(302). The device of the present invention provides safety to the half helmets on the bike, luggage while traveling, and many more. The device eliminates the irritation of carrying helmets while traveling. This device is also helpful to lock the CPU, Printer, and all other accessories on the table, locking the luggage with the seat while traveling, and many more.

No. of Pages : 23 No. of Claims : 5

(54) Title of the invention : AN INTEGRATED IOT AUGMENTED REALITY-BASED FRAMEWORK FOR HEALTH MONITORING SYSTEM

(51) International classification :A61B0005000000, G06T0019000000, A61B0090500000, G06F0003147000, G09B0023280000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)Santosh Das**

Address of Applicant :Assistant Professor, CSE Department, OmDayal Group of Institutions, Uluberia, Howrah, West Bengal, India - 711316 -----

**2)Sathisha BM****3)Dr. Gyanshankar Praphullakumar Mishra****4)Manu Y M****5)Dr. Awakash Mishra****6)Dr. Kingsleen Solomon Doss****7)Adisheshaiah Sade****8)S. Premkumar**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Santosh Das**

Address of Applicant :Assistant Professor, CSE Department, OmDayal Group of Institutions, Uluberia, Howrah, West Bengal, India - 711316 -----

**2)Sathisha BM**

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Nitte Menakshi Institute of Technology, Bangalore, Karnataka, India - 560064 -----

**3)Dr. Gyanshankar Praphullakumar Mishra**

Address of Applicant :Associate Professor, Department of Respiratory Medicine, Indira Gandhi Government Medical College, Nagpur, Maharashtra, India - 440018 -----

**4)Manu Y M**

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, BGS Institute of Technology, Adichunchanagiri University, B.G.Nagara, Nagamangala Taluk, Mandya District, Karnataka, India - 571448 -----

**5)Dr. Awakash Mishra**

Address of Applicant :Associate Professor, School of Data Science, Maharishi University of Information Technology. Sec- 110, Noida, Uttar Pradesh, India - 201304 -----

**6)Dr. Kingsleen Solomon Doss**

Address of Applicant :Scholar, Computer science department, Vels University, Chennai, Tamilnadu, India - 600059 -----

**7)Adisheshaiah Sade**

Address of Applicant :Assistant Professor, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Guntur, Andhra Pradesh, India - 522302 -----

**8)S. Premkumar**

Address of Applicant :Research Scholar, Department of Computer Science and Engineering, Annamalai University, Annamalai Nagar, Chidambaram, Tamilnadu, India - 608002 -----

## (57) Abstract :

In this invention, an augmented reality (AR) system is proposed to monitor in real-time the patient's vital parameters during surgical procedures. This system is characterised metro- logically in terms of transmission error rates and latency. These specifications are relevant to ensuring a real-time response. The proposed system automatically collects data from the equipment in the operating room and displays them in AR. The system was designed, implemented and validated experimentally through experimental tests carried out using AR glasses to monitor the output of a respiratory ventilator and a patient monitor, which are instruments that are generally present in an operating room.

No. of Pages : 9 No. of Claims : 7



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231044075 A

(19) INDIA

(22) Date of filing of Application :01/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A GREEN SYNTHESIS PROCESS FOR SYNTHESIZING ZERO VALENT NANO IRON PARTICLES USING INDUSTRIAL TEA WASTE

<p>(51) International classification :B82Y0040000000, C08L0095000000, C02F0101220000, C02F0001700000, B01J0023745000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr. Ambika Kuity</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, NIT Silchar, Assam-788010 Silchar ----- - ----- <b>2)A Shiva Ramakrishna</b> <b>3)Md Naumanul Yaqueen</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr. Ambika Kuity</b> Address of Applicant :Assistant Professor, Department of Civil Engineering, NIT Silchar, Assam-788010 Silchar ----- --- <b>2)A Shiva Ramakrishna</b> Address of Applicant :Near Tpwodl Office , Sital Nagar , Bondamunda, Rourkela Odisha- 770032 Rourkela ----- ---- <b>3)Md Naumanul Yaqueen</b> Address of Applicant :AT-Bagdahara W No-05, PO-Bagdahara, PS: Jokihat, Dist: Araria, Bihar-854311 Jokihat ----- -</p>
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(57) Abstract :

The green synthesis process for synthesizing zero valent nano iron particles using industrial tea waste comprises preparing Ferric nitrate salt solution and mixing tea extract dropwise to salt solution for 5 hours while stirring rigorously at 600-800rpm thereby drying the solution overnight to obtain crystalline and shiny appearance substance; centrifuging the substance thereby oven drying and washing at least 4 times; centrifuging the black colored extract solution to extract nanoparticle crystalline and grinding the crystalline substance 2-3 times; mixing ZVNI particles with bitumen at various dosages uniformly using a mechanical mixer and heating to a liquid consistency while monitoring the temperature constantly; and quantifying gas from the virgin bitumen using a gas over water replacement method, in which hot gases are collected in a water column by displacing the water from the column into the reservoir.

No. of Pages : 26 No. of Claims : 10

(54) Title of the invention : Ti3C2/TiO2 NANOCOMPOSITE AND METHOD FOR PREPARATION THEREOF

(51) International classification :B82Y0040000000, B01J0027220000, B01J0023420000, C01B0032921000, B82Y0030000000

(86) International Application No Filing Date :PCT// :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number Filing Date :NA :NA

(62) Divisional to Application Number Filing Date :NA :NA

## (71)Name of Applicant :

**1)Siksha 'O' Anusandhan (Deemed to be University)**

Address of Applicant :J-15, Khandagiri Square, Bhubaneswar-751030, Odisha, India. Bhubaneswar -----

**Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)Kulamani Parida**

Address of Applicant :Centre for Nano Science and Nano Technology, Institute for Technical Education and Research, Siksha 'O' Anusandhan (Deemed to be University), J-15, Khandagiri Square, Bhubaneswar-751030, Odisha, India. Bhubaneswar -----

**2)Lijarani Biswal**

Address of Applicant :Centre for Nano Science and Nano Technology, Institute for Technical Education and Research, Siksha 'O' Anusandhan (Deemed to be University), J-15, Khandagiri Square, Bhubaneswar-751030, Odisha, India. Bhubaneswar -----

**3)Bhagyashree Priyadarshini Mishra**

Address of Applicant :Centre for Nano Science and Nano Technology, Institute for Technical Education and Research, Siksha 'O' Anusandhan (Deemed to be University), J-15, Khandagiri Square, Bhubaneswar-751030, Odisha, India. Bhubaneswar -----

**4)Sarmistha Das**

Address of Applicant :Centre for Nano Science and Nano Technology, Institute for Technical Education and Research, Siksha 'O' Anusandhan (Deemed to be University), J-15, Khandagiri Square, Bhubaneswar-751030, Odisha, India. Bhubaneswar -----

**5)Susanginee Nayak**

Address of Applicant :Centre for Nano Science and Nano Technology, Institute for Technical Education and Research, Siksha 'O' Anusandhan (Deemed to be University), J-15, Khandagiri Square, Bhubaneswar-751030, Odisha, India. Bhubaneswar -----

## (57) Abstract :

The present invention relates to a Ti3C2/TiO2 (Titanium Carbide/Titanium Dioxide) nanocomposite comprises of: i) Ti3C2 MXene nanosheets in the range of 0.1-0.2 % w/w, and ii) an acid solution in the range of 99.7-99.8 % w/w. A method for preparation of proposed nanocomposite comprises of following steps: i) adding Ti3C2 MXene nanosheets in acid solution (0.5-4 M), followed by subjecting to ultrasonic treatment to obtain a suspension, ii) transferring suspension to a round flask attached to a condenser, followed by magnetically stirring for a time duration in range of 12-72 hours to obtain a solution, and iii) subjecting solution to centrifugation and washing with deionized water and ethanol, followed by drying in vacuum at a temperature in range of 50o-70o C for time duration in range of 10-14 hours to obtain Ti3C2/TiO2 nanocomposite.

No. of Pages : 24 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231044306 A

(19) INDIA

(22) Date of filing of Application :02/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : DEVELOPMENT OF PHARMACEUTICAL EXCIPIENTS FROM NATURAL SOURCES

<p>(51) International classification :A61K0031167000, A61K0033060000, A61K0009200000, C08B0037000000, D04H0001640000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr. Swarupananda Mukherjee</b> Address of Applicant :Assistant Professor, Pharmaceutical Technology, NSHM Knowledge Campus, Kolkata - Group of Institutions, Kolkata, West Bengal ----- <b>2)Dr. Gunjan Sarkar</b> <b>3)Dr. Smita Singh</b> <b>4)Dr. Partha Niyogi</b> <b>5)Dr. Amita Sharma</b> <b>6)Dr. Anuj Kumar Srivastava</b> <b>7)Amit Rajendrakumar Jaiswal</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr. Swarupananda Mukherjee</b> Address of Applicant :Assistant Professor, Pharmaceutical Technology, NSHM Knowledge Campus, Kolkata - Group of Institutions, Kolkata, West Bengal ----- <b>2)Dr. Gunjan Sarkar</b> Address of Applicant :Associate Professor, Department of Industrial Pharmacy, Bharat Technology, Uluberia, Howrah, West Bengal. Pin- 711316 ----- <b>3)Dr. Smita Singh</b> Address of Applicant :Assistant professor, SRM Modinagar College of Pharmacy, SRM Institute of Science and Technology, Delhi NCR Campus, Delhi Meerut Road, Modinagar, Ghaziabad, UP ----- <b>4)Dr. Partha Niyogi</b> Address of Applicant :Assistant Professor, School of Pharmacy, The Neotia University, West Bengal, 743368 ----- <b>5)Dr. Amita Sharma</b> Address of Applicant :Associate Professor, Botany, Raghunath Girls'PG College, Affiliated to Chaudhary Charan Singh University, Meerut ----- <b>6)Dr. Anuj Kumar Srivastava</b> Address of Applicant :Director/Principal, Pharmacy, LPM College of Pharmacy, Bhatni, Deoria, Uttar Pradesh ----- <b>7)Amit Rajendrakumar Jaiswal</b> Address of Applicant :Head of Diploma in Pharmacy Department, Vidyabharati college of Pharmacy, Amravati -----</p>
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(57) Abstract :

The present invention relates development of pharmaceutical excipients from natural sources. Utilization of mucilages as binder in the formulation & evaluation of uncoated tablets of paracetamol gave results confirming to Indian Pharmacopoeial specification. The 5% of Phaneravariagata mucilage gave the optimum results.

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :02/08/2022

(21) Application No.202231044307 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : Validation of the Impact of Online Tuition Applications Conducted in India's Social Media Network

(51) International classification :G06Q0050200000, G06Q0050000000, C23C0014080000, B01L0007000000, G06Q0010100000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Adamas University**

Address of Applicant :Adamas Knowledge City, Barasat - Barrackpore Road, P.O.- Jagannathpur, North 24 Parganas, Kolkata, West Bengal, India-700126 -----

**2)Dr. Prarthita Biswas**

**3)Adrija Chattopadhyay**

**4)Plabani Roy**

**5)Suranjana Ghosh**

**6)Soma Biswas Tarafdar**

**7)Kamala Kanta Kar**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Adamas University**

Address of Applicant :Adamas Knowledge City, Barasat - Barrackpore Road, P.O.- Jagannathpur, North 24 Parganas, Kolkata, West Bengal, India-700126 -----

**2)Dr. Prarthita Biswas**

Address of Applicant :Professor & Head Of The Dept., School Of Education, Adamas University, 11a Dover Lane, Tribeni, Flat No. A-3/13, Kolkata, West Bengal, India-700029 -----

**3)Adrija Chattopadhyay**

Address of Applicant :Research Scholar,Dept.Of Education,School Of Education, Adamas University, Adamas Knowledge City, Barasat - Barrackpore Road, P.O.- Jagannathpur, Dist. - North 24 Parganas, Kolkata, West Bengal, India-700126 -----

**4)Plabani Roy**

Address of Applicant :Research Scholar, Dept.Of Education,School Of Education, Adamas University, Adamas Knowledge City, Barasat - Barrackpore Road, P.O.- Jagannathpur, Dist. - North 24 Parganas, Kolkata, West Bengal, India-700126 -----

**5)Suranjana Ghosh**

Address of Applicant :Research Scholar,Dept.Of Education,School Of Education, Adamas University, Adamas Knowledge City, Barasat - Barrackpore Road, P.O.- Jagannathpur, Dist. - North 24 Parganas, Kolkata, West Bengal, India-700126 -----

**6)Soma Biswas Tarafdar**

Address of Applicant :Research Scholar,Dept.Of Education,School Of Education, Adamas University, Adamas Knowledge City, Barasat - Barrackpore Road, P.O.- Jagannathpur, Dist. - North 24 Parganas, Kolkata, West Bengal, India-700126 -----

**7)Kamala Kanta Kar**

Address of Applicant :Research Scholar,Dept.Of Education,School Of Education, Adamas University, Adamas Knowledge City, Barasat - Barrackpore Road, P.O.- Jagannathpur, Dist. - North 24 Parganas, Kolkata, West Bengal, India-700126 -----

(57) Abstract :

The present invention relates validation of the impact of online tuition applications conducted in India's social media network. The sample of 60 students consisting of both males and females is collected, where teaching-learning process is being conducted using online tuition applications setup. Data analysis reveals that students could access the learning activities easily, they could communicate with other students in their subject electronically, they could decide when they wanted to learn, and they could work at their own pace.

No. of Pages : 9 No. of Claims : 4

(54) Title of the invention : Municipal Solid Waste Management system and method using Artificial Intelligence

(51) International classification :G16B0030000000, G06N0020000000, G16H0020300000, C12N0009520000, G06F0119080000

(86) International Application No Filing Date :PCT// :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number Filing Date :NA :NA

(62) Divisional to Application Number Filing Date :NA :NA

## (71)Name of Applicant :

**1)Dr. Amit Kumar Pandey**

Address of Applicant :Associate Professor , Dept.of Microbiology RKDF University Ranchi Argora , Kathal more road Dhipatoli Pundag , opposite water tank Ranchi Jharkhand-834004 -----

**2)Dr. Sneha Pandey****3)Nilu Kumari****4)Tushar Mehrotra****5)Shashi Kant****6)Anita Kumari****7)Aditi Kuswaha****8)Paramita Ray**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Dr. Amit Kumar Pandey**

Address of Applicant :Associate Professor , Dept.of Microbiology RKDF University Ranchi Argora , Kathal more road Dhipatoli Pundag , opposite water tank Ranchi Jharkhand-834004 -----

**2)Dr. Sneha Pandey**

Address of Applicant :Associate Professor , Dept. of Biotechnology RKDF University Ranchi Argora , Kathal more road Dhipatoli Pundag , opposite water tank Ranchi Jharkhand-834004 -----

**3)Nilu Kumari**

Address of Applicant :Research Scholar , Dept. of Biotechnology RKDF University Ranchi Argora , Kathal more road Dhipatoli Pundag , opposite water tank Ranchi Jharkhand-834004 -----

**4)Tushar Mehrotra**

Address of Applicant :Assistant Professor College of Computing Sciences &amp; IT Teerthanker Mahaveer University, Moradabad, Uttar Pradesh -----

**5)Shashi Kant**

Address of Applicant :Research Scholar, Dept. of Botany RKDF University Ranchi Argora , Kathal more road Dhipatoli Pundag , opposite water tank Ranchi Jharkhand-834004 -----

**6)Anita Kumari**

Address of Applicant :Research Scholar, Dept. of Zoology RKDF University Ranchi Argora , Kathal more road Dhipatoli Pundag , opposite water tank Ranchi Jharkhand-834004 -----

**7)Aditi Kuswaha**

Address of Applicant :Asst professor in the department of BMLT K. B. Women's College, Hazaribagh , Jharkhand -----

**8)Paramita Ray**

Address of Applicant :Research Scholar , Dept. of Biotechnology RKDF University Ranchi Argora , Kathal more road Dhipatoli Pundag , opposite water tank Ranchi Jharkhand-834004 -----

## (57) Abstract :

ABSTRACT ROLE OF ARTIFICIAL INTELLIGENCE IN MUNICIPAL SOLID WASTE MANAGEMENT Municipal Waste management (MSWM) problems now be solved with alternative calculation methods thanks to the increasing use of artificial intelligence (AI) tools. AI has proven effective in overcoming complex challenges, learning from experience, and dealing with unpredictability and missing data. Despite the extensive research that has been conducted in this area, very few review studies have evaluated the potential of AI to solve the various MSWM challenges. Here a new AI based waste management system provides an in-depth examination of the various AI models and techniques used in MSWM, application domains, reported performance metrics, and the software platforms used to run such models. Figure 1,2 and 3 shall be reference figure.

No. of Pages : 21 No. of Claims : 8

(54) Title of the invention : Development of porous Aluminum surfaces by electrodeposition method to enhance pool BHT performance of R-134a

(51) International classification :F28F0013180000, G01N0025180000, F28D0015040000, C25D0005180000, G01N0025200000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

**(71)Name of Applicant :****1)Mr. Biswajit Majumder**

Address of Applicant :Add-1: Pratap Roy Road, South side of Judge Quarter, Krishna Nagar, Agartala, P.O. Agartala HPO, and Tripura (West). Pincode- 799001. Add-2: Research Scholar, Department of Mechanical Engineering, National Institute of Technology Agartala, Tripura,799046, India Mob: +91-9774310557 Email: bmajumdertit@gmail.com Agartala -----

**2)Mr. Ajay Dadabhau Pingale****3)Mr. Anil Shankar Katarkar****4)Miss. Asmita Bhaumik****5)Dr. Sachin Ulhasrao Belgamwar****6)Dr. Swapan Bhaumik**

Name of Applicant : NA

Address of Applicant : NA

**(72)Name of Inventor :****1)Mr. Biswajit Majumder**

Address of Applicant :Add-1: Pratap Roy Road, South side of Judge Quarter, Krishna Nagar, Agartala, P.O. Agartala HPO, and Tripura (West). Pincode- 799001. Add-2: Research Scholar, Department of Mechanical Engineering, National Institute of Technology Agartala, Tripura,799046, India Mob: +91-9774310557 Email: bmajumdertit@gmail.com Agartala -----

**2)Mr. Ajay Dadabhau Pingale**

Address of Applicant :Add-1: At/Po.- Pabal, Tal.- Shirur, Dist.- Pune, Maharashtra, Pincode- 412403 Add-2: Assistant Professor, Department of Mechanical Engineering, JSPM's Bhivarabai Sawant Institute of Technology and Research, Pune, 412207, India , Mob: +91-9970598292 Email: ajay9028@gmail.com Pune -----

**3)Mr. Anil Shankar Katarkar**

Address of Applicant :Add-1: At.Po.- Ukani Tal.- Wani Dist.- Yavatmal, Maharashtra, Pincode- 445304, India. Add-2: Research Scholar, Department of Mechanical Engineering, National Institute of Technology Agartala, Tripura,799046, India Mob: +91-9823724479, Email: anil.katarkar@gmail.com Agartala -----

**4)Miss. Asmita Bhaumik**

Address of Applicant :Add-1: 40, Jail Ashram Road, Po- Dhaleswar, Sub-Sadar, Agartala, West Tripura, Tripura, -7999007. Add-2: Student, Department of Production Engineering, National Institute of Technology Agartala, Tripura,799046, India Mob: +91- 7005032903, Email: asmitabhaumik123 @gmail.com Agartala -----

**5)Dr. Sachin Ulhasrao Belgamwar**

Address of Applicant :Add-1: Birla Institute of Technology & Science (BITS), Pilani, (Pilani Campus), Rajasthan, 333031. Add-2: Assistant Professor, Department of Mechanical Engineering, Birla Institute of Technology & Science (BITS), Pilani, (Pilani Campus), Rajasthan, 333031. Mob: +91-9929911469 Email: sachinbelgamwar@pilani.bits-pilani.ac.in Pilani -----

**6)Dr. Swapan Bhaumik**

Address of Applicant :Add-1: 40, Jail Ashram Road, Po- Dhaleswar, Sub-Sadar, Agartala, West Tripura, Tripura, -7999007. Add-2: Professor, Department of Mechanical Engineering, National Institute of Technology Agartala, Tripura,799046, India Mob: +91- 7005032903, Email: drsbhaumik@gmail.com Agartala -----

**(57) Abstract :**

ABSTRACT [500] Our Invention Development of microporous Al surfaces by electrodeposition method using AlCl<sub>3</sub>/urea Ionic Liquid to Improve Pool Boiling Heat Transfer Performance of R-134a is a development of smart heating surfaces has great significance in pool boiling applications in order to enhance the performance of pool boiling heat transfer (BHT). This invention presents the results of a study of improved pool BHT performance of R-134a on horizontal microporous Al coated surfaces (diameter = 9 mm) at saturation temperature. Microporous Al coatings were fabricated by electrodeposition method using AlCl<sub>3</sub>/urea ionic liquid (IL). The effect of various electrolyte temperatures (30°C, 40°C, 50°C and 60°C) on the morphology, microstructure, porosity, thickness and surface roughness of Al coatings was investigated. The pool BHT experiments were performed in the order of increasing heat flux varied from 9.51 kW/m<sup>2</sup> to 75.14 kW/m<sup>2</sup>. For the microporous Al coated surface electrodeposited at electrolyte bath temperature of 30°C, 40°C, 50°C and 60°C, the heat transfer coefficient (HTC) values were increased by 58%, 75%, 92% and 109%, respectively, compared to bare Al surface. The differences in HTC augmentation of Al coated surfaces observed can be explained by variations in the thickness of the microporous structure and the variations in their surface characteristics such as porosity and surface roughness.

No. of Pages : 20 No. of Claims : 6

(54) Title of the invention : A STUDY OF PHYSIOLOGICAL BASED PHARMACOKINETICS APPROACH TO DETERMINE THE EXTENT OF DRUG EXPOSURE OF ANTIBIOTICS MEDICATION DURING PREGNANCY AND BREAST FEEDING

(51) International classification :G01N0033500000, G01N0033680000, G01N0033920000, G16H0020100000, A61K0036428000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)NILANJAN PAHARI**

Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACOLOGY, CALCUTTA INSTITUTE OF PHARMACEUTICAL TECHNOLOGY AND ALLIED HEALTH SCIENCES, ULUBERIA, HOWRAH, 711316 Howrah -----

**2)MRITYUNJAY BANERJEE****3)ASWINI KUMAR SENAPATI****4)MINAKETAN SAHOO****5)BISHWANATH MISHRA****6)H. K. SUNDEEP KUMAR****7)RANJAN KUMAR GIRI****8)SUJIT KUMAR SAHU**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)NILANJAN PAHARI**

Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACOLOGY, CALCUTTA INSTITUTE OF PHARMACEUTICAL TECHNOLOGY AND ALLIED HEALTH SCIENCES, ULUBERIA, HOWRAH, 711316 Howrah -----

**2)MRITYUNJAY BANERJEE**

Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACEUTICAL CHEMISTRY, INSTITUTE OF PHARMACY & TECHNOLOGY SALIPUR Cuttack -----

**3)ASWINI KUMAR SENAPATI**

Address of Applicant :ASSISTANCE PROFESSOR, DEPARTMENT OF PHARMACOLOGY, INSTITUTE OF PHARMACY AND TECHNOLOGY, SALIPUR, CUTTACK, 754202, ODISHA Cuttack -----

**4)MINAKETAN SAHOO**

Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACEUTICAL ANALYSIS, INSTITUTE OF PHARMACY AND TECHNOLOGY, SALIPUR, CUTTACK, 754202 Cuttack -----

**5)BISHWANATH MISHRA**

Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACOLOGY, INSTITUTE OF PHARMACY AND TECHNOLOGY, SALIPUR.754202. Cuttack -----

**6)H. K. SUNDEEP KUMAR**

Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACEUTICAL CHEMISTRY, INSTITUTE OF PHARMACY AND TECHNOLOGY, SALIPUR, CUTTACK, 754202, ODISHA Cuttack -----

**7)RANJAN KUMAR GIRI**

Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACOLOGY, INSTITUTE OF PHARMACY AND TECHNOLOGY, SALIPUR, CUTTACK, 754202, ODISHA. Cuttack -----

**8)SUJIT KUMAR SAHU**

Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACEUTICAL CHEMISTRY, INSTITUTE OF PHARMACY AND TECHNOLOGY, SALIPUR, CUTTACK, 754202, ODISHA Cuttack -----

## (57) Abstract :

A study of physiological based pharmacokinetics approach to determine the extent of drug exposure of antibiotics medication during pregnancy and breast feeding is the proposed invention. The invention focuses on analyzing the impact of antibiotics in pregnant and breastfeeding women. The proposed invention aims at understanding the pharmacokinetics of various patients and their response to drug molecules. The invention will revolutionize the aspect of specific and customized prescription of medicines.

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231045007 A

(19) INDIA

(22) Date of filing of Application :06/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : BIO-MASS PELLETS AND THE METHOD FOR MANUFACTURING THEREOF

(51) International classification :C10L0005360000, C10L0005440000, C05F0011000000, C08L0097000000, C10L0005100000

(86) International Application No :PCT// /  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)GHOSH, Dr. Swatilekha**

Address of Applicant : 'CHARULATA', 70/2, Lake East, 6th Road, Santoshpur, Kolkata, West Bengal, India Kolkata -----

**2)GHOSH, Dr. Biswajit**

**Name of Applicant : NA**  
**Address of Applicant : NA**

(72)Name of Inventor :

**1)GHOSH, Dr. Swatilekha**

Address of Applicant : 'CHARULATA', 70/2, Lake East, 6th Road, Santoshpur, Kolkata, West Bengal, India Kolkata -----

**2)GHOSH, Dr. Biswajit**

Address of Applicant : 'CHARULATA', 70/2, Lake East, 6th Road, Santoshpur, Kolkata, West Bengal, India Kolkata -----

(57) Abstract :

ABSTRACT BIO-MASS PELLETS AND THE METHOD FOR MANUFACTURING THEREOF A biomass pellet comprising an agricultural biomass waste comprising of a weight percentage from 60 to 80% of bio-mass by volume with a moisture content of 15 - 20% by weight; a weight percentage from 20 to 35% of energy intensive items including iron dust, coke / charcoal; a weight percentage of embedded binder from 3 to 5% by weight; wherein the said pellet size ranges from 20 to 60 mm, embedded with powdered energy intensive materials and binding agent and method of manufacturing thereof.

No. of Pages : 10 No. of Claims : 10



(54) Title of the invention : A DEEP LEARNING BASED ENHANCED SOLAR ENERGY FORECASTING WITH AI-DRIVEN IOT SYSTEM

<p>(51) International classification :G06N0003040000, G06N0003080000, H04L0029080000, G06N0003020000, G01W0001100000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr. Nutan Saha</b> Address of Applicant :Assistant Professor, Department of Electrical Engineering, Veer Surendra Sai University of Technology, Sambalpur, Odisha, India, PIN- 768018 Sambalpur --</p> <p>-----</p> <p><b>2)Bibhu Prasad Ganthia</b> <b>3)Rakesh Roy</b> Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : <b>1)Dr. Nutan Saha</b> Address of Applicant :Assistant Professor, Department of Electrical Engineering, Veer Surendra Sai University of Technology, Sambalpur, Odisha, India, PIN- 768018 Sambalpur --</p> <p>-----</p> <p><b>2)Bibhu Prasad Ganthia</b> Address of Applicant :Assistant Professor, Department of Electrical Engineering, Indira Gandhi Institute of Technology, Sarang, Dhenkanal, Odisha, India, 759146 Dhenkanal -----</p> <p>-----</p> <p><b>3)Rakesh Roy</b> Address of Applicant :Assistant Professor, Department of Electrical Engineering, Government College of Engineering &amp; Textile Technology, WB University: Maulana Abdul Kalam Azad University of Technology, Berhampore, Mursidabad, West Bengal, India, 742101 Mursidabad -----</p>
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(57) Abstract :

The present invention discloses a deep learning based enhanced solar energy forecasting with AI-driven IoT system. The present invention is comprised of, but not limited to, an Artificial Intelligence based receiving means for providing weather forecast data, the weather forecast data including a plurality of weather features; a processing unit in an IoT environment for processing the weather forecast data using a chain of a plurality of processing blocks of an artificial neural network to derive one or more of the plurality of weather features, wherein each of the plurality of processing blocks is having a neural network layer, an activation unit, and a pooling unit, wherein the neural network layer associates a filter to a region of the weather forecast data across a plurality of neural network layers in the weather forecast data; and an output unit for determining a solar power forecast for enhancing solar energy with AI-driven IoT connected modules through the derived weather features. Accompanied Drawings [FIG. 1]

No. of Pages : 19 No. of Claims : 4

(54) Title of the invention : Machine learning based recognition of patient's behaviour using hand - to-mouth gestures to assess their physical and emotional states in possible prediction using AI - dataset

(51) International classification :G06K0009000000, A61B0005000000, G06N0003040000, A61B0005160000, G06K0009620000  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (87) International Publication No : NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA  
 (62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Dr. Manoj Kumar Praharaaj**  
 Address of Applicant :Assistant Professor Department of Physics Ajay Binay Institute of Technology, Cuttack, Odisha, India Pin: 753014 -----  
**2)Nirupama**  
**3)Nilima Dongre Jawade**  
**4)Laxmi**  
**5)Shobhana**  
**6)Shmmon Ahmad**  
**7)Sayan Majumder**  
**8)S.Gowsalya**  
 Name of Applicant : NA  
 Address of Applicant : NA  
 (72)Name of Inventor :  
**1)Dr. Manoj Kumar Praharaaj**  
 Address of Applicant :Assistant Professor Department of Physics Ajay Binay Institute of Technology, Cuttack, Odisha, India Pin: 753014 -----  
**2)Nirupama**  
 Address of Applicant :Plot no-84 NGO'S Colony oklay camp opposite om nagar sedam road kalabragi. 585105, Karnataka -----  
**3)Nilima Dongre Jawade**  
 Address of Applicant :Ramrao Adik Institute of Technology, Sector 7 Nerul, Navi Mumbai, Maharastra -----  
**4)Laxmi**  
 Address of Applicant :ECE department, SB Campus,Vidya Nagar, Sharnbasva University Kalaburagi Pincode- 585103, Karnataka -----  
**5)Shobhana**  
 Address of Applicant :Plot no. 145,NGO's colony, okaly camp,Sedam road kalburgi, Karnataka -----  
**6)Shmmon Ahmad**  
 Address of Applicant :Glocal School of Pharmacy, Glocal University, Mirzapur Pole,Saharanpur, UP -----  
**7)Sayan Majumder**  
 Address of Applicant :Assistant professor, Gargi Memorial Institute of Technology, Baruiapur, Mouza Beralia, Balarampur , Kolkata , West Bengal 700144 -----  
**8)S.Gowsalya**  
 Address of Applicant :D2,plot no 29 SUVADUGAL APARTMENT,2nd Street, captain sasi Kumar nagar, mudichur 63, Kanchipuram, Tamil nadu -----

## (57) Abstract :

Machine learning based recognition of patient's behaviour using hand - to-mouth gestures to assess their physical and emotional states in possible prediction using AI - dataset ABSTRACT  
 Over the course of the last few decades, research into recognising people's feelings in real time has been increasingly prevalent. This work aims to classify the emotional expressions of physically disabled people (deaf, dumb, and bedridden) as well as the emotional expressions of children with autism based on facial landmarks and electroencephalograph (EEG) signals using a convolutional neural network (CNN) and long short-term memory (LSTM) classifiers. This will be accomplished by developing an algorithm for real-time emotion recognition using virtual markers through an optical flow algorithm that functions effectively in uneven lighting and subject head rotation (up Ten virtual markers are used to collect data on a person's face in order to determine their happiness, sadness, rage, fear, disgust, and surprise. The experiment on recognising facial expressions was carried out with the voluntary participation of 55 undergraduate students, with a gender split of 35 males and 25 females and an average age of 22.9 years. EEG data were voluntarily collected from nineteen undergraduate students by these students. In the beginning, Haar-like features are employed for detecting both the face and the eyes. After that, the Lucas-Kande optical flow algorithm is used to track the virtual markers that were placed on the subject's face at defined locations based on a facial action coding system using the mathematical model approach. The markers were placed virtually on the subject's face at the defined locations. One of the features that is used for the classification of facial expressions is the distance that is measured from the centre of the subject's face to each marker point. The statistical validity of this distance feature was determined by conducting a one-way analysis of variance and setting the significance level to p 0.001. In addition, the fourteen signals that were gathered from the EEG signal reader (EPOC+) channels are used as characteristics in the classification of emotions based on EEG signals. In the end, the features are supplied to the LSTM and CNN classifiers after they have been cross-validated using a fivefold cross-validation procedure. By utilising CNN to identify emotional states based on facial characteristics, we were able to reach a maximum identification rate of 99.81%. However, the LSTM classifier may obtain a maximum recognition rate of 87.25 percent when used for the purpose of determining an individual's emotional state by analysing EEG signals.

No. of Pages : 16 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046205 A

(19) INDIA

(22) Date of filing of Application :12/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : A DEVICE FOR HOLDING SOLAR PANELS AND WIND TURBINE FOR GENERATING POWER

(51) International classification :F24S0030425000, H02S0020000000, F24S0030000000, F03D0009000000, H02S0010400000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Dr Sibnath Maity**

Address of Applicant :36/1E/1, N S C Bose Road, Kolkata - 700047 kolkata -----

**2)Partha Pobi**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)Dr Sibnath Maity**

Address of Applicant :36/1E/1, N S C Bose Road, Kolkata - 700047 kolkata -----

**2)Partha Pobi**

Address of Applicant :B-150. Columbia Street, Bidhannagar, Durgapur , PIN -713212 Durgapur -----

(57) Abstract :

The present disclosure provides a device for holding solar panels and wind turbine for generating power. The device comprises a tubular metallic base (1) grouted firmly on ground, a tubular trunk portion (2) extended vertically from the tubular metallic base (1), a set of rotatable sockets (4, 5) clamped at one or more levels of the tubular trunk portion (2). Each of the set of rotatable sockets is operated by respective gear and motor (6, 7). A set of metallic branches (3) is adjustably secured at each of the one or more levels of the tubular trunk portion (2). The device further comprises a set of solar photovoltaic panels (9) secured at each of the metallic branches along axis of the respective metallic branch and a wind turbine (8) comprising a set of blades, secured at top of the tubular trunk portion

No. of Pages : 17 No. of Claims : 6

(54) Title of the invention : A METHOD FOR RHIZOBIAL BIOFORMULATION WITH AN ISOLATE - OCHROBACTRUM SPECIES AND ITS COMPOSITION THEREOF

<p>(51) International classification :C12N0001200000, A01N0063100000, C12R0001010000, C12Q0001040000, C12N0001000000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Piyush Pandey</b>  Address of Applicant :Department of Microbiology, Assam University, Silchar Silchar -----  <b>2)Sourav Debnath</b>  <b>3)K. Malabika Singha</b>  <b>4)Nandita Das</b>  Name of Applicant : NA  Address of Applicant : NA  (72)Name of Inventor :  <b>1)Piyush Pandey</b>  Address of Applicant :Department of Microbiology, Assam University, Silchar Silchar -----  <b>2)Sourav Debnath</b>  Address of Applicant :Department of Microbiology, Assam University, Silchar Silchar -----  <b>3)K. Malabika Singha</b>  Address of Applicant :Department of Microbiology, Assam University, Silchar Silchar -----  <b>4)Nandita Das</b>  Address of Applicant :Department of Microbiology, Assam University, Silchar Silchar -----</p>
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## (57) Abstract :

The present invention generally relates to a rhizobial bioformulation composition with an isolate -Ochrobactrum species a powder extract of dipotassium phosphate, from 0.2-1.0 grams in 10 liters of distilled water; a powder extract of magnesium sulphate, from 0.1-0.6 grams; a powder extract of sodium chloride, from 0.05-0.5 grams; an aqueous extract of Mannitol, from 5-15 grams; a powder extract of yeast, from 0.05-0.50 grams; and a powder extract of Agar, from 15-30 grams. The method for rhizobial bioformulation with an isolate -Ochrobactrum species comprises growing the strain of the microorganism on YMA solid medium; inoculating the resulting culture from stage (a) in YMB liquid medium; pelleting down bacterial cells; and mixing the bacterial cells with coco-peat for solid formulations, and monosodium glutamate (MSG) for liquid formulation. The bioformulation can be administered in the agricultural fields in combination with the chemical fertilizers.

No. of Pages : 29 No. of Claims : 10

(54) Title of the invention : VOLLEYBALL TRAINING DEVICE

(51) International classification :A63B0069400000, A63B0069000000, G03B0017480000, G02B0021260000, A01K0015020000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Kundan Kumar Pramanik**

Address of Applicant :School of Engineering and Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

(57) Abstract :

A volleyball training device, comprises of a platform 1 arranged with multiple motorized omnidirectional wheels 2 to manoeuvre platform 1, an AI-based imaging unit 3 mounted on platform 1 to detect user's expertise level, a touch interactive display panel 4 installed on platform 1 to enter details, an inclined rack 5 stored with multiple volleyballs and mapped on platform 1 with L-shaped telescopic rod 6 to dispense ball on launching section 8 positioned underneath rack 5, a primary ring 7 assembled at launching section 8 for collecting dispensed ball, a pair of L-shaped telescopic links 9 hinged with primary ring 7 to grip ball, a secondary ring 10 arranged within multiple retractable springs 11 and configured with motorized ball and socket joint 12 to launch ball, a pair of telescopic bars 13 each configured with motorized pulley 14 wrapped with a stretchable strap 15 to provide resistance to user.

No. of Pages : 16 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046566 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : ADAPTABLE MULTIPURPOSE TOOL

(51) International classification :G06K0009320000, B67B0007180000, A61M0005315000, B25F0001000000, A01K0087080000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Ashwini Kumar**

Address of Applicant :School of Engineering and Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

An adaptable multipurpose tool, comprising an elongated body 1 having a proximal and distal ends, where a frame 2 is integrated with the proximal end that is accessed by a user for holding the body 1, an imaging unit 3 for capturing images of the surroundings, a handle 4 that is to be pulled by the user for holding the nut, a string 5 passed through the body 1 and coiled over a cylindrical member 6 in a manner that pulling of the string 5 results in rotation of the member 6, a movable jaw 7 that is moved at an angular distance towards a fixed jaw 11 for holding a nut that is to be unfastened/fastened, a pair of suction cups 8 for positioning the cups 8 over the nut for tightly grip the nut and a pair of driver tips 9 for unscrewing different types of screws.

No. of Pages : 14 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046567 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : TILE MANUFACTURING DEVICE

(51) International classification :B01F0013000000, A45D0019000000, G01L0019080000, B25J0015000000, B29C0070840000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Shatabhisa Sinha**

Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A tile manufacturing device includes housing 1 with first 2 , second portion 3 , wheels 4 introduced at first part 1 for moving housing 1, a touch panel 5 mounted over second part of housing to allow user entering insights about varieties regarding tiles, two containers 9 one with mixture and other with water mounted within housing 1 having openings 7, 10 are dispensed in receptacle 8, motorized stirrer 11 introduced inside housing 1 for mixing, a motorized iris lid 12 introduced at base of receptacle 8 to administer mixture inside mould 14 with motorized gripper 13 introduced inside housing, canisters 16 filled with colors placed behind mould 14 having nozzles 17 for dispensing colors within mould 14, robotic hand 19 installed in housing 1 to pick manufactured tiles from mould 14 and place over floor, telescopic pusher 18 attached with housing for attaining hardness over surface.

No. of Pages : 17 No. of Claims : 8

(54) Title of the invention : CARDBOARD BOX PACKING DEVICE

(51) International classification :G06K0007100000, A61B0005020000, B65B0005100000, F25D0029000000, B25J0005000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Alka Kumari**Address of Applicant :Department of Computer Science and Engineering, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A cardboard box packing device, comprising an inverted U-shaped frame 1 integrated with multiple motorized omnidirectional wheels 2 for providing movement of frame 1, an artificial intelligence based imaging unit 3 for capturing and processing images of a box positioned on surface to detect physical dimensions of box, a set of linear actuators 6 for extending towards box with a set of rollers 7 for rotating to provide a rotational movement to box, a thermal imaging module 8 for capturing and processing thermal images of box to detect fragility of objects stored within box, multiple motorized rollers 9 each wrapped with a different packing sheet for unwrapping decoded type of sheet and synchronously actuates plate for rotating rods 5 in order to rotate sheet around the box, and a touch interactive display panel 10 for enabling user to enter details regarding type and number of objects stored within box.

No. of Pages : 13 No. of Claims : 5



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046569 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : WORKPIECE PROCESSING DEVICE

(51) International classification :B23P0023040000, B23Q0015220000, B23K0026140000, B23K0037020000, F24S0023770000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. Anupam Kumari**

Address of Applicant :School of Engineering and Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A workpiece processing device, comprising multiple wheels 1 are arranged underneath the platform 2 for providing movement to the platform 2 on the surface, disc 3 fabricated with pins 4 and mounted on the platform 2 for accommodating one end of workpiece, an imaging unit 5 mounted on the platform 2 for capturing images of the workpiece, a display panel 6 mapped on the platform 2 for entering details of the workpieces, a sliding arrangement 7 mapped on the disc 3 that rotates in a manner to bend the workpiece in accordance to the user specified shape, a pressure sensor 8 mounted on the pins 4 for detecting pressure exerted on the pins 4, a welding unit 9 placed and cutter 11 are mounted on the platform 2 for welding each ends of the workpiece and cutting any uneven edges of the joined ends.

No. of Pages : 17 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046570 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : PORTABLE FENCING DEVICE

(51) International classification :E21B0007020000, A63B0069020000, B65H0049320000, A46B0013000000, A46B0013020000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)ARKA JAIN University**  
Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
**Name of Applicant : NA**  
**Address of Applicant : NA**  
(72)Name of Inventor :  
**1)Syed Rashid Anwar**  
Address of Applicant :Department of Computer Science and Engineering, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A portable fencing device comprises of a platform 1 installed with multiple motorized caterpillar wheels 2 arranged underneath platform 1 to move platform 1, a chamber 3 to store multiple fencing sticks 13, a touch interactive display panel 4 for entering details, a conical shaped motorized drilling unit 5 to drill hole, a pair of excavating unit 6 assembled with drilling unit 5 for excavating soil, a telescopic pusher 7 to install an anchor frame arranged underneath platform 1 within hole, a fencing wire 15 dispensing arrangement 8 positioned underneath platform 1 and paired with frame for dispensing fencing wire 15, a motorized iris lid 9 installed within the chamber 3 to dispense sticks 13 within holes, a telescopically operated hammering unit 10 installed within chamber 3 that hammers dispensed sticks 13, an artificial intelligence based imaging unit 11 installed underneath platform 1 to capture multiple images of sticks 13.

No. of Pages : 16 No. of Claims : 6

(54) Title of the invention : ASSISTIVE DEVICE FOR CROSSING WATER RESERVOIR

(51) International classification :F16K0031060000, F04B0039000000, E02D0027520000, A61B0017320500, C02F0103360000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Maniranjana Kumar**

Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

(57) Abstract :

The present invention relates to an assistive device for crossing water reservoir, comprises of a hollow body 1 placed at a water reservoir, multiple pneumatic pins 2 extend to appropriately fix body 1 on ground surface, an image capturing module 3 to decode width of reservoir and accordingly decodes force required for launching a ring 4 attached with body 1, multiple springs 5 configured with ring 4 via multiple electromagnets which activates and deactivates for launching and transferring of ring 4, a double-layered cylindrical hollow member 6 bridged over reservoir utilized by people for moving, an air compressor 7 for inflating a primary layer allowing user for crossing reservoir and an electronic nozzle 8 connected to a chamber 9 stored with an electromagnetic fluid to increase hardness of member 6, for preventing collision of people with pebbles/stone present within reservoir.

No. of Pages : 17 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046572 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : WELDING ASSISTIVE DEVICE

(51) International classification :A61B0005000000, A61H0001020000, A41D0019000000, G16H0050300000, H03K0017950000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)ARKA JAIN University**  
Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
**Name of Applicant : NA**  
**Address of Applicant : NA**  
(72)Name of Inventor :  
**1)Kuldip Kumar Sahu**  
Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

The present invention relates to a welding assistive device, comprising a wearable component 1 developed to be equipped by a user, plurality of straps 2 that are accessed by the user to secure the component 1 on a torso region of the user, a pair of gloves 3 for enabling the user to place hands while performing the operation, an inductive proximity sensor for detecting type of material of the workpiece, an imaging unit 4 for capturing multiple images of a workpiece, a pair of clamping units 5 for gripping an elbow portion of the user, a vibration unit for providing alerts to the user while performing the welding operation, a FBG (fiber brag grating) sensor for examining vital health parameters of the user while performing the welding operation and an alarming unit 6 for alerting the user regarding the mismatched parameters.

No. of Pages : 15 No. of Claims : 5

(54) Title of the invention : AUTOMATED WRAP PREPARATION DEVICE

(51) International classification :G06F0040106000, B65H0016000000, B60R0021237000, B23K0101180000, A47J0027140000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Akash Kumar Bhagat**

Address of Applicant :Department of Computer Science and Engineering, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

An automated wrap preparation device, comprising a display panel 2 mapped with body 1 for providing input regarding wraps along with ingredients, a tray 3 installed within the body 1 configured with a bar 4 engaged with a belt 5 that passes through the bars 4 horizontally and gets looped over a roller 6 integrated over a movable member 7 arranged on the first portion, a chamber 8 stored with wrap sheets configured within the body 1 that is accessed by a robotic arm 9 mounted in proximity to the chamber 8 for positioning one of the sheet on the belt 5, containers 10 filled with ingredients and fabricated with nozzle 11 for dispensing ingredients on sheet and roller 6 and member 7 to rotate and translate towards the second portion for wrapping and a receptacle 12 arranged in proximity to the tray 3 for collecting the rolled wrap.

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046574 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : DEVICE FOR TRANSPORTING CONSTRUCTION MACHINES

(51) International classification :E02F0009200000, G06F0003160000, B62K0005060000, A61B0090500000, B23K0037020000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Shatabhisa Sinha**

Address of Applicant :School of Engineering and Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A device for transporting construction machines, comprises of a pair of platforms 1 developed to be positioned on a ground surface, multiple wheels 2 that provides movement to platform 1 on surface, an imaging unit 3 for capturing and processing images of a construction machine like excavator that is to be transported, multiple links 4 for altering length of platform 1 in order to accommodate excavator, multiple supporting units 5 for tilting platforms 1 to enable an operator for loading excavator, multiple conveyors 6 for moving in a rotational motion in accordance to movements provided by caterpillar belt, a chain sprocket arrangement for translating movements provided by belt to wheels 2 in order to translate platforms 1 in specified direction, a user interface installed within a computing unit for enabling operator to enter details destination and an driving wheel 7 for steering platforms 1 to specified location.

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046575 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : FIRE EXTINGUISHING SYSTEM

(51) International classification :A62C0037400000, G06K0009000000, B65C0001020000, A47F0005000000, G06F0003042000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Kuldip Kumar Sahu**

Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A fire extinguishing system comprises of a first and second platforms 1, 2 installed over a vehicle 3 that is driven by user to reach fire prone area, an artificial intelligence based image capturing module 4 for analyzing fire prone area, a touch interactive display panel 5, allow user to select area in which fire is to be extinguished in accordance with intensity of fire detected by an infrared thermometer 6, a motorized gun barrel arrangement 7 carved with multiple slots 8 for pouring water over area, a hydraulic pusher 10 installed over first platform 1 for extending height accordance with height of fire prone area, a hammering unit 12 is paired arrangement 7 apply an excessive force over containers 9 results in dispensing water from container 9, and a water filled chamber 13 dispenses water within area by means of conduit.

No. of Pages : 14 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046576 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : BOOK READING ASSISTIVE DEVICE

(51) International classification :G06K0009000000, G06F0021320000, G10L0015220000, G02C0011000000, H04N0005225000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Sneha Kashyap**

Address of Applicant :Department of Computer Science and Engineering, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A book reading assistive device, comprising a cuboidal body 1 configured with multiple suction cups 2, a fingerprint sensor 3 for giving fingerprint data, a telescopically operated gripper 4 for gripping fetched book, a pair of motorized clamps 7 for positioning book, an artificial intelligence image capturing module 8 for capturing multiple images of user, an optical character resolution mapped 10 on body 1 for giving voice command to listen text written on page, a microphone 9 for giving voice command, an angle sensor 14 for detecting tilt angle for clamps 7, an eye blink sensor 12 for detecting blinking of user's eye, a moisture sensor for detecting book to be wet, an air blower for drying the book, a battery for supply power to device.

No. of Pages : 14 No. of Claims : 8



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046578 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMATED SKIRTING REPAIRING DEVICE

(51) International classification :A45D0044000000, E04F0019040000, B44C0007080000, G01B0011020000, H04N0013200000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Divya Paikaray**

Address of Applicant :Department of Computer Science and Engineering, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

An automated skirting repairing device, comprising a body 1 mapped with a display panel 2 for providing input regarding repairing of wear and tear of skirting of a wall of an enclosure, an imaging unit 3 installed on the body 1 for capturing surrounding images, wheels 4 fabricated underneath the body for moving body 1 towards the wear portion, an acuity laser sensor 5 plugged on the body 1 for determining dimension of the wear and tear surface of skirting, a robotic arm 6 and motorized blade 7 configured on the body 1 for gripping and cutting a wooden block respectively, a brush 9 with plurality of bristles 10 mounted on the body 1 for coating the portion with an adhesive, an pusher 12 installed on the body 1 to extend/retract for pressing against the pasted workpiece against the skirting.

No. of Pages : 15 No. of Claims : 6

(54) Title of the invention : METAL WORK PIECE PROCESSING DEVICE

(51) International classification :B23D0055080000, A46B0013000000, E06B0009720000, B21D0005140000, B65G0023080000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr Anupam Kumari**

Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A metal work piece processing device comprises of a body 1 established over ground surface and mounted with display panel 2 in order to provide input regarding the shape and dimensions of work piece, an inlet 3 erected on the body 1 for inserting a metal work piece, an artificial intelligence (AI) based imaging unit 4 is configured within body 1 to determine dimension of work piece, a primary motorized roller 5 assembled within body 1 for withdrawing work piece, a secondary motorized roller 6 positioned within body 1 on a dual lead screw 7 for bending work pieces, a tertiary motorized roller 8 assembled on body 1 by dual slider 9 for orienting the tertiary motorized roller 8 to bend the work piece and a telescopically operated pusher 10 assembled on dual slider 9 to push the work piece for coiling the work piece.

No. of Pages : 16 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046580 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : NUT UNSCREWING DEVICE

(51) International classification :B67B0007180000, E21B0007020000, F16B0039320000, F16M0011160000, B23K0009320000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)ARKA JAIN University**  
Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
**Name of Applicant : NA**  
**Address of Applicant : NA**  
(72)Name of Inventor :  
**1)Nivedan Mahato**  
Address of Applicant :School of Engineering and Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A nut unscrewing device, comprising a platform 1 developed to be placed on fixed surface and configured with multiple suction cups 2 for affixing platform 1 on surface to provide stability, a touch interactive display panel 3 mounted on platform 1 for taking user input regarding nut type that is to be unscrewed, a motorized sliding arrangement 4 fabricated with an unscrewing unit 5 for engaging the unit 5 over nut for unscrewing, a circular body 8 assembled with a flame torch 9 for heating the nut and simultaneously actuates the unit 5 to unscrew the nut, an artificial intelligence based imaging unit 10 mounted on platform 1 for detecting size of nut, a welding unit 13 weld each of the nuts with one another, and a drilling unit 14 drill a hole on a head portion of the nut.

No. of Pages : 19 No. of Claims : 7

(54) Title of the invention : AUTOMATED PIPE CLEANING DEVICE

(51) International classification :F16L0055180000, B23B0005160000, B21D0039040000, F16L0055168000, B25B0005140000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Kundan Kumar Pramanik**

Address of Applicant :School of Engineering and Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

(57) Abstract :

An automated pipe cleaning device, comprising of a platform 1 mounted with a display panel 2 that is accessed by a user for providing input regarding a cylindrical or cuboidal shape of a pipe, an artificial intelligence (AI) based imaging unit 3 for capturing and processing surrounding images for determining exact location of pipe, a primary semicircular member 4 that is fitted over outer surface of pipe by user, a conveyer belt arrangement 7 for engaging belt over a trough for translating belt resulting in circular movement of primary 4 and secondary semicircular members 6 over surface of pipe, multiple attachments 8 arranged by means of a telescopically operated links 9 to extend/retract for aiding in positioning of attachments 8, and a C-shaped fix jaw 10 arranged by means of a telescopically operated rod 11 to extend/retract for aiding in positioning of fix jaw 10 on periphery of pipe.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/08/2022

(21) Application No.202231046582 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : TIRE RESTORATION DEVICE

(51) International classification :B60C0023040000, G01M0017020000, G06F0003042000, B25J0019020000, B23K0009320000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Nivedan Mahato**

Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A tire restoration device comprises of a cuboidal housing 1 enclosing a platform 2 for placing the damaged tire, a touch interactive display panel 3 for providing the input, an artificial intelligence enabled image capturing module 4 to capture the multiple images of the tire, a telescopically operated gripper 5 to position the disc 6 within the tire, an expandable pulley arrangement to enable the expansion/contraction of the disc 6, a primary base 8 to hold the tire, an electronic nozzle 9 to dispense water, a first direct current motor to allow the rotation of the tire, a second rotatable base 12 for positioning the tire, multiple treading tools 14 for treading the tire and multiple motorized hinge joints to positions the treading tool 14 near the tire, a second direct current motor for treading and a speaker 11 for alerting the user.

No. of Pages : 13 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046583 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : ADAPTABLE PASSENGER CONVENIENCE DEVICE

(51) International classification :G06Q0020320000, A47C0007020000, H04R0031000000, F16M0011260000, H04W0004420000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Sweta Kumari Barnwal**

Address of Applicant :Department of Computer Science and Engineering, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

The present invention relates to an adaptable passenger convenience device, comprising plurality of holding units 1 developed to be arranged within a passenger vehicle for providing grip to user(s) travelling, an imaging unit 2 for capturing multiple images of the user(s), a telescopic rod 3 for extending and providing proper grip, a pair of L-shaped telescopic rods 4 for providing a seating platform to the user, a touch interactive display panel 5 for enabling the user to enter details regarding a desired multimedia activity, an IOT (internet of things) for allowing the user to perform the desired activity while travelling, a microphone 6 for enabling the user(s) to provide voice commands regarding geological coordinates of a destination, a GPS (global positioning system) module for detecting real-time location of the user and a speaker 7 for alerting the user to alight from the vehicle.

No. of Pages : 16 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046584 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMATIC WORKPIECE PROCESSING DEVICE

(51) International classification :B23K0026080000, B23D0059000000, B23Q0017200000, B24B0049020000, B23K0037020000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Ashwini Kumar**

Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

An automatic workpiece processing device, includes a platform 1 placed with a workpiece to be processed, a display panel 2 for inputting commands regarding shape in which workpiece to be molded along with a design to be crafted on workpiece edges, an image capturing module 3 for detecting dimensions of workpiece, a laser emitter 4 installed via a rod 5 for cutting workpiece in user-defined shape, a pair of rollers 6 installed via a bar 7 such that, a slider 8 installed between roller 6 and bar 7 for adjusting distance between rollers 6 as per detected thickness of workpiece, a first gripper 9 for placing cut-workpiece between roller 6, multiple pneumatic blocks 10 that extend out of rollers 6 to craft user-defined design on workpiece, a second gripper 11 installed for collecting work-piece after designing to keep workpiece in a chamber 12 attached on platform 1.

No. of Pages : 15 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/08/2022

(21) Application No.202231046587 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : PAYMENT CALCULATIVE DEVICE FOR LAUNDRY CLOTHS

(51) International classification :G06Q0020320000, G06Q0020120000, G06Q0020200000, G06Q0020140000, G06K0019060000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Naresh Sharma**

Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A payment calculative device for laundry cloths, comprising a bucket 1 is fabricated with the body 3 to store washed cloths, an image capturing module 2 plugged on the body 3 to capture multiple images of surroundings to detect type of the cloths, an arm 4 installed on the body 3 to catch one cloth at a time and place the cloth over flaps 5 to fold the cloth in accordance with type of the cloth, plates 7 configured within the body 3 and attached via rods 8 to hold the cloth in between the plates 7, a display panel 9 mapped on the body 3 to enter amount that is to be paid by customer for laundry of the cloths and display a QR (quick response) code over the panel 9 to allow the customer to scan the code for making payment.

No. of Pages : 15 No. of Claims : 7



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046588 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : POSTURE MANAGEMENT EXERCISING DEVICE

(51) International classification :G09B0019000000, H04N0005225000, A63B0023120000, A63B0023020000, B41J0029020000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Ashwini Kumar**

Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

The device comprises a housing 1 positioned over multiple omnidirectional wheels 2 for manoeuvring of the housing 1 in different directions, a cylindrical body 3 installed within housing 1 via a caster wheel arrangement for allowing user to perform different kind of exercises, a touch interactive display panel 4 installed on housing for enabling user to choose an input regarding type of exercise to be performed by the user, multiple pneumatic pins 6 are interlinked within body 3 is actuated by the microcontroller in order to form a shape of exercise that user's wants to perform and allows user to lean over body in a specified posture for performing user desired exercise, an artificial intelligence base thermal imaging unit 5 installed on housing for capturing multiple images of user to monitor the pain and strain in muscles, and correspondingly enable user to perform exercise in an appropriate manner.

No. of Pages : 14 No. of Claims : 4

(54) Title of the invention : FIXING DEVICE FOR WOODEN PLANK

(51) International classification :A63B0023120000, G06F0003042000, B27M0003000000, B62B0005000000, E05D0007100000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA****Address of Applicant : NA**

(72)Name of Inventor :

**1)Shatabhisa Sinha**Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A fixing device for wooden plank comprises of a rectangular frame 1 established for fixing a wooden plank with fixed surface, an artificial intelligence enabled image capturing module 2 mounted on frame 1 to capture images of plank, a pair of telescopically operated vertical plates 3 assembled beneath frame 1 via a pair of motorized sliders 4 for gripping plank, a touch interactive display panel 5 positioned on frame 1 to provide input commands regarding type of plank, a robotic arm 6 installed on frame 1 to pick nail from chamber positioned on frame 1, and position nails within pair of slots 7 configured with frame 1 via pair of sliding units 8 and a pair of motorized ball and socket joints 9 paired between frame 1 and sliding units 8 to position slots 7.

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046612 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : HAND-EYE COORDINATION TRAINING DEVICE

(51) International classification :A63B0071060000, H01S0003083000, A63F0013670000, H04N0005225000, A61B0017500000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Arvind Kumar Pandey**

Address of Applicant :Department of Computer Science, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

(57) Abstract :

A hand-eye coordination training device includes a body 1 installed with a display panel 2 that allow a user to input difficulty level for performing hand-eye coordination activity, an imaging unit 3 for capturing surrounding's images for analyzing user's height, a microcontroller that actuates body 1 to extend/retract as per user's height and user-selected difficulty level, multiple members 4 attached electromagnetically over a circular ring 5 installed at body's 1 first portion 6, a gear 7 paired with ring's 5 teeth 8 that rotates ring 5, a laser illuminating unit 9 that emits laser light over one of the member 4 to be detached from ring 4 to allow user to catch member 4, a spring 10 paired with motorized lock 11 activated by microcontroller to unlock spring 10 that results in falling of particular member 4 with a jerk to increase user's difficulty while catching member 4 during training.

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046613 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : REFURBISHING DEVICE FOR BATTERY TERMINALS

(51) International classification :B25J0015000000, A61C0019000000, B64C0039020000, B25J0015060000, B29C0031000000

(86) International Application No :PCT// /  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. Arun Kumar Marandi**

Address of Applicant :Department of Computer Science, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

(57) Abstract :

A refurbishing device for battery terminals, comprising a platform 1 for allowing a user to position a battery, multiple suction cups 2 for affixing the platform 1 with the surface, an artificial intelligence based imaging unit 3 detect amount of impurities, a laser projection unit 4 assembled on the platform 1, a robotic arm 5 for cutting the terminals, an electronic nozzle 7 for storing a cleaning solution, a container 9 for storing multiple moulds having different dimensions, a primary gripper 10 for withdrawing an appropriate mould from the container 9. a touch interactive display panel 11 for allowing the user to specify type and electrical parameters, a receptacle 12 having multiple metallic pieces, a pair of heating coils 13 for melting the pieces, a secondary gripper 14 for gripping the chamber 8 and above the positioned mould, an electronic valve for dispensing the molten metal.

No. of Pages : 13 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046614 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : AUTOMATED UNBOXING DEVICE

(51) International classification :H04N0007180000, G03G0015000000, B65D0025200000, F21V0023040000, B65B0051060000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Sweta Kumari Barnwal**

Address of Applicant :Department of Computer Science, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

(57) Abstract :

An automated unboxing device comprises of a body 1 installed over a ground surface and mapped with a display panel 2 accessed by a user for providing input regarding details of a package that said user wants to open, the body 1 is constructed with an inlet 3 for enabling user to position package within body 1, an imaging unit 4 installed within body 1 for capturing and processing surrounding images, a pair of robotic arm 5 for gripping package in a manner that determined position of tapping is exposed properly, a blade 6 arranged on ceiling of body 1 via telescopic rod 7 that extends/retracts for aiding in positioning of blade 6 in proximity to tapping encountered on surface of package in order to cut tapping, an inflatable unit 8 to get inflated upon opening of package in order to prevent any damage to items within package.

No. of Pages : 15 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046615 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : WOOD PROCESSING DEVICE

(51) International classification :G06T0007000000, B27M0001000000, G01N0021898000, H04N0007180000, G01V0099000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr Anupam Kumari**

Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A wood processing device comprises of a body 1 positioned over a ground surface and mapped with a display panel 2 accessed by a user for providing input, an inlet 3 for enabling user to insert wooden log which user wants to process, a conveyer belt 4 for receiving and translating log within body 1, an imaging unit 5 for capturing and processing surrounding images, a pair of rollers 6 attached via a motorized slider 7 that align rollers 6 by maintaining a gap for allowing log to lodge within gap, a sandpaper 8 that are rubbed against surface of wooden log for removing uneven layers, a pair of grippers 9 for gripping and positioning log away from rollers 6, a blade 10 to perform shaving and cutting over wooden log, multiple chambers 13 for storing different colors and a nozzle 14 for dispensing user specified color over log.

No. of Pages : 16 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/08/2022

(21) Application No.202231046616 A

(43) Publication Date : 19/08/2022

(54) Title of the invention : DOOR HANDLING DEVICE

(51) International classification :E05B0081760000, E05B0001000000, B25B0009000000, E05B0085000000, G10K0003000000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Ashwini Kumar**

Address of Applicant :Department of Computer Science, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

(57) Abstract :

A door handling device, comprising a body 1 is fabricated with a suction unit 3 that affixes the body 1 on the frame 2, a handle 4 arranged with a suction cup 5 and mapped on the body 1 for gripping to position the cup 5 on a door hinged with the frame 2, a string 6 is joined between the handle 4 and body 1 for regulating opening and closing the door, a touch sensor 7 mounted on the handle 4 for detecting user's hand, an electromagnetically operated link fabricated with the handle 4 for detaching the handle 4 from the body 1 to translate the handle 4, a roller 9 mapped on the body 1 and wrapped with the string 6 for unrolling the string 6 for opening door and spring 10 fabricated within the string 6 for allowing opening of the door up to pre-defined distance.

No. of Pages : 14 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046617 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : WORKPIECE PROCESSING DEVICE

(51) International classification :B23B0005080000, B23Q0009000000, G01B0005080000, G06F0003048800, B29C0037000000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Ashwini Kumar**

Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A workpiece processing device, comprising a platform 1 developed to be placed on a fixed surface, a gripping unit 2 mounted on a first portion for gripping mouth portion of a workpiece that is to be processed, a pair of robotic arms 3 plotted on a second portion for gripping and translating a processing tool 4 towards mouth portion to perform different operations, a touch interactive display panel 5 takes user input regarding workpiece operation type that is to be perform, a motorized cutter 12 attached within tool 4 for performing cutting on workpiece, a container 6 plotted on tool 4 configured with a primary cylindrical member 7 for performing chamfering operation, an acuity laser sensor measure diameter of workpiece, a secondary cylindrical member 9 assembled within container 6 for performing turning operation, and a second sliding arrangement attached on secondary member 9 for aligning the evaluated turning unit.

No. of Pages : 18 No. of Claims : 6



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046618 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : BALANCE IMPROVING DEVICE

(51) International classification :H04N0007180000, A61B0005110000, A63B0023120000, A63B0024000000, G09B0019000000  
(86) International Application No :PCT//  
Filing Date :01/01/1900  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Kuldip Kumar Sahu**

Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A balance improving device, comprises a frame 1 arranged over a ground surface, a display panel 2 installed on the frame 1 for providing input regarding difficulty level with which the user wants to perform, multiple extendible blocks 3 assembled within the frame 1 and linked with a strap 4 for providing space to a user for performing, an artificial intelligence (AI) based imaging unit 5 arranged on the frame 1 for capturing and processing surrounding images to monitor the user while performing the exercise, a pair of motorized rollers 6 installed on each of the blocks 3 and coiled with the strap 4, an inflatable unit 7 assembled on each of the blocks 3 to prevent any chances of injury for the user in case the user falls while performing the exercise.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046619 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : VIRTUAL REALITY BASED SKATING PRACTICING SYSTEM

(51) International classification :G06F0003010000, G02B0027010000, G06T0019000000, A63B0069000000, B66F0007060000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Arvind Kumar Pandey**

Address of Applicant :Department of Computer Science, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

(57) Abstract :

A virtual reality based skating practicing system, comprising a frame 1 mounted over a ground surface and integrated with a platform 2 that is accessed by a user for practicing leg movement required in skating, an artificial intelligence based imaging unit 3 mounted on frame 1 for capturing and identifying user and based on which scrutinizes previous performance record of user, a virtual reality based eye wearable unit 4 worn by user for displaying virtual scenes as per user's previous performance record where the user is required to perform leg movements over platform 2 for crossing tracks or pathways, a pair of extendible L-shaped rods 5 attached on frame 1 and connected with a blocking unit 6 for preventing any chances of falling of user from platform 2, and a pair of scissor lift arrangement 7 installed in between frame and platform 1, 2 for lifting sides of platform 2.

No. of Pages : 15 No. of Claims : 5

## (54) Title of the invention : BALL BEARING ASSEMBLING DEVICE

(51) International classification :F16C0035067000, F16C0033380000, F16C0033400000, A44C0009000000, F16C0043060000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

## (71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA****Address of Applicant : NA**

## (72)Name of Inventor :

**1)Kundan Kumar Pramanik**

Address of Applicant :Department of Computer Science, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

## (57) Abstract :

A ball bearing assembling device includes a platform 1 installed with a gripping unit 2 to securely bearing's grip outer ring, an image capturing module 3 for capturing surrounding's images to analyze outer ring's size, a chamber 4 for storing ball cages, a telescopic gripper 5 for picking one ball cage in accordance with size of outer ring to fix it in outer ring via gripping unit 2 that rotates outer ring on axis for appropriate fixing of cage in outer ring for covering ring's inner circumference, multiple containers 6 stored with rigid balls of various sizes such that microcontroller actuates gripper 5 to pick balls and fix them in cage as per sizes, upon fixing balls microcontroller again actuates gripper 5 to place inner ring stored in a receptacle 7, in alignment with outer ring and simultaneously fixes a seal in gap between rings to form a ball bearing.

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231046621 A

(19) INDIA

(22) Date of filing of Application :16/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : CLEANING ASSISTIVE DEVICE FOR SEWAGE PIPES

(51) International classification :E03F0009000000, B08B0009040000, B08B0009023000, B08B0009020000, E21B0037000000

(86) International Application No :PCT// /  
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)ARKA JAIN University**

Address of Applicant :Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)Dr. Binod Kr. Choudhary**

Address of Applicant :School of Engineering & Information Technology, ARKA JAIN University, Mohanpur, Block – Gamharia, Opposite to Kerala Public School, Gamharia, Distt – Seraikela – Kharsawan-832108, India. Jamshedpur -----  
-----

(57) Abstract :

A cleaning assistive device for sewage pipes, comprising a cuboidal body 1 developed to be positioned within a sewage pipe that is to be cleaned, a rotatable shaft 2 for inserting within a mouth portion of pipe, an artificial intelligence based imaging unit 3 for capturing and processing images of an inner surroundings of pipe to detect an amount of dirt and/or debris, a pair of motorized spoke wheels 4 to provide movement to body 1 within pipe, a primary cleaning unit 5 configured with multiple for moving in a rotational motion through an electromagnetic clutch to aid in slicing of dirt and/or debris, a motorized disc for rotating in a manner to aid in pushing sliced dirt/debris, and a secondary cleaning unit 7 configured with plurality of motorized brushes 8 for rotating to clean sliced dirt and/or debris.

No. of Pages : 13 No. of Claims : 4

## **Publication After 18 Months:**

The following Patent Applications have been published under Section 11A (3) of The Patents (Amendment) Act, 2005. Any Person may file representation by way of opposition to the Controller of Patents at the appropriate office against the grant of the patent in the prescribed manner under section 25(1) of the Patents (Amendment) Act, 2005 read with the rule 55 of The Patents (Amendment) Rules, 2006:

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114036209 A

(19) INDIA

(22) Date of filing of Application :11/08/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : ANTIBACTERIAL DEODORANT CONTAINING TITANIUM DIOXIDE PHOTOCATALYST

(51) International classification	:B01J0035000000, B01J0021060000, B01J0037020000, A61L0009200000, B01J0037030000	(71)Name of Applicant : <b>1)DAESOO HI-TECH CO., LTD.</b> Address of Applicant :Suite 404, 111, Daedeok-daero 989beon-gil, Yuseong-gu, Daejeon, Republic of Korea Republic of Korea
(31) Priority Document No	:10-2021-0021962	(72)Name of Inventor :
(32) Priority Date	:18/02/2021	<b>1)Kim, Chang Kyun</b>
(33) Name of priority country	:Republic of Korea	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ANTIBACTERIAL DEODORANT CONTAINING TITANIUM DIOXIDE PHOTOCATALYST ABSTRACT Provided is an antibacterial deodorant containing a titanium dioxide photocatalyst, including: a titanium dioxide photocatalyst; and a composition for antibacterial deodorization, wherein the titanium dioxide photocatalyst includes titanium dioxide (TiO<sub>2</sub>), copper (Cu), and magnesium (Mg).

No. of Pages : 31 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114060020 A

(19) INDIA

(22) Date of filing of Application :22/12/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : PASSENGER CONVEYOR CONTROLLER, REMOTE MONITORING CENTER DEVICE, ENGINEER PORTABLE DEVICE, AND LANDING DISPLAY DEVICE

(51) International classification	:F02N0011080000, B66B0029000000, B66B0025000000, B66B0005000000, G06F0011140000	(71)Name of Applicant : <b>1)TOSHIBA ELEVATOR KABUSHIKI KAISHA</b> Address of Applicant :72-34, Horikawa-cho, Saiwai-ku, Kawasaki-shi, Kanagawa, Japan Japan (72)Name of Inventor : <b>1)Yusuke NAKAMURA</b>
(31) Priority Document No	:2021-020818	
(32) Priority Date	:12/02/2021	
(33) Name of priority country	:Japan	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT PASSENGER CONVEYOR CONTROLLER, REMOTE MONITORING CENTER DEVICE, ENGINEER PORTABLE DEVICE, AND LANDING DISPLAY DEVICE A passenger conveyor controller (1) includes: a travel control unit (2) controlling operation and stop of a passenger conveyor, and executing start the passenger conveyor that has been stopped when a restart request is received from a remote monitoring center device (5, 50, 51); an error detection unit (3) detecting an error of the passenger conveyor and transmitting the error to the remote monitoring center device (5, 50, 51); and a restart control unit (4) configured to: determine whether the passenger conveyor that has been stopped is restartable when receiving the restart request; restart the passenger conveyor to the travel control unit (2) and transmit a restart execution signal to the remote monitoring center device (5, 50, 51) when the passenger conveyor is restartable; and transmit a restart rejection signal to the remote monitoring center device (5, 50, 51) without restarting the passenger conveyor when the passenger is not restartable.

No. of Pages : 26 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117004782 A

(19) INDIA

(22) Date of filing of Application :04/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : REAL-TIME MITIGATIONS FOR UNFAMILIAR THREAT SCENARIOS

(51) International classification	:G06K0009620000, G06F0021560000, H04L0029060000, G06F0021550000, G06F0011070000	(71)Name of Applicant : <b>1)MICROSOFT TECHNOLOGY LICENSING, LLC</b> Address of Applicant :One Microsoft Way Redmond, Washington 98052-6399 U.S.A.
(31) Priority Document No	:16/056052	(72)Name of Inventor : <b>1)KLIGER, Ben</b>
(32) Priority Date	:06/08/2018	<b>2)ISRAEL, Moshe</b>
(33) Name of priority country	:U.S.A.	<b>3)PATRICH, Dotan</b>
(86) International Application No	:PCT/US2019/039645	<b>4)BARGURY, Michael Zeev</b>
Filing Date	:28/06/2019	
(87) International Publication No	:WO 2020/033072	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A computing system performs real-time mitigations for unfamiliar threat scenarios by identifying a particular threat scenario for a client system that has not previously experienced the threat scenario and for which a remediation process is unknown. The computing system responds to the unknown threat scenario by generating and providing the client system a mitigation file that includes a predictive set of mitigation processes for responding to the threat scenario. The mitigation file is generated by first generating a threat vector that identifies a plurality of different threat scenario characteristics for the particular threat scenario. Then, a classification model is applied to the threat vector to identify a predictive set of mitigation processes that are determined to be a best fit for the threat vector and that are included in the mitigation file.

No. of Pages : 21 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117004784 A

(19) INDIA

(22) Date of filing of Application :04/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : ENHANCING CYBERSECURITY AND OPERATIONAL MONITORING WITH ALERT CONFIDENCE ASSIGNMENTS

(51) International classification	:G06K0009620000, G06N0007000000, G06N0020000000, G06F0021550000, G16H0030400000	(71)Name of Applicant : <b>1)MICROSOFT TECHNOLOGY LICENSING, LLC</b> Address of Applicant :One Microsoft Way Redmond, Washington 98052-6399 U.S.A.
(31) Priority Document No	:16/105500	(72)Name of Inventor : <b>1)KRAUS, Naama</b>
(32) Priority Date	:20/08/2018	<b>2)LEVIN, Roy</b>
(33) Name of priority country	:U.S.A.	<b>3)ISRAEL, Assaf</b>
(86) International Application No	:PCT/US2019/039661	<b>4)BRILL, Oran</b>
Filing Date	:28/06/2019	<b>5)LIVNY, Yotam</b>
(87) International Publication No	:WO 2020/040878	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Tools and techniques are described to automate triage of security and operational alerts. Insight instances extracted from raw event data associated with an alert are aggregated, vectorized, and assigned confidence scores through classification based on machine learning. Confidence scoring enables heavily loaded administrators and controls to focus attention and resources where they are most likely to protect or improve the functionality of a monitored system. Feature vectors receive a broad base in the underlying instance values through aggregation, even when the number of instance values is unknown prior to receipt of the event data. Visibility into the confidence scoring process may be provided, to allow tuning or inform further training of a classifier model. Performance metrics are defined, and production level performance may be achieved.

No. of Pages : 46 No. of Claims : 15



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202113006286 A

(19) INDIA

(22) Date of filing of Application :15/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : A HUMAN MILK FORTIFIER

(51) International classification	:A61K0031355000, A23C0009200000, A61K0031375000, A23L0002520000, A23L0033150000	(71)Name of Applicant : <b>1)Rakesh Kumar Aggarwal</b> Address of Applicant :12, Palmers Road, East Moons Moat, Redditch B98 0RF, United Kingdom U.K. <b>2)Saurabh Aggarwal</b>
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)RAKESH AGGARWAL</b>
(33) Name of priority country	:NA	<b>2)SAURABH AGGARWAL</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:	
Filed on	:01/01/1900	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention discloses a human milk fortifier product composition with, a protein component in the milk fortifier in an amount ranging from 6 wt/wt % to 35 wt/wt % on solids basis; a fat component in the in the milk fortifier in an amount ranging from 0.1 wt/wt % to 36 wt/wt % on solids basis; a carbohydrate in the milk fortifier selected from the group of Lactose and Oligosaccharides present in the in an amount from 25 wt/wt % to 75 wt/wt % on solids basis; small molecules consisting of Oligosaccharides in the human milk fortified by the said fortifier is atleast 25% more than the human milk alone. The majority of small molecules consisting of Vitamin A, Vitamin D, Vitamin E, LCPUFA, Epidermal growth factor and many others are retained in the fortifier product.

No. of Pages : 16 No. of Claims : 5

(54) Title of the invention : APPARATUS FOR EVALUATION OF MEMORY ENHANCEMENT ACTIVITY, ANTIANXIETY AND ANTI DEPRESSANT ACTIVITY OF DRUGS

(51) International classification	:A61K0031445000, A61K0031460000, A61K0031195000, A61F0002460000, G06Q0010100000	(71)Name of Applicant : <b>1)YOGESH CHAND YADAV</b> Address of Applicant :Village Pakari, Post Sipah Ibrahimabad, District-Mau, Uttar Pradesh 221603 Uttar Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)YOGESH CHAND YADAV</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:	
Filed on	:01/01/1900	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention relates to novel apparatus for evaluation of memory enhancing and antianxiety drugs. An apparatus was designed as rectangular shape. Rats were divided three groups each group consist of 6 rats. Group 1 (normal control) will be received 1 ml/kg intraperitoneal (i.p.) normal saline for 14 days. Group 2 will be received scopolamine (3 mg/kg i.p) 30 min prior to the trial on 14th day. Group 3 will be received Donepezil 3 mg/kg/day for 14 days and scopolamine (3 mg/kg i.p) 30 min prior to the trial on 14th day. Group 2 (Scopolamine treated) showed increase transfer latency time after 30 minutes as compared to the control group and it was significantly decreased in Group III (Donepezil + Scopolamine treated). It can be concluded that present apparatus has been justified objective of screening memory enhancing drugs.

No. of Pages : 12 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114057276 A

(19) INDIA

(22) Date of filing of Application :09/12/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : WINDING DEVICE AND MANUFACTURING METHOD OF WOUND BODY

(51) International classification	:B65H0023260000, B41J0029020000, H04N0005372800, H04L0012707000, B29C0053800000	(71)Name of Applicant : <b>1)KABUSHIKI KAISHA TOSHIBA</b> Address of Applicant :1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-0023, Japan Japan
(31) Priority Document No	:2021-022672	(72)Name of Inventor : <b>1)Ryunosuke Shishido</b>
(32) Priority Date	:16/02/2021	
(33) Name of priority country	:Japan	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT According to an embodiment, a winding device includes a core, a transfer path, a pinch roller, a detection unit, a driving unit, and a control unit. A band body is wound around the core. The transfer path transfers the band body to the core. The pinch roller presses the band body being transferred in the transfer path from one side of a first direction intersecting a transfer direction, and presses a partial range of the band body in a second direction intersecting both the transfer direction and the first direction. The detection unit detects an abnormally shaped portion formed in the band body in the transfer path. The control unit controls the driving unit based on a result of detection by the detection unit.

No. of Pages : 36 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117005818 A

(19) INDIA

(22) Date of filing of Application :11/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : CATALYST FOR PIR/PUR FOAM PRODUCTION

(51) International classification	:C08G0101000000, C07F0009656100, C12P0017180000, C07F0011000000, C07C0317220000	(71)Name of Applicant : <b>1)HUNTSMAN INTERNATIONAL LLC</b> Address of Applicant :10003 Woodloch Forest Drive The Woodlands, TEXAS 77380 U.S.A.
(31) Priority Document No	:18189859.4	(72)Name of Inventor : <b>1)BUONO, Pietro</b>
(32) Priority Date	:21/08/2018	<b>2)DRIES, Geert, Lodewijk</b>
(33) Name of priority country	:EPO	<b>3)HUMBERT, Heiko, Heinrich</b>
(86) International Application No	:PCT/EP2019/071592	<b>4)VANDERSTRAETEN, Petra, Emma</b>
Filing Date	:12/08/2019	
(87) International Publication No	:WO 2020/038755	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure is related to a catalyst for PIR/PUR foam production comprising a compound having the general formula (I) wherein R1 and R2 are independently selected from a C1-C18 straight-chain or branched alkyl group, unsubstituted or substituted with one or more hydroxyl, amino or aminoalkyl groups, or R1 and R2, taken together, form a 5- or 6-membered ring or 7-membered bicyclic structure, one of the members of the ring or bicyclic structure being X, wherein X is selected from CH2, O, S, NCH3 or NCH2COOM, wherein R3 and R4 are independently selected from hydrogen or a C1-C4 straight-chain or branched alkyl group and wherein M is an alkali metal ion or a quaternary ammonium ion, as well as to a process for production of said compound and uses thereof and to a process for the production of PIR/PUR foam or flexible foam in the presence of the catalyst of the present disclosure.

No. of Pages : 24 No. of Claims : 17

(54) Title of the invention : ELECTRIC MOTOR AND VENTILATOR WITH CORRESPONDING ELECTRIC MOTOR

(51) International classification	:H02K0011200000, H02K0011330000, G05B0019418000, H02K0011250000, B23Q0017240000	(71)Name of Applicant : <b>1)ZIEHL-ABEGG SE</b> Address of Applicant :Heinz-Ziehl-Straße 74653 Künzelsau Germany
(31) Priority Document No	:10 2018 211 843.4	(72)Name of Inventor : <b>1)SCHMEZER, Joachim</b>
(32) Priority Date	:17/07/2018	
(33) Name of priority country	:Germany	
(86) International Application No	:PCT/DE2019/200050	
Filing Date	:29/05/2019	
(87) International Publication No	:WO 2020/015793	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The invention relates to an electric motor with a stator (2) and a rotor which is mounted in a rotatable manner about a motor axis (3) relative to the stator (2). The electric motor (1) comprises an inclination measuring unit with at least one sensor and an electronic sensor unit, wherein the at least one sensor is arranged in a fixed position and orientation relative to the stator (2), and the electronic sensor unit actuates the at least one sensor. The at least one sensor is designed to generate measurement values which allow conclusions to be drawn regarding the spatial orientation of the sensor and thus conclusions regarding the spatial orientation of the electric motor. The electric motor can be part of a ventilator according to the invention. Additionally, a corresponding electronic motor unit is provided which is designed to actuate such an electric motor.

No. of Pages : 17 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006461 A

(19) INDIA

(22) Date of filing of Application :16/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : BIOLOGICAL METHODS FOR CONTROLLING PHYTOPATHOGENIC FUNGI

(51) International classification	:G06Q0020040000, H04N0005445000, C12P0001020000, H04N0021450000, H04N0005440000	(71)Name of Applicant : <b>1)BAYER SAS</b> Address of Applicant :16 rue Jean-Marie Leclair 69009 Lyon France
(31) Priority Document No	:18183999.4	(72)Name of Inventor :
(32) Priority Date	:17/07/2018	<b>1)DUBOURNET, Patrice</b>
(33) Name of priority country	:EPO	
(86) International Application No	:PCT/EP2019/069043	
Filing Date	:15/07/2019	
(87) International Publication No	:WO 2020/016193	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to methods for controlling phytopathogenic fungi using biological control agents. More specifically, the invention relates to methods for controlling phytopathogenic fungi having a long incubation period. In particular, the methods according to the invention are particularly suited for controlling the causal agent of powdery mildew on grapes, the fungus Erysiphe necator.

No. of Pages : 26 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006464 A

(19) INDIA

(22) Date of filing of Application :16/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : LIPASE DEGRADATION RESISTANT SURFACTANTS FOR USE IN LARGE MOLECULE THERAPEUTIC FORMULATIONS

(51) International classification	:A61K0009000000, A61K0031436000, A61K0047180000, A61P0013120000, C12N0009200000	(71)Name of Applicant : <b>1)JANSSEN BIOTECH, INC.</b> Address of Applicant :800/850 Ridgeview Drive Horsham, Pennsylvania 19044 U.S.A.
(31) Priority Document No	:62/721884	(72)Name of Inventor :
(32) Priority Date	:23/08/2018	<b>1)LABRENZ, Steven</b>
(33) Name of priority country	:U.S.A.	<b>2)STAHL, Patrick</b>
(86) International Application No	:PCT/IB2019/057079	
Filing Date	:22/08/2019	
(87) International Publication No	:WO 2020/039384	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention is directed to pharmaceutical formulations of therapeutic proteins that comprise one or more polyethoxylated fatty alcohol (PFA) surfactants that are resistant to lipase mediated degradation. The present invention is also directed to methods of reducing aggregate and/or particulate formation in pharmaceutical formulations of therapeutic proteins and methods of maintaining a stable surfactant level in pharmaceutical formulations of therapeutic proteins.

No. of Pages : 36 No. of Claims : 26

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006626 A

(19) INDIA

(22) Date of filing of Application :17/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : CLOSED BIOPROCESSING DEVICE

(51) International classification	:A61M0005315000, A61M0005320000, B01D0071360000, B01D0065020000, B01D0046100000	(71)Name of Applicant : <b>1)EMD MILLIPORE CORPORATION</b> Address of Applicant :400 Summit Drive Burlington, Massachusetts 01803 U.S.A.
(31) Priority Document No	:62/719014	(72)Name of Inventor : <b>1)SUSIENKA, Michael James</b>
(32) Priority Date	:16/08/2018	<b>2)PERREAULT, Jeremy</b>
(33) Name of priority country	:U.S.A.	<b>3)GERINGER, Joseph</b>
(86) International Application No	:PCT/US2019/046159	<b>4)HILLIER, Brian</b>
Filing Date	:12/08/2019	<b>5)MULDOON, Joseph</b>
(87) International Publication No	:WO 2020/036869	<b>6)AMARA, John Paul</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A filtration module is provided, the module including at least one filtration packet containing filtration media or one or more membranes, such as a stack of membranes, the at least one filtration packet having one or more fluid ports, the one or more fluid ports being surrounded by a primary seal and a secondary seal spaced from the primary seal. The secondary seals are designed to maintain sterility of the assembly during shipping, handling and/or installation. A removable film may cover one or more fluid ports to maintain sterility prior to use.

No. of Pages : 28 No. of Claims : 16



(54) Title of the invention : METHODS, DEVICES, SYSTEMS AND KITS FOR PREPARING COMPOSITIONS FOR CARE AND REPAIR OF VARICOSE VEINS

(51) International classification	:A61K0009120000, B01F0013080000, B01F0015020000, B01F0003040000, B01F0013000000	(71)Name of Applicant : <b>1)VASCULAR BARCELONA DEVICES, S.L.</b> Address of Applicant :Oliana 27 - Bajos 08006 Barcelona Spain
(31) Priority Document No	:18382621.3	(72)Name of Inventor :
(32) Priority Date	:21/08/2018	<b>1)ROCHE REBOLLO, Enrique</b>
(33) Name of priority country	:EPO	<b>2)GALY, Jean-Baptiste</b>
(86) International Application No	:PCT/EP2019/072242	<b>3)LLUSÀ MELÉNDEZ, Guiu</b>
Filing Date	:20/08/2019	<b>4)GREGO MAYOR, Federico</b>
(87) International Publication No	:WO 2020/038928	<b>5)GARCIA DE CASTRO, Arcadio</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Examples of containers for the production of a foamed sclerosant composition are provided. The containers comprise a container body comprising one or more sidewalls extending between a top and a bottom of the container body and a bottom surface, a foaming space being defined in an interior of the container body. The foaming space contains a sterile gas and a mixing element configured to be operatively coupled with a rotatable actuator without the actuator entering into the foaming space. The container comprises a female coupling member for mating with a syringe, and a pressure equalizer for equalizing a pressure inside the foaming space with a pressure outside the foaming space. Also systems and kits including such containers are provided. Also disclosed are methods for the preparation of a sclerosant foam which may include a pressure release before extraction of the foam and/or a continued rotation of the actuator while the foam is being extracted.

No. of Pages : 23 No. of Claims : 15

(54) Title of the invention : ACCESSORY DEVICE OF AN OSTOMY SYSTEM AND RELATED METHODS FOR ISSUE IDENTIFICATION

(51) International classification	:A61F0005443000, A61F0005445000, A61F0005440000, A61F0013000000, A61B0005000000	(71)Name of Applicant : <b>1)COLOPLAST A/S</b> Address of Applicant :Holtedam 1 3050 Humlebaek Denmark
(31) Priority Document No	:PA 2018 70526	(72)Name of Inventor : <b>1)ANDERSEN, Dan Boegsted</b>
(32) Priority Date	:15/08/2018	<b>2)STROEBECH, Esben</b>
(33) Name of priority country	:Denmark	<b>3)VESTERGAARD, Marie Svane Rizk</b>
(86) International Application No	:PCT/DK2019/050243	
Filing Date	:15/08/2019	
(87) International Publication No	:WO 2020/035121	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

An accessory device (8) and a method (1000) performed in an accessory device (8) is disclosed, wherein the accessory device (8) comprises an interface (600) configured to communicate with one or more devices of an ostomy system (1), the interface comprising a display (602), wherein the ostomy system (1) comprises a monitor device (6) and/ or an ostomy appliance (2,4), the ostomy appliance (2, 4) being configured to be placed on a skin surface of a user, wherein the ostomy appliance (2, 4) comprises a base plate (4). The method (1000) comprises obtaining monitor data (1002) from the monitor device (6), wherein the monitor data is indicative of presence of fluid at a proximal side of a first adhesive layer (200) of the base plate (4) towards the skin surface; determining (1004) an issue based on the monitor data, wherein the issue is related to the ostomy appliance (2, 4); identifying (1006), based on the determined issue, a set of candidate actions to the issue from a plurality of possible actions (1006A); selecting (1008) a set of digital content (1010A, 1010B) based on the set of candidate actions (1006A); and displaying (1010) the set of digital content (1010A, 1010B) on the display (602).

No. of Pages : 50 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006001 A

(19) INDIA

(22) Date of filing of Application :12/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : PERITONEAL DIALYSIS SYSTEM WITH SENSORS AND CONFIGURED TO DIAGNOSE PERITONITIS

(51) International classification	:A61M0001280000, A61B0005145000, A61B0005053000, A61B0005010000, A61M0001160000	(71)Name of Applicant : <b>1)BAXTER INTERNATIONAL INC.</b> Address of Applicant :One Baxter Parkway Deerfield, Illinois 60015 U.S.A. <b>2)BAXTER HEALTHCARE SA</b>
(31) Priority Document No	:62/703749	(72)Name of Inventor :
(32) Priority Date	:26/07/2018	<b>1)BASATI, Sukhraaj</b>
(33) Name of priority country	:U.S.A.	<b>2)GADRE, Shantanu Avinash</b>
(86) International Application No	:PCT/US2019/043450	<b>3)JAMNIA, Mohammad Ali</b>
Filing Date	:25/07/2019	<b>4)NAIR, Lakshmy M.</b>
(87) International Publication No	:WO 2020/023754	<b>5)O'REILLY, William J.</b>
(61) Patent of Addition to Application Number	:NA	<b>6)WLODARCZYK, Marta</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Peritoneal dialysis, such as automated peritoneal dialysis (APD) is provided with any one or more or all of the following sensing or feedback features: impedance sensing to detect peritonitis, temperature sensing to detect peritonitis, bio-MEMS sensing to detect peritonitis, and glucose control for diabetes patients, wherein each sensing or feedback feature analyzes patient effluent fluid or fluid dwelling within a patient's peritoneal cavity.

No. of Pages : 53 No. of Claims : 66

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006003 A

(19) INDIA

(22) Date of filing of Application :12/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : COMPOSITION FOR PREPARING VINYL CHLORIDE-BASED POLYMER AND METHOD FOR PREPARING VINYL CHLORIDE-BASED POLYMER USING SAME

(51) International classification	:C08F0014060000, C08K0005420000, C08J0009000000, C08F0002180000, C08F0002240000	(71)Name of Applicant : <b>1)LG CHEM, LTD.</b> Address of Applicant :128, Yeoui-daero Yeongdeungpo-gu Seoul 07336 Republic of Korea
(31) Priority Document No	:10-2018-0133740	(72)Name of Inventor : <b>1)JEON, Yang Jun</b>
(32) Priority Date	:02/11/2018	<b>2)LEE, Hyun Min</b>
(33) Name of priority country	:Republic of Korea	<b>3)HA, Hyun Kyou</b>
(86) International Application No	:PCT/KR2019/014499	<b>4)KIM, Kun Ji</b>
Filing Date	:30/10/2019	<b>5)LEE, Kwang Jin</b>
(87) International Publication No	:WO 2020/091429	<b>6)JU, Jin Hyuck</b>
(61) Patent of Addition to Application Number	:NA	<b>7)PARK, Jae Hyun</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention can provide a composition for preparing a vinyl chloride-based polymer and a method for preparing a vinyl chloride-based polymer using same, the composition comprising: a transition metal catalyst; and a pH adjuster containing a carbonate-based metal salt, wherein the content of the transition metal catalyst is adjusted and the content of a reducing agent is adjusted to be low or zero, thereby improving foaming properties and viscosity properties of a plastisol containing the prepared polymer and attaining excellent productivity.

No. of Pages : 50 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006004 A

(19) INDIA

(22) Date of filing of Application :12/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : CONTAINER WITH CAP AND LOCATOR AID

(51) International classification	:B65D0043160000, B65D0043020000, B65D0088120000, B65D0050040000, B65D0077220000	(71)Name of Applicant : <b>1)AIRNOV, INC.</b> Address of Applicant :251 Little Falls Drive Wilmington, New Castle DE 19808 U.S.A.
(31) Priority Document No	:18184884.7	(72)Name of Inventor :
(32) Priority Date	:23/07/2018	<b>1)BOIS, Dominique</b>
(33) Name of priority country	:EPO	
(86) International Application No	:PCT/EP2019/068238	
Filing Date	:08/07/2019	
(87) International Publication No	:WO 2020/020618	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a container (100), preferably for loosely stored products, comprising a) a container body (10) comprising a peripheral body wall (16); b) a cover (20) comprising an outer peripheral cover wall (32) and a cover skirt (30); c) a hinge (22) connecting the container body (10) and the cover (20); and d) at least one protruding element (41, 42) provided on the peripheral body wall (16) of the container and/or on the outer peripheral cover wall (32).

No. of Pages : 21 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006007 A

(19) INDIA

(22) Date of filing of Application :12/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : PHARMACEUTICAL COMPOSITION COMPRISING POLYPEPTIDE

(51) International classification	:A61P0003040000, A61P0001160000, A23L0033100000, A61K0036185000, A61K0031474500
(31) Priority Document No	:10-2018-0083946
(32) Priority Date	:19/07/2018
(33) Name of priority country	:Republic of Korea
(86) International Application No	:PCT/KR2019/008918
Filing Date	:19/07/2019
(87) International Publication No	:WO 2020/017916
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)D&D PHARMATECH INC.**

Address of Applicant :4th Floor 24, Pangyo-ro 255beon-gil  
Bundang-gu, Seongnam-si Gyeonggi-do 13486 Republic of Korea

(72)Name of Inventor :

**1)LEE, Kang Choon**

**2)PARK, Og Yi**

**3)AN, Hyung Tae**

**4)PARK, Eun Ji**

**5)SHIN, Jae Hee**

**6)LIM, Sung Mook**

(57) Abstract :

The present invention relates to a pharmaceutical composition including a polypeptide, and more particularly, to a pharmaceutical composition for preventing or treating obesity, diabetes, or non-alcoholic fatty liver disease. The pharmaceutical composition is safe without any side effects such as vomiting or nausea, and has effects of reducing food intake, enhancing insulin secretion, suppressing gastric emptying, promoting lipolysis, and lowering a level of triglycerides.

No. of Pages : 30 No. of Claims : 26

(54) Title of the invention : COMPOSITION CONTAINING BECLOMETHASONE FOR THE PREVENTION AND THE TREATMENT OF BACTERIAL PROSTATITIS AND VAGINITIS

(51) International classification	:A61K0009000000, A61K0045060000, A61K0031573000, A61P0029000000, A61P0015020000	(71)Name of Applicant : <b>1)SOFAR S.P.A.</b> Address of Applicant :Via Firenze 40 20060 Trezzano Rosa [MI] Italy
(31) Priority Document No	:102018000007527	(72)Name of Inventor :
(32) Priority Date	:26/07/2018	<b>1)BIFFI, Andrea</b>
(33) Name of priority country	:Italy	
(86) International Application No	:PCT/IB2019/056407	
Filing Date	:26/07/2019	
(87) International Publication No	:WO 2020/021509	
(61) Patent of Addition to Application	:NA	
Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention regards a composition C1 in a form for topical administration comprising beclomethasone or a derivative thereof for use in a method for treating a disease, symptom and/or disorder deriving from an inflammation of the urogenital system and the lower urinary tract, in particular prostatitis of bacterial origin, inflammatory and painful symptoms associated with said bacterial prostatitis, vaginitis and inflammatory and painful symptoms associated with said vaginitis. Furthermore, the present invention regards a combination C for use in the aforementioned treatment method comprising said composition C1, comprising beclomethasone or a derivative thereof, and a composition C2 comprising a different active ingredient.

No. of Pages : 22 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006801 A

(19) INDIA

(22) Date of filing of Application :18/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : INFORMATION PROCESSING DEVICE, INFORMATION PROCESSING METHOD, PROGRAM, AND INFORMATION PROCESSING SYSTEM

(51) International classification	:H04S0007000000, A63F0013214500, G06K0009000000, G06N0003040000, H04R0003120000	(71)Name of Applicant : <b>1)SONY CORPORATION</b> Address of Applicant :1-7-1, Konan, Minato-ku, Tokyo 1080075 Japan
(31) Priority Document No	:2018-179846	(72)Name of Inventor :
(32) Priority Date	:26/09/2018	<b>1)ITAKURA Eisaburo</b>
(33) Name of priority country	:Japan	<b>2)YAMAGUCHI Takeshi</b>
(86) International Application No	:PCT/JP2019/035845	
Filing Date	:12/09/2019	
(87) International Publication No	:WO 2020/066649	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An information processing device includes circuitry that estimates an attribute of a first person located in at least one of a plurality of areas, and sets a first content corresponding to the attribute of the first person and outputs a sound through wave field synthesis so that a sound field of the set first content is spatially transmitted to at least the one of the plurality of areas via a plurality of speakers.

No. of Pages : 49 No. of Claims : 28



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006802 A

(19) INDIA

(22) Date of filing of Application :18/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : INFORMATION PROCESSING DEVICE, METHOD, AND PROGRAM

(51) International classification	:G06F0003160000, H04N0021854000, G10L0025480000, G06F0016640000, H04N0021845000	(71)Name of Applicant : <b>1)SONY CORPORATION</b> Address of Applicant :1-7-1, Konan, Minato-ku, Tokyo 1080075 Japan
(31) Priority Document No	:2018-184161	(72)Name of Inventor :
(32) Priority Date	:28/09/2018	<b>1)YAMAMOTO Yuki</b>
(33) Name of priority country	:Japan	<b>2)CHINEN Toru</b>
(86) International Application No	:PCT/JP2019/036032	<b>3)TSUJI Minoru</b>
Filing Date	:13/09/2019	
(87) International Publication No	:WO 2020/066681	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to an information processing device, method, and program configured so as to make it possible to easily produce 3D audio content. The information processing device comprises a determination unit that determines, on the basis of one or a plurality of items of attribute information of an object, one or a plurality of parameters constituting metadata of the object. The present invention can be applied to an information processing device.

No. of Pages : 45 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006803 A

(19) INDIA

(22) Date of filing of Application :18/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : METHOD FOR PREPARING TEREPHTHALATE-BASED COMPOSITION, COMPRISING PRESSURIZATION SECTION

(51) International classification	:G01N0001280000, C08G0065000000, G06K0015100000, C07C0067307000, B01J0021040000	(71)Name of Applicant : <b>1)LG CHEM, LTD.</b> Address of Applicant :128, Yeoui-daero Yeongdeungpo-gu Seoul 07336 Republic of Korea
(31) Priority Document No	:10-2018-0149455	(72)Name of Inventor : <b>1)LEE, Seok Goo</b>
(32) Priority Date	:28/11/2018	<b>2)LEE, Sung Kyu</b>
(33) Name of priority country	:Republic of Korea	<b>3)SHIN, Joon Ho</b>
(86) International Application No	:PCT/KR2019/012079	
Filing Date	:18/09/2019	
(87) International Publication No	:WO 2020/111475	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides a method for preparing a terephthalate-based composition, comprising a pressurization section. The pressurization section in the preparation method of the present invention prevents the evaporation of a primary low-boiling-point alcohol, which is a reactant, thus shortening the reaction time, and also reduces refluxing, thus having the effect of reducing the total manufacturing cost.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006806 A

(19) INDIA

(22) Date of filing of Application :18/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : ANTI-CXCR2 ANTIBODIES AND USES THEREOF

(51) International classification	:A61K0039000000, C07K0016280000, A61K0048000000, A61K0035170000, C12N0005078300	(71)Name of Applicant : <b>1)CEPHALON, INC.</b> Address of Applicant :1090 Horsham Road North Wales, PA 19454 U.S.A.
(31) Priority Document No	:62/713095	(72)Name of Inventor :
(32) Priority Date	:01/08/2018	<b>1)CHEN, Doris, Shim Siew</b>
(33) Name of priority country	:U.S.A.	<b>2)POULTON, Lynn, Dorothy</b>
(86) International Application No	:PCT/US2019/044314	<b>3)CLARKE, Adam</b>
Filing Date	:31/07/2019	<b>4)LAINE, David, Jose Simon</b>
(87) International Publication No	:WO 2020/028479	<b>5)POLLARD, Matthew</b>
(61) Patent of Addition to Application Number	:NA	<b>6)COOKSEY, Bridget, Ann</b>
Filing Date	:NA	<b>7)DOYLE, Anthony</b>
(62) Divisional to Application Number	:NA	<b>8)GILL, Jason, William</b>
Filing Date	:NA	

(57) Abstract :

Disclosed herein are human antibody molecules that immunospecifically bind to human CXCR2. The disclosed human antibody molecules are potent and selective antagonists of CXCR2 functions and prevent the recruitment of neutrophils into tissues without strongly depleting circulating neutrophil numbers. Pharmaceutical compositions, nucleic acid molecules, vectors, cells, and uses of the disclosed antibodies are also provided.

No. of Pages : 92 No. of Claims : 26

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006807 A

(19) INDIA

(22) Date of filing of Application :18/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : GLOBAL ADDRESS SYSTEM AND METHOD

(51) International classification	:G06K0019060000, G01S0019460000, G01S0019130000, G06Q0010080000, G01C0021000000	(71)Name of Applicant : <b>1)PEDAWI, Sarwar</b> Address of Applicant :North Light International DMCC, Unit No: 2402, Fortune Executive Towers, Plot No: JLT-PH2- T1A, Jumeriah Lake Towers, P.O. Box 214079 Dubai, United Arab Emirates U.A.E.
(31) Priority Document No	:16/055775	(72)Name of Inventor :
(32) Priority Date	:06/08/2018	<b>1)PEDAWI, Sarwar</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/IB2019/056661	
Filing Date	:05/08/2019	
(87) International Publication No	:WO 2020/031074	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This disclosure relates to a system, method, and computer-readable device configured to receive demographic and geographical information and create a unique global address therefrom. For example, the system comprises at least one processor configured to receive account information describing the remote user and global location data describing a remote location, validate the received information and data, determine navigational data, create a location code, and send the location code to a remote device.

No. of Pages : 28 No. of Claims : 15

(54) Title of the invention : TACKING LAMINATED RAIL WITH INSET TRACK GUIDE

(51) International classification	:B65D0043160000, A61B0017000000, E04C0002288000, F24S0025610000, A45F0005020000	(71) <b>Name of Applicant :</b> <b>1)Norwood Industries Inc.</b> Address of Applicant :2267 15/16 Side Road East, Oro- Medonte, Ontario L0L 1T0, CANADA Canada
(31) Priority Document No	:3109307	(72) <b>Name of Inventor :</b>
(32) Priority Date	:18/02/2021	<b>1)DALE, Ashlynnne</b>
(33) Name of priority country	:Canada	<b>2)CABRIT, Sebastien</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A laminated rail for a sawmill bed comprises an outer plate having 5 a middle body portion, a top portion, and a bottom portion; and an inner plate secured to the outer plate, the inner plate having a middle body portion, a top portion, and a bottom portion. The middle body portion of each of the inner plate and the outer plate may have substantially the same cross sectional tacking configuration to allow the inner plate to be matingly received by the outer plate. A channel may be formed between the top portion of the inner plate and the top portion of the outer plate, the channel being shaped and dimensioned to receive and secure a track in a sandwich grip.

No. of Pages : 22 No. of Claims : 29

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006259 A

(19) INDIA

(22) Date of filing of Application :15/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : CONNECTING ELEMENT FOR FASTENING A SINK TO A WORKTOP

(51) International classification	:F01L0001053000, E05F0011480000, F01L0001020000, F16B0005060000, E03C0001330000	(71)Name of Applicant : <b>1)FRANKE TECHNOLOGY AND TRADEMARK LTD</b> Address of Applicant :Sonnenbergstrasse 9 6052 Hergiswil Switzerland
(31) Priority Document No	:10 2018 119 845.0	(72)Name of Inventor :
(32) Priority Date	:15/08/2018	<b>1)BOMATTER, Christian W.</b>
(33) Name of priority country	:Germany	<b>2)NEESER, Rolf</b>
(86) International Application No	:PCT/EP2019/068785	
Filing Date	:12/07/2019	
(87) International Publication No	:WO 2020/035235	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

What is proposed is a connecting element (1) for fastening a sink (10) to a worktop (20), which worktop (20) has a cutout (21) for inserting the sink (10), which cutout (21) has a peripheral boundary surface (22), which connecting element (1) has: a basic body (2) serving as a bearing part for bearing against the sink (10); at least one spring part (3.1-3.8) which projects from the basic body (2) on a first side and which is designed, under loading in the direction of the basic body (2), to produce a spring force which acts away from the basic body (2); and at least one anchoring part which projects from the basic body (2) on a second side thereof situated opposite to the first side and which is designed to engage in a slot-shaped recess (15) in the sink (10); wherein an engagement direction of the anchoring part extends substantially approximately antiparallel to a direction of the spring force. .

No. of Pages : 17 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006267 A

(19) INDIA

(22) Date of filing of Application :15/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : GLASS CERAMIC ARTICLES HAVING IMPROVED PROPERTIES AND METHODS FOR MAKING THE SAME

<p>(51) International classification</p> <p>(31) Priority Document No</p> <p>(32) Priority Date</p> <p>(33) Name of priority country</p> <p>(86) International Application No</p> <p>Filing Date</p> <p>(87) International Publication No</p> <p>(61) Patent of Addition to Application Number</p> <p>Filing Date</p> <p>(62) Divisional to Application Number</p> <p>Filing Date</p>	<p>(71)Name of Applicant :</p> <p><b>1)CORNING INCORPORATED</b></p> <p>Address of Applicant :One Riverfront Plaza SP-TI-3-1 Corning, New York 14831 U.S.A.</p> <p><b>2)CLICK, Carol Ann</b></p> <p><b>3)EDMONSTON, James Howard</b></p> <p><b>4)FU, Qiang</b></p> <p><b>5)HALL, Jill Marie</b></p> <p><b>6)HUBERT, Mathieu Gerard Jacques</b></p> <p><b>7)JOSHI, Dhananjay</b></p> <p><b>8)KITTLESAN, Andrew Peter</b></p> <p><b>9)KROEMER, Katherine Weber</b></p> <p><b>10)MOORE, Galan Gregory</b></p> <p><b>11)RAI, Rohit</b></p> <p><b>12)RIDGE, John Richard</b></p> <p><b>13)SALTZER, JR., John Robert</b></p> <p><b>14)SMITH, Charlene Marie</b></p> <p><b>15)STAPLETON, Erika Lynn</b></p> <p><b>16)TROSA, Matthew Daniel</b></p> <p><b>17)UKRAINCZYK, Ljerka</b></p> <p><b>18)WILSON, Shelby Kerin</b></p> <p><b>19)YANG, Bin</b></p> <p><b>20)ZHENG, Zheming</b></p> <p>(72)Name of Inventor :</p> <p><b>1)CLICK, Carol Ann</b></p> <p><b>2)EDMONSTON, James Howard</b></p> <p><b>3)FU, Qiang</b></p> <p><b>4)HALL, Jill Marie</b></p> <p><b>5)HUBERT, Mathieu Gerard Jacques</b></p> <p><b>6)JOSHI, Dhananjay</b></p> <p><b>7)KITTLESAN, Andrew Peter</b></p> <p><b>8)KROEMER, Katherine Weber</b></p> <p><b>9)MOORE, Galan Gregory</b></p> <p><b>10)RAI, Rohit</b></p> <p><b>11)RIDGE, John Richard</b></p> <p><b>12)SALTZER, JR., John Robert</b></p> <p><b>13)SMITH, Charlene Marie</b></p> <p><b>14)STAPLETON, Erika Lynn</b></p> <p><b>15)TROSA, Matthew Daniel</b></p> <p><b>16)UKRAINCZYK, Ljerka</b></p> <p><b>17)WILSON, Shelby Kerin</b></p> <p><b>18)YANG, Bin</b></p> <p><b>19)ZHENG, Zheming</b></p>
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(57) Abstract :

A glass ceramic article including a lithium disilicate crystalline phase, a petalite crystalline phased, and a residual glass phase. The glass ceramic article has a warp ( $\mu\text{m}$ )  $(3.65 \times 10^{-6} / \mu\text{m diagonal})^2$  where diagonal is a diagonal measurement of the glass ceramic article in  $\mu\text{m}$ , a stress of less than 30 nm of retardation per mm of glass ceramic article thickness, a haze (%)  $0.0994t + 0.12$  where t is the thickness of the glass ceramic article in mm, and an optical transmission (%)  $0.91 \cdot 10^{(2-0.03t)}$  of electromagnetic radiation wavelengths from 450 nm to 800 nm, where t is the thickness of the glass ceramic article in mm.

No. of Pages : 123 No. of Claims : 29

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006291 A

(19) INDIA

(22) Date of filing of Application :15/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : QUANTUM-RESISTANT SIM CARD

(51) International classification	:H04L0029080000, H04W0088060000, H04L0029060000, H04W0076100000, H01L0021823400
(31) Priority Document No	:00620/19
(32) Priority Date	:10/05/2019
(33) Name of priority country	:Switzerland
(86) International Application No	:PCT/IB2019/001133
Filing Date	:11/11/2019
(87) International Publication No	:WO 2020/229871
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)QRC AAA SRL**

Address of Applicant :c/o Fiduconsult Conseils & Gestion SA,  
Rue des Pilettes 3, 1700 Fribourg, SWITZERLAND Switzerland

(72)Name of Inventor :

**1)KOVAC, Stiepan, Aurélien**

**2)UNDERHILL, John, Gregory**

(57) Abstract :

A quantum resistant smart card is configured to enable access to mobile or integrated telecommunications networks for a cellular communication device, and comprises: encryption means configured for an encryption of data by a standard of at least 256-bit encryption from the list comprising at least AES-256 as defined in the ISO/IEC 18033- 3:2011 standard and eAES; dynamic loading means configured to dynamically load in an intended legacy communication device an upgraded protocol stack enabling the intended legacy communication device to connect to a New Radio network by reusing existing frequencies mastered by the intended legacy communication device; and at least one hardware accelerator system which enables the smart card to provide support for the encryption of data according to the standard of at least 256-bit encryption from the list comprising at least AES-256 as defined in the ISO/IEC 18033-3:2011 standard and eAES.

No. of Pages : 16 No. of Claims : 4



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006628 A

(19) INDIA

(22) Date of filing of Application :17/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : DOWN-REGULATION OF THE CYTOSOLIC DNA SENSOR PATHWAY

(51) International classification	:C12N0009220000, A01H0001060000, C12N0015113000, C12N0015820000, C12N0015520000	(71)Name of Applicant : <b>1)SIGMA-ALDRICH CO. LLC</b> Address of Applicant :3050 Spruce Street St. Louis, MO 63103 U.S.A.
(31) Priority Document No	:62/720726	(72)Name of Inventor :
(32) Priority Date	:21/08/2018	<b>1)ZENSER, Nathan</b>
(33) Name of priority country	:U.S.A.	<b>2)MALKOV, Dmitry</b>
(86) International Application No	:PCT/US2019/047265	<b>3)GERBER, Mark, A.</b>
Filing Date	:20/08/2019	<b>4)WARD, Jill</b>
(87) International Publication No	:WO 2020/041313	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Methods for increasing targeted genome editing by down-regulating proteins involved in cytosolic DNA sensing pathways.

No. of Pages : 31 No. of Claims : 34

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006629 A

(19) INDIA

(22) Date of filing of Application :17/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : CONTROLLED-RELEASE URETHANE-ELASTOMERS FOR USE IN IMPLANTABLE PRODUCTS

(51) International classification	:A01N0025100000, C08G0101000000, A61K0009000000, C08G0018180000, A61L0031160000	(71)Name of Applicant : <b>1)THE SECANT GROUP, LLC</b> Address of Applicant :551 E. Church Avenue Telford, Pennsylvania 18969 U.S.A.
(31) Priority Document No	:62/720412	(72)Name of Inventor :
(32) Priority Date	:21/08/2018	<b>1)REED, Stephanie</b>
(33) Name of priority country	:U.S.A.	<b>2)SMOOT, Carissa</b>
(86) International Application No	:PCT/US2019/047533	<b>3)SHULL, Dennis</b>
Filing Date	:21/08/2019	<b>4)CRUMBLING, Todd</b>
(87) International Publication No	:WO 2020/041489	<b>5)D'OTTAVIO, John</b>
(61) Patent of Addition to Application Number	:NA	<b>6)GABRIELE, Peter D.</b>
Filing Date	:NA	<b>7)HARRIS, Jeremy J.</b>
(62) Divisional to Application Number	:NA	<b>8)NICHOLSON, Charles Brendan</b>
Filing Date	:NA	<b>9)ELY, Jared</b>

(57) Abstract :

A process forms an implantable product including poly(glycerol sebacate) urethane (PGSU) loaded with an active pharmaceutical ingredient (API). The process includes homogeneously mixing a flowable poly(glycerol sebacate) (PGS) resin with the API and a catalyst to form a resin blend. The process also includes homogeneously combining the resin blend with an isocyanate to form a reaction mixture and injecting the reaction mixture to form the PGSU loaded with the API. An implantable product includes a PGSU loaded with an API. In some embodiments, the implantable product includes at least 40% w/w of the API, and the implantable product releases the API by surface degradation of the PGSU at a predetermined release rate for at least three months under physiological conditions. In some embodiments, the PGSU is formed from a PGS reacted with an isocyanate at an isocyanate-to-hydroxyl stoichiometric (crosslinking) ratio in the range of 1:0.25 to 1:1.25.

No. of Pages : 55 No. of Claims : 30

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006631 A

(19) INDIA

(22) Date of filing of Application :17/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : SYSTEMS AND METHODS FOR FACILITATING TRANSACTIONS USING A DIGITAL CURRENCY

(51) International classification	:G06Q0020380000, G06Q0020360000, G06Q0020060000, G06Q0020400000, H04L0009320000	(71)Name of Applicant : <b>1)RIDGEVIEW DIGITAL LLC</b> Address of Applicant :13750 Parc Drive Palm Beach Gardens, FL 33410 U.S.A.
(31) Priority Document No	:62/713374	(72)Name of Inventor : <b>1)MAYBLUM, Jonathan</b>
(32) Priority Date	:01/08/2018	<b>2)MAYBLUM, Zachary</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2019/044603	
Filing Date	:01/08/2019	
(87) International Publication No	:WO 2020/028626	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Systems and methods for facilitating a transaction between a first entity and a second entity using a digital currency are described. In some aspects, a computing node participates in a private distributed ledger for a financial institution and stores one or more transaction blocks representing transactions in a digital currency. The digital currency is issued by the financial institution and is fixed with respect to a fiat currency. The computing node is configured to receive a transaction for transferring an amount of digital currency from a first entity to a second entity, generate a new transaction block representing the transaction, transmit the new transaction block to other computing nodes participating in the private distributed ledger, receive an indication of validity of the new transaction block, and insert the new transaction block into the private distributed ledger.

No. of Pages : 37 No. of Claims : 30

(54) Title of the invention : NOVEL HETEROAROMATIC AMIDE DERIVATIVE AND MEDICINE CONTAINING SAME

(51) International classification	:C07D0471040000, C07D0413120000, C07D0401120000, A61K0031437000, C07D0417140000	(71)Name of Applicant : <b>1)KAKEN PHARMACEUTICAL CO., LTD.</b> Address of Applicant :28-8, Honkomagome 2-chome, Bunkyo-ku, Tokyo 1138650 Japan
(31) Priority Document No	:2018-169104	(72)Name of Inventor :
(32) Priority Date	:10/09/2018	<b>1)AKAHOSHI Issei</b>
(33) Name of priority country	:Japan	<b>2)SUMIKAWA Yoshitake</b>
(86) International Application No	:PCT/JP2019/035354	<b>3)FURUTA Sadayoshi</b>
Filing Date	:09/09/2019	<b>4)FUKUSHIMA Keiichiro</b>
(87) International Publication No	:WO 2020/054657	<b>5)IMAZU Takuya</b>
(61) Patent of Addition to Application	:NA	<b>6)KOTAKA Ryota</b>
Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

To provide a compound for selectively inhibiting Nav1.7 rather than Nav1.5. A heteroaromatic amide derivative or a salt thereof which is highly effective for pain and various other Nav1.7-related diseases, the heteroaromatic amide derivative being represented by general formula (I). [In the formula: X1-X2 represent N-C or C-N; Y1, Y2, Y3, and Y4 represent -CH2-, -CR4aH-, -O-, or the like; Z1 represents -O- or the like; the ring A is a 3-7-membered monocyclic aromatic ring or the like; R1a and R1b are hydrogen atoms, halogen atoms, or the like; R2 is a hydrogen atom or the like; R3a, R3b, and R3c are hydrogen atoms or C1-C6 haloalkyl groups or the like which may be substituted; R4a, R4b, and R4c are C1-C6 haloalkyl groups or C1-C6 haloalkoxy groups or the like which may be substituted; R5a is a hydrogen atom or the like; R5a and R5b join together to form -CH2O- or the like; R6a and R6b are hydrogen atoms or the like; and n is 1 or 2.]

No. of Pages : 375 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006652 A

(19) INDIA

(22) Date of filing of Application :17/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : CITRATE PERHYDRATES AND USES THEREOF

(51) International classification	:A23L0033105000, A61K0036185000, A01N0025040000, A01N0047060000, C07C0059265000	(71)Name of Applicant : <b>1)COMPAGNIE VRANKEN</b> Address of Applicant :Chteau des Castaignes 51270 MONTMORT-LUCY France <b>2)BIOREM ENGINEERING SA</b>
(31) Priority Document No	:1857317	(72)Name of Inventor :
(32) Priority Date	:03/08/2018	<b>1)LAKAYE, Frédéric</b>
(33) Name of priority country	:France	<b>2)GAUME, Alain</b>
(86) International Application No	:PCT/EP2019/070941	<b>3)GINDRO, Katia</b>
Filing Date	:02/08/2019	<b>4)SCHNEE, Sylvain</b>
(87) International Publication No	:WO 2020/025816	<b>5)HARDY, Wendy</b>
(61) Patent of Addition to Application Number	:NA	<b>6)NOËL, Marc</b>
Filing Date	:NA	<b>7)SEMER, Maurice</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to citrate perhydrates and to the uses of citrate perhydrates, in particular as biocides, in particular pesticides, more particularly phytopharmaceuticals.

No. of Pages : 38 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006831 A

(19) INDIA

(22) Date of filing of Application :18/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : INHIBITORS OF KEAP1-NRF2 PROTEIN-PROTEIN INTERACTION

(51) International classification	:C07D0417100000, C07D0417120000, C07D0409140000, A61K0038000000, C07D0417140000	(71)Name of Applicant : <b>1)JANSSEN PHARMACEUTICA NV</b> Address of Applicant :Turnhoutseweg 30 B-2340 Beerse Belgium
(31) Priority Document No	:62/719978	(72)Name of Inventor :
(32) Priority Date	:20/08/2018	<b>1)CHAI, Wenying</b>
(33) Name of priority country	:U.S.A.	<b>2)HIRST, Gavin C.</b>
(86) International Application No	:PCT/US2019/047015	<b>3)KREUTTER, Kevin D.</b>
Filing Date	:19/08/2019	<b>4)KUMMER, David A.</b>
(87) International Publication No	:WO 2020/041169	<b>5)MCCLURE, Kelly J.</b>
(61) Patent of Addition to Application Number	:NA	<b>6)NISHIMURA, Rachel T.</b>
Filing Date	:NA	<b>7)SHIH, Amy Y.</b>
(62) Divisional to Application Number	:NA	<b>8)VENABLE, Jennifer D.</b>
Filing Date	:NA	<b>9)VENKATESAN, Hariharan</b>
		<b>10)WEI, Jianmei</b>
		<b>11)BARBAY, J. Kent</b>

(57) Abstract :

Sultam compounds, pharmaceutical compositions containing them, methods of making them, and methods of using them including methods for treating disease states, disorders, and conditions associated with the KEAP1-Nrf2 interaction, such as inflammatory bowel disease, including Crohn's disease and ulcerative colitis.

No. of Pages : 1133 No. of Claims : 99

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006833 A

(19) INDIA

(22) Date of filing of Application :18/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : SOLAR MODULE MOUNTING BRACKET ASSEMBLIES

(51) International classification	:F24S0025000000, A61B0001000000, H02S0020230000, F24S0025636000, B62B0003100000	(71) <b>Name of Applicant :</b> <b>1)NEXTRACKER INC.</b> Address of Applicant :6200 Paseo Padre Parkway Fremont, California 94555 U.S.A.
(31) Priority Document No	:16/116238	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/08/2018	<b>1)WATSON, Tyler Joseph</b>
(33) Name of priority country	:U.S.A.	<b>2)DELGADO-NANEZ, Ricardo</b>
(86) International Application No	:PCT/US2019/048894	
Filing Date	:29/08/2019	
(87) International Publication No	:WO 2020/047308	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A solar module mounting bracket assembly includes a rail configured to support a solar module thereon, and a pair of braces. The braces each have a first end portion movably coupled to the rail. The braces are movable relative to the rail between a collapsed configuration and an expanded configuration. In the expanded configuration, the braces cooperatively define a channel dimensioned for receipt of a frame member.

No. of Pages : 19 No. of Claims : 20

(54) Title of the invention : CRYOGENIC THERMODYNAMIC CYCLE WITH HEAT RECOVERY

(51) International classification	:F25J0001020000, F25J0001000000, B29L0009000000, F17C0013000000, F01K0025080000	(71)Name of Applicant : <b>1)SAIPEM S.P.A.</b> Address of Applicant :Via Martiri di Cefalonia, 67 I-20097 San Donato Milanese, Milano Italy
(31) Priority Document No	:102018000008157	(72)Name of Inventor :
(32) Priority Date	:22/08/2018	<b>1)DE RINALDIS, Salvatore</b>
(33) Name of priority country	:Italy	<b>2)FANTOLINI, Anton Marco</b>
(86) International Application No	:PCT/IB2019/057071	<b>3)INGLESE, Luca Davide</b>
Filing Date	:22/08/2019	
(87) International Publication No	:WO 2020/039380	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention relates to a process for the regasification of a flow of liquefied natural gas (LNG1), contained in a tank together with a quantity of Boil Off Gas (BOG), and for the production of electricity comprising: a step a) in which a flow of the LNG (LNG1) is subjected to a low-pressure pumping step, thus obtaining a flow LNG2; a step b) in which a portion of said flow (LNG1') is heated in a recondenser, thus obtaining a flow LNG1" then combined with the flow LNG2; a step c) in which said flow LNG2 is heated in a condenser (COND); a step d) in which said flow LNG2 is subjected to a step of superheating in a superheater (SUR), thus obtaining regasified LNG; a step I) in which a flow (BOG1) of the Boil Off Gas (BOG) contained in the tank is compressed in a first step Ia), thus obtaining a flow of Boil Off Gas (BOGa), and in a second step Ib), thus obtaining a flow of Boil Off Gas (BOGb); a step II) in which said flow of Boil Off Gas (BOGb) is cooled in a step of heat recovery in a recuperator (REG, REC1, REC2); a step III) in which said flow of Boil Off Gas (BOGb) is recondensed in the recondenser of step b); in which the step II) of heat recovery and the step c) of condensation are carried out respectively in a step 1) and 3) of a cycle which employs a flow of an organic fluid (F0A1), which, after step 1) and before step 3), is subjected to a step 2) of expansion in a turbine (TURB) for the production of electricity.

No. of Pages : 51 No. of Claims : 20



(54) Title of the invention : GLASS-CERAMIC ARTICLES WITH IMPROVED STRESS PROFILES

(51) International classification	:C03C0021000000, C03C0003097000, C03C0010000000, C03C0003091000, C03C0004180000	(71)Name of Applicant : <b>1)CORNING INCORPORATED</b> Address of Applicant :1 Riverfront Plaza Corning, New York 14831 U.S.A.
(31) Priority Document No	:62/719730	(72)Name of Inventor :
(32) Priority Date	:20/08/2018	<b>1)DUFFY, Delena Lucinda Justice</b>
(33) Name of priority country	:U.S.A.	<b>2)FIENO, Constance L.</b>
(86) International Application No	:PCT/US2019/046450	<b>3)HALL, Jill Marie</b>
Filing Date	:14/08/2019	<b>4)JIN, Yuhui</b>
(87) International Publication No	:WO 2020/041057	<b>5)SCHNEIDER, Vitor Marino</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Glass-ceramic articles are manufactured by an ion exchange process that results in glass-based articles having improved stress profiles. A knee may be located at a depth of 3 microns or deeper. A compressive stress at a surface may be 200 MPa or more and at a knee may be 20 MPa or more. A non-sodium oxide may have a non-zero concentration that varies from the first surface to a depth and a depth of compression (DOC) may be located at  $0.10 \cdot t$ , or even at  $0.17 \cdot t$  or deeper. A two-step ion exchange (DIOX) includes, for example, a potassium bath in a first treatment to form a spike in a spike region of the stress profile, followed by a second treatment which includes, for example, a potassium and sodium mixed bath to maintain the spike and form a tail region of the stress profile. The glass-ceramic articles may thereby avoid developing a vitreous surface layer, which facilitates repeatable and reliable measurement of waveguide modes and determination of compressive stress in the surface (CS) and depth of the spike.

No. of Pages : 28 No. of Claims : 25

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117005663 A

(19) INDIA

(22) Date of filing of Application :10/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : HEMATITE PIGMENTS

(51) International classification	:C01G0049060000, C09C0001240000, C08K0003013000, C09C0001000000, A61K0008810000	(71)Name of Applicant : <b>1)LANXESS DEUTSCHLAND GMBH</b> Address of Applicant :Kennedyplatz 1 50569 Köln Germany
(31) Priority Document No	:18184286.5	(72)Name of Inventor : <b>1)ROSENHAHN, Carsten</b>
(32) Priority Date	:18/07/2018	<b>2)MÜLLER, Rolf</b>
(33) Name of priority country	:EPO	<b>3)SCHAUFLE, Larissa</b>
(86) International Application No	:PCT/EP2019/068946	<b>4)KATHREIN, Christine</b>
Filing Date	:15/07/2019	<b>5)WEBER-CZAPLIK, Anna</b>
(87) International Publication No	:WO 2020/016147	<b>6)KLUPP-TAYLOR, Robin</b>
(61) Patent of Addition to Application Number	:NA	<b>7)GOLKAR, Saeedeh</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A hematite pigment having i) an aspect ratio AR of lower than 1.5, preferably lower than 1.3, most preferably lower than 1.2,5 ii) a CIELAB a value of = 28.5, in particular from 29 to 33, iii) a CIELAB b-value of = 71% of the CIELAB a value, preferably = 70% of the CIELAB a value iv) a CIELAB L value of = 39, in particular from 40 to 43, preferably 40 to 41.10

No. of Pages : 21 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117005664 A

(19) INDIA

(22) Date of filing of Application :10/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : 5-SUBSTITUTED 4-AMINO-1H-BENZO[C][1,2,6]THIADIAZINE 2,2-DIOXIDES AND FORMULATIONS AND USES THEREOF

(51) International classification	:C07D0405120000, C07D0401120000, A23L0002560000, A23L0027200000, A23L0002600000	(71)Name of Applicant : <b>1)FIRMENICH INCORPORATED</b> Address of Applicant :250 Plainsboro Road Plainsboro, New Jersey 08536 U.S.A.
(31) Priority Document No	:62/715669	(72)Name of Inventor :
(32) Priority Date	:07/08/2018	<b>1)FOTSING, Joseph, R.</b>
(33) Name of priority country	:U.S.A.	<b>2)TACHDJIAN, Catherine</b>
(86) International Application No	:PCT/US2019/045325	<b>3)SERVANT, Guy</b>
Filing Date	:06/08/2019	<b>4)CHING, Brett, Weylan</b>
(87) International Publication No	:WO 2020/033420	<b>5)DAVIS, Timothy</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Disclosed herein are 5-Substituted 4-amino-1H-benzo[c][1,2,6]thiadiazine 2,2-dioxide compounds useful as sweet flavor modifiers. Also disclosed herein are ingestible compositions that include one or more of these compounds in combination with a natural or artificial sweetener.

No. of Pages : 83 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117005667 A

(19) INDIA

(22) Date of filing of Application :10/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : TRANSGLUTAMINASE 2 (TG2) INHIBITORS

(51) International classification	:C07D0271070000, C07D0257060000, A61K0031410000, A61K0031180000, A61K0031433000
(31) Priority Document No	:62/717697
(32) Priority Date	:10/08/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/045827
Filing Date	:09/08/2019
(87) International Publication No	:WO 2020/033784
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)SITARI PHARMA, INC.**

Address of Applicant :11099 N. Torrey Pines Road, Suite 290  
La Jolla, CA 92037 U.S.A.

(72)Name of Inventor :

**1)CAMPBELL, David**

**2)CHAPMAN, Justin**

**3)CHEUNG, Mui, H.**

**4)DIRAIMONDO, Thoams, R.**

**5)DURON, Sergio, G.**

(57) Abstract :

Described herein are compounds and pharmaceutical compositions containing such compounds which inhibit transglutaminase 2 (TG2). Also described herein are methods for using such TG2 inhibitors, alone or in combination with other compounds, for treating diseases or conditions that would benefit from TG2 inhibition.

No. of Pages : 549 No. of Claims : 29

(54) Title of the invention : PROCESS FOR DRY FRACTIONATION TO OBTAIN A FINAL HARD PALM OIL MID FRACTION

(51) International classification	:C11B0007000000, A23D0009000000, C02F0001360000, A61B0008080000, D21C0003040000	(71)Name of Applicant : <b>1)AAK AB (PUBL)</b> Address of Applicant :Skrivaregatan 9 S-215 32 Malmö Sweden
(31) Priority Document No	:1851011-5	(72)Name of Inventor : <b>1)HJORTH, Jeppe Lindegaard</b>
(32) Priority Date	:24/08/2018	
(33) Name of priority country	:Sweden	
(86) International Application No	:PCT/SE2019/050766	
Filing Date	:20/08/2019	
(87) International Publication No	:WO 2020/040687	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A process for dry fractionation of a soft palm oil mid fraction (SPMF) into a final hard palm oil mid fraction (fHPMF-A) is disclosed. The process comprises: providing the soft palm oil mid fraction (SPMF), using the soft palm oil mid fraction (SPMF) as an input (IN1) to a first dry fractionation (FDF) to obtain an intermediate olein fraction (SPMF-O) and an intermediate stearin fraction (SPMF-S), using the intermediate olein fraction (SPMF-O) as an input (IN2) to an ultrasound assisted second dry fractionation (SDF) to obtain the final hard palm oil mid fraction (fHPMF-A) and a palm oil olein fraction (POO), wherein the ultrasound assisted second dry fractionation (SDF) comprises subjecting at least a part of the input (IN2) to ultrasonic treatment (US2). Also disclosed is a final hard palm oil mid fraction (fHPMF-A), a second hard palm oil mid fraction (sHPMF-B), a hard palm oil mid fraction mixture, and uses of these.

No. of Pages : 41 No. of Claims : 30

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007524 A

(19) INDIA

(22) Date of filing of Application :23/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN APPARATUS AND METHOD FOR CONTROLLING MEMORY ACCESSES

(51) International classification	:G06F0012140000, G11C0008120000, G06F0021520000, G06F0009455000, G06F0013160000
(31) Priority Document No	:1818572.8
(32) Priority Date	:14/11/2018
(33) Name of priority country	:U.K.
(86) International Application No	:PCT/GB2019/052998
Filing Date	:21/10/2019
(87) International Publication No	:WO 2020/099825
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)ARM LIMITED**

Address of Applicant :110 Fulbourn Road Cherry Hinton  
Cambridge CB1 9NJ U.K.

(72)Name of Inventor :

**1)AYRAPETYAN, Ruben Borisovich**

**2)BARNES, Graeme Peter**

**3)GRISENTHWAITE, Richard Roy**

(57) Abstract :

An apparatus and method are provided for controlling memory accesses. The apparatus has memory access circuitry for performing a tag-guarded memory access operation in response to a target address, the tag-guarded memory access operation by default comprising: comparing an address tag associated with the target address with a guard tag stored in a memory system in association with a block of one or more memory locations comprising an addressed location identified by the target address; and generating an indication of whether a match is detected between the guard tag and the address tag. Further, the apparatus has control tag storage for storing, for each of a plurality of memory regions, configuration control information used to control how the tag-guarded memory access operation is performed by the memory access circuitry when the target address is within that memory region. Each memory region corresponds to multiple of the blocks. This provides a very flexible and efficient mechanism for performing tag-guarded memory access operations.

No. of Pages : 29 No. of Claims : 29

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006009 A

(19) INDIA

(22) Date of filing of Application :12/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : SPHERICAL UREA-ALDEHYDE CONDENSATE FERTILIZERS

(51) International classification	:A61K0009160000, C05C0009020000, C08G0012120000, B01J0002200000, B01J0002040000	(71)Name of Applicant : <b>1)SABIC GLOBAL TECHNOLOGIES B.V.</b> Address of Applicant :Plasticslaan 1 4612 PX Bergen Op Zoom Netherlands
(31) Priority Document No	:62/701987	(72)Name of Inventor : <b>1)KORIPALLY, Rajamalleswaramma</b>
(32) Priority Date	:23/07/2018	<b>2)BURLA, Satish</b>
(33) Name of priority country	:U.S.A.	<b>3)ACHANATH, Radha</b>
(86) International Application No	:PCT/IB2019/000869	<b>4)GUPTA, Samik</b>
Filing Date	:23/07/2019	
(87) International Publication No	:WO 2020/021335	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Fertilizers that contain urea-aldehyde condensates. The fertilizer can be spherical and can be formed using a granulation and/or spheronization technique and optionally can be an extruded fertilizer that is spheronized.

No. of Pages : 21 No. of Claims : 22

(54) Title of the invention : PROGRAMMABLE LOGIC CONTROLLER-BASED MODULAR ACCELERATION MODULE FOR ARTIFICIAL INTELLIGENCE

(51) International classification :G06N0020000000,  
G06N0003040000,  
G06N0003080000,  
G05B0019050000,  
G05B0019042000

(31) Priority Document No :NA  
(32) Priority Date :NA  
(33) Name of priority country :NA  
(86) International Application No :PCT/US2018/047030  
Filing Date :20/08/2018  
(87) International Publication No :WO 2020/040721  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)SIEMENS AKTIENGESELLSCHAFT**  
Address of Applicant :Werner-von-Siemens-Straße 1  
München, 80333 Germany  
(72)Name of Inventor :  
**1)CLAUSSEN, Heiko**

(57) Abstract :

A controller system includes a CPU module, one or more technology modules, and a backplane bus. The CPU module comprises a processor executing a control program. The technology modules include an artificial intelligence (AI) accelerator processor configured to (a) receive input data values related to one or more machine learning models, and (b) apply the machine learning models to the input data values to generate one or more output data values. The backplane bus connects the CPU module and the technology modules. The technology modules transfer the output data values to the processor over the backplane bus and the processor uses output data values during execution of the control program.

No. of Pages : 18 No. of Claims : 20



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007736 A

(19) INDIA

(22) Date of filing of Application :24/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : MELT DISPENSER FOR PLASTIC MOLDING

(51) International classification	:B29C0048285000, A61M0005145000, B29C0048920000, G02B0007100000, B29C0048570000	(71) <b>Name of Applicant :</b> <b>1)HUSKY INJECTION MOLDING SYSTEMS LTD.</b> Address of Applicant :500 Queen Street South Bolton, Ontario L7E 5S5 Canada
(31) Priority Document No	:62/724790	(72) <b>Name of Inventor :</b>
(32) Priority Date	:30/08/2018	<b>1)TENG, Alex</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/CA2019/051202	
Filing Date	:29/08/2019	
(87) International Publication No	:WO 2020/041886	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

OF THE DISCLOSURE A melt dispenser for plastic molding comprises a barrel unit removably mountable to a drive unit. A feed screw is received within a barrel of the barrel unit and is rotated by the drive unit to dispense molten molding material through an outlet of the barrel. A coupling mechanism can be engaged to hold the barrel unit against the drive unit and to connect the screw to the drive. The coupling mechanism is operable by an actuator.

No. of Pages : 108 No. of Claims : 41

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007746 A

(19) INDIA

(22) Date of filing of Application :24/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : PLASTIC MOLDING APPARATUS AND METHOD WITH SHAPER MODULE

(51) International classification	:B29C0045320000, B29C0045420000, B29C0033300000, B29C0033260000, B29C0045330000
(31) Priority Document No	:62/724790
(32) Priority Date	:30/08/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/CA2019/051204
Filing Date	:29/08/2019
(87) International Publication No	:WO 2020/041888
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)HUSKY INJECTION MOLDING SYSTEMS LTD.**

Address of Applicant :500 Queen Street South Bolton, Ontario  
L7E 5S5 Canada

(72)Name of Inventor :

**1)NOGUEIRA, Joaquim Martins**

**2)ULEMEK, Adam Christopher**

**3)FISCH, Ralf Walter**

**4)KMOCH, Sven**

**5)TENG, Alex**

(57) Abstract :

An injection molding apparatus comprises a support base and a mold carrier removably mounted to the support base. The mold carrier includes a mounting plate with attachment features for engaging the support base. A mold with two mold plates is slidably mounted to the mounting 5 plate. A clamp is operable to move the plates between open and closed positions. In the closed position, the plates abut one another. In the open position, the plates are spaced apart for removing molded articles.

No. of Pages : 119 No. of Claims : 60

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007749 A

(19) INDIA

(22) Date of filing of Application :24/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : A SYSTEM AND A METHOD FOR BUILDING A ROAD

(51) International classification	:E03F0001000000, E01C0003000000, E01C0011220000, E01C0005000000, E01F0015080000	(71)Name of Applicant : <b>1)WAVIN B.V.</b> Address of Applicant :Stationsplein 3 8011 CW Zwolle Netherlands
(31) Priority Document No	:2021404	(72)Name of Inventor :
(32) Priority Date	:27/07/2018	<b>1)KOUDESTAAL, Anne Cornelis Pieter</b>
(33) Name of priority country	:Netherlands	<b>2)JORRITSMA, Simon</b>
(86) International Application No	:PCT/NL2019/050476	<b>3)BOSHOVE, Antonie Twan</b>
Filing Date	:24/07/2019	<b>4)JAGER, Harm Jantinus Marcel</b>
(87) International Publication No	:WO 2020/022888	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A system for assembling a road comprises a plurality of plastic support structures and a plurality of road deck elements. Each of the support structures comprises a base plate and at least one column extending, or for extending, upwardly from the base plate for supporting at least partly one of the road deck elements. Each of the road deck elements is configured such that in an assembled and as road useable condition of the system rainwater predominantly flows away over the road to one or more positions next to the road, and/or to a slit-sized interruption of the road across the road.

No. of Pages : 25 No. of Claims : 51

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007750 A

(19) INDIA

(22) Date of filing of Application :24/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : SYSTEM AND METHOD FOR MONITORING A BLOOD FLOW THAT DOES NOT INTERACT WITH VENTILATED LUNGS OF A PATIENT

(51) International classification	:A61B0005000000, A61M0016100000, A61M0016000000, A61M0016160000, A61M0016080000	(71) <b>Name of Applicant :</b> <b>1)ROSTRUM MEDICAL INNOVATIONS INC.</b> Address of Applicant :3687 East 1st Avenue Vancouver, British Columbia V5M 1C2 Canada
(31) Priority Document No	:62/715484	(72) <b>Name of Inventor :</b>
(32) Priority Date	:07/08/2018	<b>1)FREDRICK, Aron</b>
(33) Name of priority country	:U.S.A.	<b>2)GARRY, James</b>
(86) International Application No	:PCT/CA2019/051080	<b>3)AYOUBI, Nathan</b>
Filing Date	:06/08/2019	<b>4)MCGREGOR, Hanna</b>
(87) International Publication No	:WO 2020/028984	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A method and a system to monitor the progression of a pulmonary ailment in patients who are mechanically ventilated or spontaneously breathing. By delivering specific gases to the patient and monitoring the release of those gases over various timescales, the system monitors the progression of pulmonary shunt. No invasive procedures are required, and the system is able to operate through the sole delivery and monitoring of respiratory gases.

No. of Pages : 19 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007001 A

(19) INDIA

(22) Date of filing of Application :19/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : NS1-BINDING PROTEIN

(51) International classification	:C07K0014005000, A61K0039000000, A61K0031400000, C07K0016300000, G01N0033569000
(31) Priority Document No	:201811001557.1
(32) Priority Date	:28/08/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/102630
Filing Date	:26/08/2019
(87) International Publication No	:WO 2020/043067
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)Fapon Biotech Inc.**

Address of Applicant :Room 604;603;602;601, Unit ABCD, 6 / F, Building D2, TCL Science Park, No.1001 Zhongshan Yuan Road, Liuxiandong, Xili, Nanshan District, Shenzhen City, Guangdong Province 518063, China China

(72)Name of Inventor :

**1)CUI, Peng**

**2)HE, Zhiqiang**

**3)MENG, Yuan**

**4)ZHONG, Dongmei**

(57) Abstract :

Provided is an isolated binding protein including an antigen binding domain binding to an NS1 protein, and including specific heavy chain CDR and light chain CDR. The binding protein can specifically identify and bind to NS1, and has relatively high sensitivity and specificity, so as to detect dengue virus. Moreover, the binding protein does not need to be produced by injecting hybridoma cells into mouse peritoneal cavity, while simplifying production, thus stabilizing antibody functionality.

No. of Pages : 26 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007035 A

(19) INDIA

(22) Date of filing of Application :19/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : EARLY VELOCITY MEASUREMENT FOR PROJECTILES BY DETECTING SPIN

(51) International classification	:F42B0010640000, F42B0015010000, F41G0007220000, F42B0010140000, G01P0003380000
(31) Priority Document No	:62/725466
(32) Priority Date	:31/08/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/049010
Filing Date	:30/08/2019
(87) International Publication No	:WO 2020/072153
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)BAE SYSTEMS INFORMATION AND ELECTRONIC  
SYSTEMS INTEGRATION INC.**

Address of Applicant :P.O. Box 868 Nashua, NH 03061-0868  
U.S.A.

(72)Name of Inventor :

**1)ZEMANY, Paul, D.**

**2)CHROBAK, Matthew, F.**

(57) Abstract :

A sensor determines the spin rate or rotation frequency of a munition body of a guided projectile relative to precision guidance munition assembly. The spin rate is used to determine launch velocity of the guided projectile early in flight before GPS is operationally active. The launch velocity is used to determine whether a corrective maneuver is needed to change the range of the guided projectile. Logic can control the canards on the canard assembly in response to the determination that a corrective maneuver is needed.

No. of Pages : 24 No. of Claims : 20

(54) Title of the invention : SUPPORT FOR THE STEERING WHEEL OF A VEHICLE, AND VEHICLE FOR RURAL USE OR FOR USE IN THE CONSTRUCTION INDUSTRY

(51) International classification	:B62D0033060000, B62D0001100000, B62D0009020000, F24S0025617000, B60P0003140000	(71)Name of Applicant : <b>1)CNH INDUSTRIAL BRASIL LTDA.</b> Address of Applicant :Rua Senador Milton Campos, nº 175 - 8º andar - Parte 34006-050 Nova Lima Brazil
(31) Priority Document No	:102018015638-1	(72)Name of Inventor : <b>1)CLEODOLPHI, Daenio</b>
(32) Priority Date	:31/07/2018	<b>2)MARCOLIN LUCCA, Joo Augusto</b>
(33) Name of priority country	:Brazil	<b>3)DOS SANTOS CARVALHO, Leonardo</b>
(86) International Application No	:PCT/BR2019/050242	<b>4)RAMOS PEREIRA, Marco Aurélio</b>
Filing Date	:01/07/2019	
(87) International Publication No	:WO 2020/024026	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The invention relates to a support for a steering wheel of an agricultural or civil engineering vehicle, which has been designed and developed to improve the working conditions of operators in the cabs and also to simplify the production lines of said vehicles, particularly in the step of constructing and assembling the control and operating cabs. According to one embodiment of the invention, said steering wheel support is formed by interconnected articulated elements (2, 3) that are attached to a mounting base (4), said first articulated element (2) being pivoted on said mounting base (4), while the second articulated element (3) is connected to the opposite end of said first articulated element (2) by means of a connecting element (6), and the free end of said second articulated element (3) also supports a frame (7) for mounting a steering box (8) together with its respective steering wheel (9).

No. of Pages : 10 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007044 A

(19) INDIA

(22) Date of filing of Application :19/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : ELECTRICALLY ACTIVATED VALVE ACTUATOR FOR AN INTERNAL COMBUSTION ENGINE

(51) International classification	:F01L0009040000, F02B0075020000, F01L0001160000, F01L0001380000, F01L0003180000	(71)Name of Applicant : <b>1)HEDMAN ERICSSON PATENT AB</b> Address of Applicant :Stäringe Säteri 642 95 FLEN Sweden
(31) Priority Document No	:1800146-1	(72)Name of Inventor : <b>1)HEDMAN, Mats</b>
(32) Priority Date	:31/07/2018	
(33) Name of priority country	:Sweden	
(86) International Application No	:PCT/SE2019/050713	
Filing Date	:29/07/2019	
(87) International Publication No	:WO 2019/245450	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention concerns a method and a device for electrically controlling a valve actuator in a two-stroke or four-stroke combustion engine where the actuator comprises a solenoid (A), a plunger (5) and a spring (6), wherein the engine has at least one cylinder (1) with at least one freely controllable engine valve with a valve disc (10) with corresponding valve stem (11) and a valve spring (4), where a distance (7) is provided between the lower end of the plunger and the upper end of the valve stem and where air is supplied, or exhaust gases are evacuated from, a combustion chamber (3) past a lower part of the valve stem with the valve disc via at least one channel (2) in the cylinder, wherein the valve actuator is activatable to open the engine valve. The invention is characterized in that the opening of the engine valve is initiated after activation of the solenoid, wherein the following acceleration of the plunger brings its lower end to strike the upper end of the valve stem for initial opening of the valve.

No. of Pages : 6 No. of Claims : 7



(54) Title of the invention : HYDROGEN SULFIDE REMOVAL PROCESS

(51) International classification	:C01B0017640000, C01B0017020000, C01B0017160000, B01J0023940000, B01J0023883000	(71)Name of Applicant : <b>1)MERICHEM COMPANY</b> Address of Applicant :5455 Old Spanish Trail Houston, TX 77023 U.S.A.
(31) Priority Document No	:16/160549	(72)Name of Inventor :
(32) Priority Date	:15/10/2018	<b>1)GAWADE, Preshit</b>
(33) Name of priority country	:U.S.A.	<b>2)GOMACH, Jeffrey Bruce</b>
(86) International Application No	:PCT/US2019/051445	<b>3)NELSON, E. Cole</b>
Filing Date	:17/09/2019	<b>4)JACKSON, David</b>
(87) International Publication No	:WO 2020/081179	<b>5)HARDY, K. Michael</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A process is presented to treat a process stream containing a hydrocarbon (oil and/or gas) and hydrogen sulfide with a liquid treatment solution containing a sulfur dye catalyst. The process stream can be within a pipeline, wellbore, subsea pipeline or a wellhead that contains hydrogen sulfide where the liquid treatment solution is injected at a predetermined point to define a scavenger zone such that the sulfur dye catalyst in the liquid treatment solution causes the sulfide from the hydrogen sulfide to react with the catalyst. The hydrocarbon component is separated substantially free of the hydrogen sulfide from a spent treatment solution containing spent sulfur dye catalyst which can then be fed to an oxidation vessel where it is contacted with an oxygen containing gas causing the sulfide to oxidize to thiosulfate and converting the spent sulfur dye catalyst to regenerated sulfur dye catalyst. The thiosulfate can be recovered, and the regenerated sulfur dye catalyst can be recycled as part of the liquid treatment solution.

No. of Pages : 24 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006417 A

(19) INDIA

(22) Date of filing of Application :16/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : NEGATIVE PRESSURE DEVICE HAVING OXYGEN SCAVENGER AND VOLUME REDUCTION

(51) International classification	:A61M0001000000, A61M0027000000, A61F0013000000, A61H0009000000, A61F0013020000	(71)Name of Applicant : <b>1)AATRU MEDICAL, LLC</b> Address of Applicant :1301 East Ninth Street 27th Floor Cleveland, OH 44114 U.S.A.
(31) Priority Document No	:62/723772	(72)Name of Inventor : <b>1)BUAN, John</b>
(32) Priority Date	:28/08/2018	<b>2)MIDDAUGH, Richard, L.</b>
(33) Name of priority country	:U.S.A.	<b>3)WOJCIECHOWSKI, Timothy</b>
(86) International Application No	:PCT/US2019/048303	<b>4)LASH, Thomas, E.</b>
Filing Date	:27/08/2019	
(87) International Publication No	:WO 2020/046907	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A negative pressure tissue treatment system useful for negative pressure therapy includes a drape, a gasket material, a reactor housing, a reactor, and any fluid connection(s). The drape covers the skin of a patient and maintains negative pressure under the drape. The gasket material cooperates with the drape to define an enclosed volume that is sealed by the gasket material. The reactor housing defines a closed chamber in fluid communication with the enclosed volume, and the reactor is disposed in the reactor housing. The reactor consumes oxygen from a system volume defined by the enclosed volume, closed chamber, and/or any fluid connection(s). As a result of the oxygen consumption, the system volume is reduced to between about 95% to about 80% of the initial system volume.

No. of Pages : 11 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006418 A

(19) INDIA

(22) Date of filing of Application :16/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : RUBBER PRODUCT WITH WEAR INDICATING LAYERS

(51) International classification	:B60C0011240000, F16H0057010000, F16G0005220000, F16L0011120000, B60C0001000000	(71)Name of Applicant : <b>1)GATES CORPORATION</b> Address of Applicant :a Delaware Corporation 1144 15th Street Suite 1400 Denver, Colorado 80202 U.S.A.
(31) Priority Document No	:16/053420	(72)Name of Inventor : <b>1)HODJAT, Yahya</b>
(32) Priority Date	:02/08/2018	<b>2)FENG, Yuding</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2019/044313	
Filing Date	:31/07/2019	
(87) International Publication No	:WO 2020/028478	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A polymeric product with at least one surface subject to wear or abrasion, at least a portion of which product includes microcapsules of an indicator substance which is released to indicate a state of wear has been reached. The microencapsulated indicator substance may be a fragrance or a colorant. The indicating portion or zone may be a layer or a thin sheet of microcapsules in rubber or in the polymeric material making up the body of the product. There may be more than one indicating layer or zone in the product. The various zones may contain different fragrances or colorants, which may provide progressive indication of the state of wear.

No. of Pages : 13 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006438 A

(19) INDIA

(22) Date of filing of Application :16/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : TECHNIQUES FOR RAPID DETECTION AND QUANTITATION OF VOLATILE ORGANIC COMPOUNDS (VOCS) USING BREATH SAMPLES

(51) International classification	:G01N0033497000, A61B0005080000, A61B0005097000, G01N0033000000, G01N0021350400	(71)Name of Applicant : <b>1)UNIVERSITY OF NORTH TEXAS</b> Address of Applicant :1155 Union Circle Denton, Texas 76203-5017 U.S.A. <b>2)INSPECTIR SYSTEMS, LLC</b>
(31) Priority Document No	:62/712941	(72)Name of Inventor :
(32) Priority Date	:31/07/2018	<b>1)VERBECK, Guido Fridolin</b>
(33) Name of priority country	:U.S.A.	<b>2)REDMOND, John</b>
(86) International Application No	:PCT/IB2019/056456	<b>3)WING, Tim</b>
Filing Date	:29/07/2019	
(87) International Publication No	:WO 2020/026120	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An exemplary breath analysis system may include a sampling chamber having a molecule collector disposed therein. The molecule detector may be configured such that volatile organic compounds (VOCs) present in a breath sample introduced to the sampling chamber adhere to the molecule collector. A heating element may introduce heat within the sampling chamber, causing release of at least a portion of the VOCs adhered to the molecule collector. An analysis device (e.g., a mass spectrometer or terahertz (THz) spectrometer) may identify one or more target VOCs from among at least the portion of the VOCs released from the molecule collector and generate an output representative of the identified one or more target VOCs. The output may include information that quantitates a concentration of the one or more target VOCs with respect to a source of the breath sample.

No. of Pages : 20 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006439 A

(19) INDIA

(22) Date of filing of Application :16/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : DRESSING

(51) International classification	:A61F0013020000, A61F0013000000, A61K0008040000, A61L0015260000, A61L0015580000	(71)Name of Applicant : <b>1)AATRU MEDICAL, LLC</b> Address of Applicant :1301 East Ninth Street 27th Floor Cleveland, OH 44114 U.S.A.
(31) Priority Document No	:16/114813	(72)Name of Inventor :
(32) Priority Date	:28/08/2018	<b>1)BUAN, John</b>
(33) Name of priority country	:U.S.A.	<b>2)MIDDAUGH, Richard, L.</b>
(86) International Application No	:PCT/US2019/048343	<b>3)WOJCIECHOWSKI, Timothy</b>
Filing Date	:27/08/2019	<b>4)LASH, Thomas, E.</b>
(87) International Publication No	:WO 2020/046935	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A dressing includes a drape, a pressure-sensitive acrylic-based adhesive on a skin-facing surface of the drape, an island of absorbent material, a silicone gel backing film, and a silicone gel on the silicone gel backing film. The drape is a thin film capable of maintaining a negative pressure underneath the drape upon application of a vacuum. The island of absorbent material has a smaller area than the drape and is applied onto the skin-facing surface of the drape. The silicone gel backing film has a frame shape and a smaller footprint than the drape and a larger footprint than the island of absorbent material.

No. of Pages : 14 No. of Claims : 16

(54) Title of the invention : METHODS AND APPARATUSES FOR CODEBOOK RESTRICTION FOR TYPE-II FEEDBACK REPORTING AND HIGHER LAYER CONFIGURATION AND REPORTING FOR LINEAR COMBINATION CODEBOOK IN A WIRELESS COMMUNICATIONS NETWORK

<p>(51) International classification :H04B0007060000, H04B0007045600, H04L0005000000, H04L0025030000, H04L0025020000</p> <p>(31) Priority Document No :18215815.4</p> <p>(32) Priority Date :22/12/2018</p> <p>(33) Name of priority country :EPO</p> <p>(86) International Application No :PCT/EP2019/085226 Filing Date :16/12/2019</p> <p>(87) International Publication No :WO 2020/126960</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)FRAUNHOFER-GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V.</b> Address of Applicant :Hansastraße 27c 80686 MÜNCHEN Germany</p> <p>(72)Name of Inventor : <b>1)VENKATESH, Ramireddy</b> <b>2)GROSSMANN, Marcus</b> <b>3)LANDMANN, Markus</b></p>
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## (57) Abstract :

The embodiments herein relate to a method performed by a UE (900) for providing a channel state information (CSI) feedback in a wireless communication system including at least the UE and a gNB (800) or a radio network node. The UE (900) is operative, by means of e.g. the processor (910) to: estimate the MIMO channel between the gNB (800) and the UE (910) based on received DL reference signals for the configured resource blocks. The UE (900) is further operative to calculate, based on a performance metric, a precoder matrix, for a number of antenna ports of the gNB (800) and configured subbands, the precoder matrix being based on two codebooks and a set of combination coefficients for complex scaling/combining one or more of vectors selected from a first codebook and a second codebook, and the UE (900) is operative to report a CSI feedback and/or a PMI and/or a PMI/RI, to the gNB (800), used to indicate the precoder matrix for the configured antenna ports and resource blocks.

No. of Pages : 61 No. of Claims : 26

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006997 A

(19) INDIA

(22) Date of filing of Application :19/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : CREEP RESISTANT TITANIUM ALLOYS

(51) International classification	:C22C0014000000, C22F0001180000, B21B0003000000, C22C0038500000, C22C0038480000	(71)Name of Applicant : <b>1)ATI PROPERTIES LLC</b> Address of Applicant :1600 N.E. Old Salem Road Albany, OR 97321 U.S.A.
(31) Priority Document No	:16/114405	(72)Name of Inventor : <b>1)MANTIONE, John V.</b>
(32) Priority Date	:28/08/2018	<b>2)BRYAN, David J.</b>
(33) Name of priority country	:U.S.A.	<b>3)GARCIA-AVILA, Matias</b>
(86) International Application No	:PCT/US2019/037421	
Filing Date	:17/06/2019	
(87) International Publication No	:WO 2020/068195	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A non-limiting embodiment of a titanium alloy comprises, in weight percentages based on total alloy weight: 5.5 to 6.5 aluminum; 1.5 to 2.5 tin; 1.3 to 2.3 molybdenum; 0.1 to 10.0 zirconium; 0.01 to 0.30 silicon; 0.1 to 2.0 germanium; titanium; and impurities. A non-limiting embodiment of the titanium alloy comprises a zirconium-silicon-germanium intermetallic precipitate, and exhibits a steady-state creep rate less than  $8 \times 10^{-4}$  (24 hrs)<sup>-1</sup> at a temperature of at least 890°F under a load of 52 ksi.

No. of Pages : 18 No. of Claims : 29

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006998 A

(19) INDIA

(22) Date of filing of Application :19/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : COMPRESSION BANDAGING

(51) International classification	:A61F0013000000, A61K0039120000, C12Q0001688600, A61F0013080000, A61K0047540000	(71)Name of Applicant : <b>1)ANDOVER HEALTHCARE, INC.</b> Address of Applicant :9 Fanaras Drive Salisbury, Massachusetts 01952 U.S.A.
(31) Priority Document No	:62/721222	(72)Name of Inventor :
(32) Priority Date	:22/08/2018	<b>1)MURPHY, Thomas S.</b>
(33) Name of priority country	:U.S.A.	<b>2)BOYLE, James</b>
(86) International Application No	:PCT/US2019/047506	
Filing Date	:21/08/2019	
(87) International Publication No	:WO 2020/041472	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A compression bandage is provided that includes a zinc oxide composition and/or one or more other therapeutic agents. In use, the bandage can be compression wrapped directly contacting a subject's skin for application of the zinc oxide composition and/or other therapeutic agents.

No. of Pages : 11 No. of Claims : 35



(54) Title of the invention : CONDITIONALLY ACTIVE PROTEINS WITH PH SELECTIVITY

(51) International classification	:C12N0015100000, C07K0016000000, C07K0016180000, C07K0016280000, A61K0038000000	(71)Name of Applicant : <b>1)BIOATLA, INC.</b> Address of Applicant :10185 Torreyana Road Suite 100 San Diego, California 92121 U.S.A.
(31) Priority Document No	:62/720570	(72)Name of Inventor : <b>1)SHORT, Jay M.</b>
(32) Priority Date	:21/08/2018	
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2019/047165	
Filing Date	:20/08/2019	
(87) International Publication No	:WO 2020/041247	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A method of producing a conditionally active polypeptide from a parent polypeptide, which comprises steps of: (i) evolving the parent polypeptide by introducing mutations into the parent polypeptide to produce mutant polypeptides that have a pI the same as or lower than a pI of the parent polypeptide; (ii) subjecting the mutant polypeptides to a first assay under a normal physiological condition to measure the activity of the mutant polypeptides under the normal physiological condition and a second assay under an aberrant condition to measure the activity of the mutant polypeptides under the aberrant condition, wherein the normal physiological condition and the aberrant condition are the same condition but having different values; and (iii) selecting the conditionally active polypeptide from the mutant polypeptides which exhibits an increased activity in the second assay compared to the same activity in the first assay. Conditionally active polypeptides and uses are also provided.

No. of Pages : 66 No. of Claims : 51

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008531 A

(19) INDIA

(22) Date of filing of Application :01/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : SYSTEM AND METHOD FOR SEPARATING THE LAYERS OF MULTILAYER PLASTICS

(51) International classification	:B29B0017020000, B29C0049040000, B03B0009060000, B29K0023000000, B29K0705000000	(71)Name of Applicant : <b>1)REPETCO INNOVATIONS S. L.</b> Address of Applicant :C/ Núñez de Balboa, 120 28006 Madrid Spain
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)GARRIDO ESCUDERO, Amalio</b>
(33) Name of priority country	:NA	<b>2)MARTÍNEZ GRACIA, Alexandra</b>
(86) International Application No	:PCT/ES2018/070541	<b>3)ESCUDERO MARÍN, Pedro Antonio</b>
Filing Date	:01/08/2018	
(87) International Publication No	:WO 2020/025836	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a system and method for separating the layers of multilayer plastics, the fragments of multilayer plastic being carried into a receptacle (1) pressurised for 10 to 60 seconds. The receptacle is pressurised using overheated vapour generated in a boiler and introduced into the receptacle until reaching a pressure between 1 and 12 bar and a temperature between 100 and 191.12°C, then the fragments are carried to a discharge tank at a relative pressure between -0.7 and 0.1 bar and at a temperature between 15 and 25°C for between 1 and 5 minutes. The multilayer fragments are later transferred to a mechanical separation unit where they are separated into fragments of single-layer plastic and, lastly, to a mechanical sorting unit where they are sorted by material.

No. of Pages : 10 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008535 A

(19) INDIA

(22) Date of filing of Application :01/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : PALATABLE ANTIPARASITIC FORMULATIONS

(51) International classification	:A61K0009000000, A61K0031365000, A61K0009200000, A61K0031498500, A61K0047440000	(71)Name of Applicant : <b>1)ZOETIS SERVICES LLC</b> Address of Applicant :10 Sylvan Way Parsippany, NJ 07054 U.S.A.
(31) Priority Document No	:62/727018	(72)Name of Inventor :
(32) Priority Date	:05/09/2018	<b>1)KOLHE, Sachin, Pundlik</b>
(33) Name of priority country	:U.S.A.	<b>2)THAKUR, Supriya, Gautam</b>
(86) International Application No	:PCT/US2019/049279	
Filing Date	:03/09/2019	
(87) International Publication No	:WO 2020/051106	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention is directed to a palatable, hard chewable composition comprising a therapeutically effective amount of a veterinary acceptable isoxazoline, a stabilized macrocyclic lactone, an acceptable salt form of pyrantel, at least one natural animal based palatant, and at least one veterinary acceptable excipient; and methods for treating or preventing a parasitic infection or infestation in an animal in need thereof with said composition.

No. of Pages : 29 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006653 A

(19) INDIA

(22) Date of filing of Application :17/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : NIPAH VIRUS IMMUNOGENS AND THEIR USE

(51) International classification	:A61K0039120000, C07K0014005000, A61K0039000000, A61P0031140000, A61K0048000000	(71)Name of Applicant : <b>1)THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES</b> Address of Applicant :National Institutes of Health Office of Technology Transfer 6011 Executive Boulevard, Suite 325, MSC 7660 Bethesda, Maryland 20892-7660 U.S.A.
(31) Priority Document No	:62/714230	<b>2)TRUSTEES OF DARTMOUTH COLLEGE</b>
(32) Priority Date	:03/08/2018	(72)Name of Inventor :
(33) Name of priority country	:U.S.A.	<b>1)STEWART-JONES, Guillaume</b>
(86) International Application No	:PCT/US2019/045110	<b>2)LOOMIS, Rebecca</b>
Filing Date	:05/08/2019	<b>3)GRAHAM, Barney</b>
(87) International Publication No	:WO 2020/028902	<b>4)MASCOLA, John</b>
(61) Patent of Addition to Application Number	:NA	<b>5)MCLELLAN, Jason</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Embodiments of immunogens comprising a recombinant Nipah virus (NiV) F ectodomain trimer stabilized in a prefusion conformation are provided. Also provided are embodiments of immunogens comprising chimeric proteins comprising the recombinant NiV F ectodomain trimer and one or more G ectodomains, a multimer of NiV G ectodomains, and protein nanoparticles comprising the recombinant NiV F ectodomain trimer or an NiV G ectodomain. Also disclosed are nucleic acids encoding the immunogens and methods of their production. Methods for inducing an immune response in a subject by administering a disclosed immunogen to the subject are also provided. In some embodiments, the immune response treats or inhibits NiV infection in a subject.

No. of Pages : 77 No. of Claims : 39

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006654 A

(19) INDIA

(22) Date of filing of Application :17/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : GAS MONITORING SYSTEM FOR GAS-INSULATED SWITCHGEARS

(51) International classification	:H02B0013035000, H01H0033560000, H02G0005060000, B65D0081320000, G01N0033000000	(71)Name of Applicant : <b>1)SIEMENS ENERGY GLOBAL GMBH &amp; CO. KG</b> Address of Applicant :Otto-Hahn-Ring 6 81739 München Germany
(31) Priority Document No	:18193151.0	(72)Name of Inventor :
(32) Priority Date	:07/09/2018	<b>1)COAPES, Graeme</b>
(33) Name of priority country	:EPO	
(86) International Application No	:PCT/EP2019/072928	
Filing Date	:28/08/2019	
(87) International Publication No	:WO 2020/048840	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention concerns a gas monitoring system (1) comprising a gasinsulated switchgear (10), wherein the gas-insulated switch gear (10) has at least two separated chambers (11, 12) which are filled with an insulating gas (15) surrounding high or medium voltage components (16), further comprising a first sensor (21) connected to the first chamber (11) and a second sensor (22) connected to the second chamber (12), both sensors (21, 22) adapted to measure a physical property of the insulating gas (15) in their respective chambers (11, 12) over time, and further comprising a computer unit (25) adapted to calculate from the two sensor measurements a leakage rate of the insulating gas (15) in one of the two chambers (11, 12) using an adaptive filter, in particular a Wiener filter.

No. of Pages : 9 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008157 A

(19) INDIA

(22) Date of filing of Application :26/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : SYSTEMS AND METHODS FOR ALUMINA PRODUCTION

(51) International classification	:C01F0007060000, C01F0007140000, C01F0007460000, D21H0017450000, B01J0021040000	(71) <b>Name of Applicant :</b> <b>1)SOLENIS TECHNOLOGIES, L.P.</b> Address of Applicant :Suite 500 3 Beaver Valley Road Wilmington, Delaware 19803 U.S.A.
(31) Priority Document No	:62/703905	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/07/2018	<b>1)ROSCOE, Clive</b>
(33) Name of priority country	:U.S.A.	<b>2)ANDERMANN, Lawrence J.</b>
(86) International Application No	:PCT/US2019/043908	
Filing Date	:29/07/2019	
(87) International Publication No	:WO 2020/023958	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A method for isolating a humic substance from alumina process liquor is provided herein. Separate from or within the method, bauxite is processed to form the alumina process liquor. The method includes providing a diallyldimethylammonium chloride-containing polymer. The method further includes providing an amine-containing polymer. The method further includes combining the diallyl dimethyl ammonium chloride, the amine-containing polymer, and the alumina process liquor, to isolate the humic substance from the alumina process liquor.

No. of Pages : 14 No. of Claims : 10

(54) Title of the invention : COMPOUNDS USEFUL FOR THE TREATMENT AND/OR CARE OF THE SKIN, HAIR, NAILS AND/OR MUCOUS MEMBRANES

(51) International classification	:A61Q0019080000, A61K0038000000, A61K0008730000, C07K0007060000, C07K0005037000	(71)Name of Applicant : <b>1)LUBRIZOL ADVANCED MATERIALS, INC.</b> Address of Applicant :9911 Brecksville Road Cleveland, Ohio 44141 3247 U.S.A.
(31) Priority Document No	:18382605.6	(72)Name of Inventor :
(32) Priority Date	:10/08/2018	<b>1)DELGADO, Raquel</b>
(33) Name of priority country	:EPO	<b>2)ALMIÑANA, Núria</b>
(86) International Application No	:PCT/IB2019/056796	<b>3)SOLEY, Albert</b>
Filing Date	:09/08/2019	<b>4)LIDÓN, Maria del Carmen</b>
(87) International Publication No	:WO 2020/031146	<b>5)RODRÍGUEZ, Catalina</b>
(61) Patent of Addition to Application Number	:NA	<b>6)MOLA, Gemma</b>
Filing Date	:NA	<b>7)VALERIO, Mauricio</b>
(62) Divisional to Application Number	:NA	<b>8)GARCIA, Consuelo</b>
Filing Date	:NA	

## (57) Abstract :

The invention relates to a compound of formula (I) R1 - Wm-Xn- AA1- A A2- A A3- AA4- A A5- AA6-Yp-Zq-R2, a stereoisomer and/or cosmetically acceptable salt thereof wherein: AA1 is Arg, Lys or no amino acid; AA2 is Arg or Lys; AA3 is Gln, Glu, Asn or Asp; AA4 is Met or Leu; AA5 is Glu, Asp or Gin; AA6 is Glu, Asp, Gin or no amino acid; and AA1 is different from AA6. The compounds are useful for the treatment and/or prevention of the symptoms of skin aging and, in particular, for the treatment and/or prevention of skin wrinkles, the treatment and/or prevention of a sagging appearance of the skin, and/or the reduction and/or prevention of facial asymmetry.

No. of Pages : 93 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008194 A

(19) INDIA

(22) Date of filing of Application :26/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : BRAKING SYSTEMS AND METHODS FOR EXERCISE EQUIPMENT

(51) International classification	:A63B0021220000, A63B0022060000, A63B0021005000, A63B0021000000, A63B0021015000	(71)Name of Applicant : <b>1)PELOTON INTERACTIVE, INC.</b> Address of Applicant :125 West 25th Street 11th Floor New York, New York 10001 U.S.A.
(31) Priority Document No	:62/714635	(72)Name of Inventor :
(32) Priority Date	:03/08/2018	<b>1)PETRILLO, David William</b>
(33) Name of priority country	:U.S.A.	<b>2)CORTESE, Thomas Philip</b>
(86) International Application No	:PCT/US2019/045013	<b>3)CONSIGLIO, John Chester</b>
Filing Date	:02/08/2019	<b>4)KASHYAP, Ashkey</b>
(87) International Publication No	:WO 2020/028883	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Systems and methods for adjusting resistance on an exercise apparatus include a first resistance apparatus having an adjusting bracket, magnetic members mounted on an inner surface of the adjusting bracket, a stepper motor having an adjusting shaft and operable to traverse a portion of the length of the adjusting shaft. At a first position, the magnetic members are disposed above a flywheel, and in a second position, the magnetic members are disposed on opposite sides of the flywheel, providing resistance thereto. A load cell couples the adjusting bracket to the frame and generates a signal corresponding to the movement of the adjusting bracket. A computing system calculates resistance, rpms, power from load cell signal, stepper motor position, shaft rotational position and other sensor inputs.

No. of Pages : 22 No. of Claims : 20



(54) Title of the invention : 3D PRINTING SYSTEM FOR PREPARING A THREE-DIMENSIONAL OBJECT

(51) International classification	:B33Y0010000000, B33Y0030000000, B29C0044340000, C08J0009000000, B29C0048050000	(71)Name of Applicant : <b>1)SULZER MANAGEMENT AG</b> Address of Applicant :Neuwiesenstrasse 15 8401 Winterthur Switzerland
(31) Priority Document No	:18191777.4	(72)Name of Inventor :
(32) Priority Date	:30/08/2018	<b>1)SHIELDS, Stephen</b>
(33) Name of priority country	:EPO	<b>2)TAMMARO, Daniele</b>
(86) International Application No	:PCT/EP2019/072702	<b>3)TROMMSDORFF, Ulla</b>
Filing Date	:26/08/2019	<b>4)WALKER, Claudio</b>
(87) International Publication No	:WO 2020/043660	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention relates to a three-dimensional printing system for preparing a three-dimensional object made at least partially of an expanded polymer comprising: • i) a printing device (10) for preparing an expandable polymer melt and for depositing a strand of the expandable, expanding or expanded polymer onto a surface and • II) a three-dimensional movement device for adjusting the position of the printing device in a predefined three-dimensional matrix so as to allow to deposit the strand of expandable, expanding or expanded polymer at a predetermined time at a precise position within the three-dimensional matrix, wherein the printing device comprises: • a) a feed section (16) at the upstream end of the printing device • b) a heating section (20), • c) a pressurizing section (22), • d) a blowing agent supply line (26), • e) a mixing section (24), • f) a cooling section (28) and • g) a terminal printing head section (30) at the downstream end of the printing device including a die for depositing the strand of expandable, expanding or expanded polymer onto the surface, wherein the mixing section e) and the cooling section f) are arranged downstream of the feed section a), of the heating section b) and of the pressurizing section c), and wherein the blowing agent supply line d) has one or more discharge end(s), which is/are connected with one or more of the pressurizing section c), mixing section e) and cooling section f).

No. of Pages : 20 No. of Claims : 14

(54) Title of the invention : METHOD FOR PRODUCING DRIMANYL ACETATE COMPOUNDS

(51) International classification	:C12N0009100000, C12Q0001480000, A61K0008970000, C12N0009900000, C07K0016000000	(71)Name of Applicant : <b>1)FIRMENICH SA</b> Address of Applicant :7, Rue de la Bergère 1242 Satigny Switzerland
(31) Priority Document No	:18200539.7	(72)Name of Inventor :
(32) Priority Date	:15/10/2018	<b>1)SOLIS ESCALANTE, Daniel</b>
(33) Name of priority country	:EPO	<b>2)GÖRNER, Christian</b>
(86) International Application No	:PCT/EP2019/077716	<b>3)DAVIET, Laurent</b>
Filing Date	:14/10/2019	<b>4)WANG, Qi</b>
(87) International Publication No	:WO 2020/078871	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention provides novel methods for the acetyl transferase-catalyzed production of drimanyl- acetate compounds by the acetylation of the respective drimanyl alcohol sources performed in vitro or in vivo. The present invention also relates to the identification of enzymes having corresponding acetyl transferase activity from different microbial and plant sources. The present invention also relates to the provision of enzyme mutants derived from said newly identified enzymes. A further aspect of the present invention relates to the provision of corresponding coding sequences of such enzymes and mutants, recombinant vectors, and recombinant host cells suitable for the production of such acetyl transferases and mutants and for performing the novel production methods of drimanyl acetate compounds. Another aspect of the invention relates to the use of such drimanyl acetates, as obtained according to the present invention, as intermediates for the production of odorant, flavor or fragrance or insect/pest control ingredients.

No. of Pages : 105 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007335 A

(19) INDIA

(22) Date of filing of Application :22/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : MODIFIED INERT GAS ATMOSPHERE AND GRAPHITE BASED THERMAL ENERGY STORAGE

(51) International classification	:H01M0004900000, F28F0021020000, H05B0003140000, H01L0021683000, F28F0013000000
(31) Priority Document No	:3012611
(32) Priority Date	:27/07/2018
(33) Name of priority country	:Canada
(86) International Application No	:PCT/CA2019/000110
Filing Date	:25/07/2019
(87) International Publication No	:WO 2020/019055
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)KELVIN THERMAL ENERGY INC.**

Address of Applicant :10 King Street East Suite 1000 Toronto,  
ON M5C 1C3 Canada

(72)Name of Inventor :

**1)DANA EI, Abdolkarim**

**2)BARATI, Mansoor**

**3)AHADI, Amirhossein**

(57) Abstract :

In graphite based thermal storage units capable of operating at high temperatures, it is advantageous to have an inert nitrogen based atmosphere. Such large storage systems can be heated to temperatures in excess of 1500°C using embedded graphite based electrical heating elements. In order to reduce possible loss of graphite, particularly from heating elements, small amounts of hydrocarbon gas is added. The preferred gas is ethylene.

No. of Pages : 18 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007355 A

(19) INDIA

(22) Date of filing of Application :22/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : RODS AND ASSEMBLIES OF RODS FOR THE COLLECTION AND TRANSPORTATION OF WATER

(51) International classification	:E03B0003400000, E04C0005070000, F04D0029440000, F15B0015260000, A01G0027040000	(71)Name of Applicant : <b>1)TARAPASKI, William Ernest</b> Address of Applicant :No. 38/6 Suan Luang Ville 2 Soi 1 Chaloermprakiat Ratchakan Thi 9 Road, Soi 28 Dokmai, Pravate 10250 Bangkok Thailand
(31) Priority Document No	:3012130	(72)Name of Inventor :
(32) Priority Date	:23/07/2018	<b>1)TARAPASKI, William Ernest</b>
(33) Name of priority country	:Canada	
(86) International Application No	:PCT/CA2019/050946	
Filing Date	:09/07/2019	
(87) International Publication No	:WO 2020/019060	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A rod for collecting water or transporting water is structured to result in capillary spaces between it and other similar-shaped rods when such rods are adjacent to one another. The rod has a cross-sectional shape with one surface portion of the rod being a greater distance from the centre of the rod than another surface portion of the rod. The rods can be laid together in an assembly or prefabricated into an assembly that provides an efficient, high capacity water collection and/or transportation system that is resistant to clogging.

No. of Pages : 29 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007525 A

(19) INDIA

(22) Date of filing of Application :23/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : BIOAVAILABLE ORAL DOSAGE FORMS

(51) International classification	:A61K0009200000, A61K0009160000, H01L0023498000, A61K0031443000, A61K0009240000	(71)Name of Applicant : <b>1)PTC THERAPEUTICS, INC.</b> Address of Applicant :100 Corporate Court South Plainfield, NJ 07080 U.S.A.
(31) Priority Document No	:62/714182	(72)Name of Inventor :
(32) Priority Date	:03/08/2018	<b>1)DALI, Mandar, V.</b>
(33) Name of priority country	:U.S.A.	<b>2)UDDIN, Akm, Nasir</b>
(86) International Application No	:PCT/US2019/044853	
Filing Date	:02/08/2019	
(87) International Publication No	:WO 2020/028778	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to bioavailable pharmaceutical compositions having increased dose loading and improved dissolution less subject to a food effect.

No. of Pages : 125 No. of Claims : 13

(54) Title of the invention : BRAKE REDUNDANCY IN A LOCOMOTIVE CONSIST

(51) International classification	:B60T0008170000, B60T0013660000, B61C0017120000, B60T0017220000, B60T0015140000	(71)Name of Applicant : <b>1)NEW YORK AIR BRAKE LLC</b> Address of Applicant :748 Starbuck Avenue Watertown, NY 13601 U.S.A.
(31) Priority Document No	:16/136342	(72)Name of Inventor :
(32) Priority Date	:20/09/2018	<b>1)CHLUMECKY, Wayne</b>
(33) Name of priority country	:U.S.A.	<b>2)GUARRERA, Vincent</b>
(86) International Application No	:PCT/US2018/051856	
Filing Date	:20/09/2018	
(87) International Publication No	:WO 2020/060552	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A redundant brake control system for a locomotive consist (A,B) that employs corresponding air brake control units (14) in each locomotive (A,B) that are interconnected by an inter-unit cable (30) extending between the locomotives (A,B). Power to the air brake control units may be selectively connected and disconnected to select which air brake control unit is controlling the brakes of the train. The electronic brake valves (18) associated with the air brake control units remain powered so that braking command may be send from either electronic brake valve and responded to by whichever of the air brake control valves have been provided with power. The control of power may be performed by the locomotive control system (22) so that an operator can easily switch control between the air brake control units from the cab of any locomotive in the consist.

No. of Pages : 8 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007558 A

(19) INDIA

(22) Date of filing of Application :23/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : PROCESSING OF LIGNOCELLULOSIC BIOMASS

(51) International classification	:C08H0008000000, C13K0001020000, C13K0013000000, A21D0013040000, B09B0003000000
(31) Priority Document No	:1812363.8
(32) Priority Date	:30/07/2018
(33) Name of priority country	:U.K.
(86) International Application No	:PCT/GB2019/051975
Filing Date	:15/07/2019
(87) International Publication No	:WO 2020/025925
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :  
**1)NOVA PANGAEA TECHNOLOGIES (UK) LIMITED**  
Address of Applicant :Leaholme Building Wilton International  
Middlesbrough TS10 4RG U.K.  
(72)Name of Inventor :  
**1)HOLM, Martin Spangsberg**  
**2)ZHURINSH, Aivars**

(57) Abstract :

Lignocellulosic biomass (11) is processed to produce organic chemicals by (a) subjecting the biomass to a first hydrolysis (14) to hydrolyse hemicellulose, to form a liquid component comprising the products of hemicellulose hydrolysis in solution, and a solid component comprising cellulose and lignin; (b) then subjecting the solid component to a second hydrolysis (20), so as to hydrolyse cellulose and vaporise the resulting products of cellulose hydrolysis; and (c) then condensing (22) the resulting vapours to form an aqueous solution (25) containing the products of cellulose hydrolysis. After the first hydrolysis (14) and before the second hydrolysis (20), the process also comprises subjecting the solid component to a washing step (16). In this washing step (16) the solid component is washed with the aqueous solution (25) that contains the products of cellulose hydrolysis. Hence the resultant solution contains the products of both the first and the second hydrolysis steps (14, 20).

No. of Pages : 12 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007559 A

(19) INDIA

(22) Date of filing of Application :23/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : ARTICLE COMPRISING PUNCTURE RESISTANT LAMINATE WITH ULTRA-THIN GLASS LAYER

(51) International classification	:G06F0003041000, H01L0031068000, B32B0017060000, H05K0005030000, B29D0011000000	(71)Name of Applicant : <b>1)CORNING INCORPORATED</b> Address of Applicant :1 Riverfront Plaza Corning, New York 14831 U.S.A.
(31) Priority Document No	:62/722309	(72)Name of Inventor :
(32) Priority Date	:24/08/2018	<b>1)BABY, Shinu</b>
(33) Name of priority country	:U.S.A.	<b>2)KUO, Kuan-Ting</b>
(86) International Application No	:PCT/US2019/046263	<b>3)QAROUSH, Yousef Kayed</b>
Filing Date	:13/08/2019	<b>4)SMITH, III, Robert Lee</b>
(87) International Publication No	:WO 2020/041032	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An article including a laminate having a substrate and an ultra-thin cover glass layer bonded to a top surface of the substrate. The ultra-thin cover glass layer has a thickness in the range of 1 micron to 49 microns. The ultra-thin cover glass layer is bonded to the top surface of the substrate with an optically transparent adhesive layer having a thickness in the range of 5 microns to 50 microns.

No. of Pages : 37 No. of Claims : 22



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007560 A

(19) INDIA

(22) Date of filing of Application :23/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : ANTI-MICA/B ANTIBODIES THAT BLOCK MICA/B SHEDDING AND METHODS OF USE

(51) International classification	:A61K0039000000, C07K0016280000, C07K0016300000, A61P0035000000, G01N0033574000
(31) Priority Document No	:62/712608
(32) Priority Date	:31/07/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/044234
Filing Date	:30/07/2019
(87) International Publication No	:WO 2020/028428
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)CULLINAN MICA CORP.**

Address of Applicant :One Main Street, Suite 520 Cambridge, Massachusetts 02142 U.S.A.

(72)Name of Inventor :

**1)GIBSON, Neil**

**2)CHAPMAN, Justin**

**3)DU, Xin**

(57) Abstract :

Provided herein are antibodies that specifically bind to MICA/B having heavy chain, light chain, variable heavy chain domains (VH), variable light chain domains (VL), and complementarity determining regions (CDRs) disclosed herein, as well as methods and uses thereof.

No. of Pages : 71 No. of Claims : 140

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117009272 A

(19) INDIA

(22) Date of filing of Application :05/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : INFORMATION PROCESSING DEVICE, INFORMATION PROCESSING METHOD, AND INFORMATION PROCESSING PROGRAM

(51) International classification	:H04R0005033000, G16H0030200000, G06T0003000000, A61B0003113000, G06T0007200000	(71)Name of Applicant : <b>1)SONY CORPORATION</b> Address of Applicant :1-7-1, Konan, Minato-ku, Tokyo 1080075 Japan
(31) Priority Document No	:2018-191513	(72)Name of Inventor :
(32) Priority Date	:10/10/2018	<b>1)FUKUDA, Kazumi</b>
(33) Name of priority country	:Japan	<b>2)MAGARIYACHI, Tetsu</b>
(86) International Application No	:PCT/JP2019/039103	
Filing Date	:03/10/2019	
(87) International Publication No	:WO 2020/075622	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An information processing device (100) according to the present disclosure comprises an acquisition unit (141) which acquires a first image which includes an image of a user's ear, and a computation unit (142) which, using a learned model which is learned so as to output a head-related transfer function corresponding to the ear when the image which includes the image of the ear is inputted, computes a head-related transfer function corresponding to the user on the basis of the first image acquired by the acquisition unit (141).

No. of Pages : 60 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007363 A

(19) INDIA

(22) Date of filing of Application :22/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : INSECTICIDAL PROTEINS AND METHODS FOR THEIR USE

(51) International classification	:C12N0015820000, A01N0063100000, C07K0014325000, A01N0037440000, C07K0014705000	(71)Name of Applicant : <b>1)PIONEER HI-BRED INTERNATIONAL, INC.</b> Address of Applicant :7100 NW 62ND AVENUE PO BOX 1014 JOHNSTON, Iowa 50131-1014 U.S.A.
(31) Priority Document No	:62/724276	(72)Name of Inventor :
(32) Priority Date	:29/08/2018	<b>1)FOX, Ellaine Anne Mariano</b>
(33) Name of priority country	:U.S.A.	<b>2)KAKANI, Naga Kishore</b>
(86) International Application No	:PCT/US2019/047660	<b>3)WALTER, Kay</b>
Filing Date	:22/08/2019	<b>4)YAMAMOTO, Takashi</b>
(87) International Publication No	:WO 2020/046701	<b>5)ZHENG, Yi</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This disclosure relates to the field of molecular biology. Provided are novel genes that encode pesticidal proteins. These pesticidal proteins and the nucleic acid sequences that encode them are useful in preparing pesticidal formulations and in the production of transgenic pest-resistant plants. Methods to create or alter pesticidal proteins are provided for altered or enhanced pesticidal activity.

No. of Pages : 77 No. of Claims : 49

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008899 A

(19) INDIA

(22) Date of filing of Application :03/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : ANALYZER FOR TESTING A SAMPLE

(51) International classification	:G01N0035000000, G01N0035020000, F16B0002100000, H01R0013000000, A61H0003060000	(71)Name of Applicant : <b>1)BOEHRINGER INGELHEIM VETMEDICA GMBH</b> Address of Applicant :Binger Strasse 173 55216 Ingelheim am Rhein Germany
(31) Priority Document No	:18197843.8	(72)Name of Inventor :
(32) Priority Date	:01/10/2018	<b>1)NIEMEYER, Axel</b>
(33) Name of priority country	:EPO	<b>2)BRUCKMANN, Guenter</b>
(86) International Application No	:PCT/EP2019/076230	<b>3)FICHTNER, André</b>
Filing Date	:27/09/2019	<b>4)HUG, Hendrik</b>
(87) International Publication No	:WO 2020/070012	<b>5)KOENIG, Juri</b>
(61) Patent of Addition to Application Number	:NA	<b>6)STOLPMANN, Dagmar</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An analyzer for testing a biological sample is proposed, wherein the analyzer comprises a guide apparatus for guiding a clamping unit and/or a connection unit, wherein the guide apparatus is adapted to compensate misalignments. The analyzer comprises a rack for the clamping unit and/or connection unit, wherein the rack is supported by a flexible cushion within a housing of the analyzer.

No. of Pages : 78 No. of Claims : 26

(54) Title of the invention : DOUBLE-ROW SELF-ALIGNING ROLLER BEARING AND MAIN SHAFT SUPPORT DEVICE FOR WIND GENERATION EQUIPPED WITH SAME

(51) International classification	:F16C0019380000, F16C0023080000, F16C0033660000, F16C0033620000, F16C0033320000	(71)Name of Applicant : <b>1)NTN CORPORATION</b> Address of Applicant :3-17, Kyomachibori 1-chome, Nishi-ku, Osaka-shi, Osaka 5500003 Japan
(31) Priority Document No	:2018-160216	(72)Name of Inventor :
(32) Priority Date	:29/08/2018	<b>1)NAKANISHI Masaki</b>
(33) Name of priority country	:Japan	<b>2)MIKAMI Hidenobu</b>
(86) International Application No	:PCT/JP2019/033572	
Filing Date	:27/08/2019	
(87) International Publication No	:WO 2020/045455	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Provided are a double-row self-aligning roller bearing and a main shaft support device for wind generation equipped with this roller bearing, wherein frictional wear of a lubrication surface is prevented even when contacting another member under conditions accompanying slipping in a state of poor lubrication, thereby achieving excellent long-term durability. In the double-row self-aligning roller bearing 5 a hard film 18 is a film having structure comprising an underlayer formed directly on a sliding surface of at least one bearing member selected from an inner ring 11, an outer ring 12, and rollers 13a and 13b, a mixed layer formed on the underlayer and mainly comprising WC and DLC, and a surface layer formed on the mixed layer and mainly comprising DLC. The hard layer 18 is used under a condition of sliding contact with another bearing member, with boundary lubrication, and the hydrogen content of the mixed layer is less than 10 at%.

No. of Pages : 38 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008901 A

(19) INDIA

(22) Date of filing of Application :03/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : PROCESS FOR PRODUCING BISPHENOL-A

(51) International classification	:C07C0037200000, C07C0045530000, C07C0039160000, C07C0037840000, C07C0002860000
(31) Priority Document No	:62/727230
(32) Priority Date	:05/09/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/049462
Filing Date	:04/09/2019
(87) International Publication No	:WO 2020/051186
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)BADGER LICENSING LLC**

Address of Applicant :One Financial Center Boston,  
Massachusetts 02111 U.S.A.

(72)Name of Inventor :

**1)PALMER, David**

(57) Abstract :

A process for producing bisphenol-A comprises reacting acetone and phenol in the presence of a catalyst system comprising an acidic heterogeneous catalyst and a catalyst promoter comprising at least one organic sulfur-containing compound to produce a reaction effluent comprising bisphenol-A, water, unreacted acetone, unreacted phenol and at least part of the catalyst promoter. At least part of the reaction effluent is distilled to remove water, catalyst promoter and unreacted acetone, and leave a residual stream containing bisphenol A. At least part of the residual stream is then contacted with a basic anion exchange resin to produce a purified stream, from which bisphenol-A is recovered.

No. of Pages : 11 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008902 A

(19) INDIA

(22) Date of filing of Application :03/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : ANALYZER AND METHOD FOR TESTING A SAMPLE

(51) International classification	:F16K0037000000, B60T0017220000, B60T0013660000, G01N0009360000, G01N0035100000	(71)Name of Applicant : <b>1)BOEHRINGER INGELHEIM VETMEDICA GMBH</b> Address of Applicant :Binger Strasse 173 55216 Ingelheim am Rhein Germany
(31) Priority Document No	:18197971.7	(72)Name of Inventor :
(32) Priority Date	:01/10/2018	<b>1)NIEMEYER, Axel</b>
(33) Name of priority country	:EPO	<b>2)BRUCKMANN, Guenter</b>
(86) International Application No	:PCT/EP2019/076237	<b>3)BENDER, Bernhard</b>
Filing Date	:27/09/2019	
(87) International Publication No	:WO 2020/070013	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An analyzer for testing a biological sample is proposed, wherein the analyzer comprises a pressurized gas supply having an intermediate gas storage that is fluidically arranged between an intermediate valve and an actuation valve. A method for testing a biological sample is proposed, wherein the power supply of an intermediate valve is cut off when the valve starts to change its position and/or wherein the pressure of an intermediate gas storage located downstream of an intermediate valve is controlled. Further, a method for inspecting an analyzer, in particular its pressurized gas supply, is proposed, wherein the pressure drop in a main gas storage is measured and compared to a reference pressure drop in order to inspect the analyzer.

No. of Pages : 79 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007751 A

(19) INDIA

(22) Date of filing of Application :24/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : MOLDING APPARATUS AND METHODS

(51) International classification	:B65D0005060000, B33Y0010000000, B65B0009200000, B65B0061240000, A21C0011000000	(71)Name of Applicant : <b>1)HUSKY INJECTION MOLDING SYSTEMS LTD.</b> Address of Applicant :500 Queen Street South Bolton, Ontario L7E 5S5 Canada
(31) Priority Document No	:62/724790	(72)Name of Inventor :
(32) Priority Date	:30/08/2018	<b>1)NIEWELS, Joachim Johannes</b>
(33) Name of priority country	:U.S.A.	<b>2)ULEMEK, Adam Christopher</b>
(86) International Application No	:PCT/CA2019/051205	<b>3)YANKOV, Peter</b>
Filing Date	:29/08/2019	<b>4)KMOCH, Sven</b>
(87) International Publication No	:WO 2020/041889	<b>5)FISCH, Ralf Walter</b>
(61) Patent of Addition to Application Number	:NA	<b>6)HALTER, Christophe</b>
Filing Date	:NA	<b>7)MACLEOD, Darrin Albert</b>
(62) Divisional to Application Number	:NA	<b>8)GUO, Teng</b>
Filing Date	:NA	<b>9)NOGUEIRA, Joaquim Martins</b>

(57) Abstract :

A plastic molding system comprises: dispensing, pre-shaping and shaping cells and a transport subsystem. The dispensing cell has a station for dispensing a dose of plastic feedstock. The pre-shaping and shaping cells each comprise a plurality of stations for shaping the workpiece into a preform shape and into a final shape, respectively. The transport subsystem advances a workpiece along a selected one of a plurality of process paths to form a molded article. Each of the plurality of process paths is defined by a combination of stations of the dispensing cell, the pre-shaping cell and the shaping cell.

No. of Pages : 126 No. of Claims : 122



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007762 A

(19) INDIA

(22) Date of filing of Application :24/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : DYNAMIC COOLANT DELIVERY SYSTEM WITH MULTI-AXIS ROTATION

(51) International classification	:B23Q0011100000, B23Q0001000000, B23Q0011000000, B23B0031200000, B23C0001060000	(71)Name of Applicant : <b>1)HURCO COMPANIES, INC.</b> Address of Applicant :One Technology Way Indianapolis, Indiana 46268-0180 U.S.A.
(31) Priority Document No	:62/721224	(72)Name of Inventor :
(32) Priority Date	:22/08/2018	<b>1)ADAIR, David C.</b>
(33) Name of priority country	:U.S.A.	<b>2)GROSS, Frederick W.</b>
(86) International Application No	:PCT/US2019/047421	<b>3)VOLOVIC, Gregory S.</b>
Filing Date	:21/08/2019	<b>4)TRAICOFF, Gerald</b>
(87) International Publication No	:WO 2020/041416	<b>5)SZCZYPIORSKI, Nick</b>
(61) Patent of Addition to Application Number	:NA	<b>6)HAMMER, Donald</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A dynamic coolant system (200) for delivering coolant to a cutting tool coupled to a spindle (120) of a computer numerical control (CNC) machine is disclosed. The dynamic coolant system comprises a platform (270) adapted to be coupled to the spindle (120) and rotatable about a first axis (271) and a nozzle (310) supported by the platform (270) and pivotable about a second axis (311). The nozzle (310) is in fluid communication with a coolant reservoir (302) and adapted to deliver coolant from the coolant reservoir (302) to the cutting tool (390).

No. of Pages : 37 No. of Claims : 39

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007913 A

(19) INDIA

(22) Date of filing of Application :25/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : STABLE AGROCHEMICAL COMPOSITION

(51) International classification	:A61K0009107000, A01N0025220000, A01N0053000000, A01N0025140000, A01N0025300000	(71)Name of Applicant : <b>1)PI INDUSTRIES LTD.</b> Address of Applicant :Post Box No. 20, Udaisagar Road Udaipur-Rajasthan 313 001 Rajasthan India
(31) Priority Document No	:201811033626	(72)Name of Inventor :
(32) Priority Date	:06/09/2018	<b>1)BHARAMBE, Shailendra Mitharam</b>
(33) Name of priority country	:India	<b>2)CHOUHAN, Pushpender Singh</b>
(86) International Application No	:PCT/IB2019/057477	<b>3)RATHOD, Dileep Saidas</b>
Filing Date	:05/09/2019	<b>4)DUTTA, Ashim Kumar</b>
(87) International Publication No	:WO 2020/049493	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention is to provide stabilized agrochemical composition with non-hazardous solvents. In a particular aspect of present invention relates to an emulsion composition comprises of an organo-phosphorus active ingredient or its combination with a pyrethroid active ingredient, surfactant, stabilizer, aqueous medium, optionally one or more green oil or auxiliary agent.

No. of Pages : 25 No. of Claims : 30

(54) Title of the invention : DEVICE AND METHOD FOR FREEZING A BIOLOGICAL SOLUTION

(51) International classification	:A23G0009220000, A01N0001020000, F25C0001120000, A23L0003360000, F25C0001040000	(71)Name of Applicant : <b>1)SMARTFREEZ LDA</b> Address of Applicant :Av. Jacques Delors, Ed. Inovação II, Incubadora Taguspark, 411 2740-122 Porto Salvo Portugal
(31) Priority Document No	:115153	(72)Name of Inventor : <b>1)SILVESTRE DUARTE, Andreia Filipa</b>
(32) Priority Date	:15/11/2018	<b>2)DE BRITO ESTRELA, Rui</b>
(33) Name of priority country	:Portugal	
(86) International Application No	:PCT/IB2019/059836	
Filing Date	:15/11/2019	
(87) International Publication No	:WO 2020/100105	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present disclosure provides systems and methods for use in freezing liquid mixtures or suspensions containing sensitive substances, such as biopharmaceutical materials, under sterile conditions and in small-volume containers. The disclosed device enables the control of ice nucleation of the solution minor the layer of volume that freezes, while controlling the ice growth rate in a bottom up geometry, and comprises a heat transfer surface (101) with means to control temperature, a holder (102) for multiple containers (109), pressing means (103) to press the holder against the heat transfer surface and optionally a contact promoting material. The disclosed method comprises pre-cooling the device to a temperature substantially below the solution nucleation temperature, placing a container into the holder, contacting the container with the heat transfer surface until a fraction of 10% of the total sample volume is frozen; interrupting the contact between the container and the heat transfer surface; contacting the container with the heat transfer surface at a predefined freezing rate, such that the freezing of the biological solution is homogeneous; until all the volume of the solution is frozen.

No. of Pages : 22 No. of Claims : 31

(54) Title of the invention : BINARY SEARCH PROCEDURE FOR CONTROL TABLE STORED IN MEMORY SYSTEM

(51) International classification	:G06F0012100900, G06F0012140000, G06F0016903000, H04L0029120000, G06F0016930000	(71)Name of Applicant : <b>1)ARM LIMITED</b> Address of Applicant :110 Fulbourn Road Cherry Hinton Cambridge CB1 9NJ U.K.
(31) Priority Document No	:1812314.1	(72)Name of Inventor :
(32) Priority Date	:27/07/2018	<b>1)GROCUTT, Thomas Christopher</b>
(33) Name of priority country	:U.K.	<b>2)BOTMAN, François Christopher Jacques</b>
(86) International Application No	:PCT/GB2019/051566	
Filing Date	:06/06/2019	
(87) International Publication No	:WO 2020/021224	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A control table (22) defines information for controlling a processing component (20) to perform an operation. The table (22) comprises entries each corresponding to a variable size region defined by a first limit address and one of a second limit address and size. A binary search procedure is provided for looking up the table, comprising a number of search window narrowing steps, each narrowing a current search window of candidate entries to a narrower search window comprising fewer entries, based on a comparison of a query address against the first limit address of a selected candidate entry of the current search window. The comparison is independent of the second limit address or size of the selected candidate entry. After the search window is narrowed to a single entry, the query address is compared with the second limit address or size of that single entry.

No. of Pages : 54 No. of Claims : 19

(54) Title of the invention : METHOD FOR THE GRAVIMETRIC CONTROL OF A METERING DEVICE FOR BULK MATERIAL DURING THE REFILLING OF ITS STORAGE CONTAINER, AND METERING DEVICE FOR CARRYING OUT THE METHOD

(51) International classification	:G01G0011080000, G01G0011000000, G01G0013240000, G01F0001840000, A01D0041127000	(71)Name of Applicant : <b>1)K-TRON TECHNOLOGIES, INC.</b> Address of Applicant :590 Woodbury Glassboro Rd. Sewell, NJ 08080 U.S.A.
(31) Priority Document No	:1064/18	(72)Name of Inventor :
(32) Priority Date	:07/09/2018	<b>1)HELFENSTEIN, Urs</b>
(33) Name of priority country	:Switzerland	<b>2)LUDESCHER, Stefan</b>
(86) International Application No	:PCT/IB2019/057521	
Filing Date	:06/09/2019	
(87) International Publication No	:WO 2020/049513	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The method according to the invention provides that the gravimetric weighing is to be continued during the refilling of a gravimetric metering device (1) for bulk material, in addition the refilled bulk material mass is to be determined during refilling via a refilling container (3) in order to determine in real time or on average the actual mass flow which is output during refilling and to control it with regard to a desired mass flow.

No. of Pages : 27 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117009288 A

(19) INDIA

(22) Date of filing of Application :05/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : INHIBITING DEUBIQUITINASE USP25 AND USP28

(51) International classification	:A61P0035000000, C07D0471040000, C07D0495040000, A61K0031616000, A61K0031167000	(71) <b>Name of Applicant :</b> <b>1)VALO EARLY DISCOVERY, INC.</b> Address of Applicant :399 Boylston Street Boston, Massachusetts 02116 U.S.A.
(31) Priority Document No	:62/716738	(72) <b>Name of Inventor :</b> <b>1)GUERIN, David J.</b>
(32) Priority Date	:09/08/2018	<b>2)CARAVELLA, Justin A.</b>
(33) Name of priority country	:U.S.A.	<b>3)LI, Hongbin</b>
(86) International Application No	:PCT/US2019/045734	<b>4)MISCHKE, Steven</b>
Filing Date	:08/08/2019	<b>5)RICHARD, David J.</b>
(87) International Publication No	:WO 2020/033709	<b>6)SCHILLER, Shawn E.R.</b>
(61) Patent of Addition to Application Number	:NA	<b>7)SHELEKHIN, Tatiana</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure relates to modulators, such as inhibitors, of at least one pathway chosen from USP28 and USP25, pharmaceutical compositions comprising the inhibitors, and methods of using the inhibitors. The modulators, such as inhibitors, of at least one pathway chosen from USP28 and USP25 can be useful in the treatment of cancers, among other ailments. The present disclosure provides compounds of Formula (I).

No. of Pages : 39 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117009291 A

(19) INDIA

(22) Date of filing of Application :05/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : MULTI-AMINE POLYESTER DISPERSANT AND METHOD OF MAKING

(51) International classification	:C08G0063060000, C08F0002240000, C08G0063910000, C09D0133120000, C09D0143020000	(71)Name of Applicant : <b>1)LUBRIZOL ADVANCED MATERIALS, INC.</b> Address of Applicant :9911 Brecksville Road Cleveland, Ohio 44141-3247 U.S.A.
(31) Priority Document No	:62/729009	(72)Name of Inventor :
(32) Priority Date	:10/09/2018	<b>1)COULBECK, Elliot</b>
(33) Name of priority country	:U.S.A.	<b>2)THETFORD, Dean</b>
(86) International Application No	:PCT/US2019/049995	<b>3)GREEN, Saša</b>
Filing Date	:06/09/2019	
(87) International Publication No	:WO 2020/055691	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a dispersant polymer and a dispersion containing the dispersant polymer. The dispersant polymer is derived from a polyamine species reacted with two different polyester chains, one of which includes a monomeric repeat unit derived from the polyesterification reaction of lactide, glycolide, lactic acid, or glycolic acid monomers. The technology includes preparing the dispersant polymer at lower temperature to allow the use of a broader selection of polyester repeat units.

No. of Pages : 32 No. of Claims : 29

(54) Title of the invention : RECOMBINANT EXPRESSION OF FUMONISIN AMINE OXIDASE

(51) International classification	:C12N0009060000, A23K0010140000, C12N0009020000, C12N0015810000, A23K0020189000	(71)Name of Applicant : <b>1)HER MAJESTY THE QUEEN IN RIGHT OF CANADA, AS REPRESENTED BY THE MINISTER OF AGRICULTURE AND AGRI-FOOD</b> Address of Applicant :Floor 5, Room 241, Tower 5, 1341 Baseline Road Ottawa, Ontario K1A 0C5 Canada
(31) Priority Document No	:62/727217	(72)Name of Inventor :
(32) Priority Date	:05/09/2018	<b>1)GARNHAM, Christopher Peter</b>
(33) Name of priority country	:U.S.A.	<b>2)SUMARAH, Mark William</b>
(86) International Application No	:PCT/CA2019/051230	<b>3)RENAUD, Justin Beneteau</b>
Filing Date	:04/09/2019	<b>4)TELMER, Patrick Gordon</b>
(87) International Publication No	:WO 2020/047656	<b>5)BUTLER, Shane Gordon</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Fumonisin are a type of mycotoxin that contaminate different products, for example, feed and food products, including corn-based products, which can lead to serious health risks to humans and livestock. Current methods for detoxifying fumonisin-contaminated products are complex and expensive. The present disclosure provides a recombinant microbial host cell expressing an heterologous polypeptide having fumonisin amine oxidase activity, the recombinant microbial host cell comprising an heterologous nucleic acid molecule encoding the heterologous polypeptide having fumonisin amine oxidase activity, a variant thereof or a fragment thereof. The heterologous polypeptide having fumonisin amine oxidase activity can be used to detoxify a fumonisin mycotoxin present in feed and food products, for example from grains and products derived from grains.

No. of Pages : 61 No. of Claims : 47



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117009295 A

(19) INDIA

(22) Date of filing of Application :05/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : REFRACTORY FOR GAS BLOWING NOZZLE AND GAS BLOWING NOZZLE

(51) International classification	:C21C0005480000, C21C0005520000, C21C0005460000, B22D0001000000, C21C0007000000	(71)Name of Applicant : <b>1)JFE STEEL CORPORATION</b> Address of Applicant :2-3, Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 1000011 Japan <b>2)SHINAGAWA REFRACTORIES CO., LTD.</b>
(31) Priority Document No	:2018-177127	(72)Name of Inventor :
(32) Priority Date	:21/09/2018	<b>1)HOSOHARA Seiji</b>
(33) Name of priority country	:Japan	<b>2)IDA Atsuhisa</b>
(86) International Application No	:PCT/JP2019/036776	<b>3)TORIGOE Atsushi</b>
Filing Date	:19/09/2019	<b>4)FUJIYOSHI Ryoma</b>
(87) International Publication No	:WO 2020/059801	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention improves the durability of a refractory for a gas blowing nozzle in which at least one thin metal tube is buried. This refractory for a gas blowing nozzle has a central refractory in which a thin metal tube is buried and an outer peripheral refractory which surrounds the outer periphery of the central refractory, wherein in a plane of the refractory for a gas blowing nozzle, when the radius of an imaginary circle having a minimum radius including all the buried thin metal tubes is R mm, the outer shape of the central refractory is concentric with the imaginary circle and is a circle having a radius of R+10 mm to R+150 mm, the central refractory is an MgO-C refractory in which a carbon content is 40-80 mass%, a metal Al content is 3-8 mass%, and a metal Si content is 0.30-1.0 times more than the metal Al content by mass ratio, and the outer peripheral refractory is an MgO-C refractory in which a carbon content is 10-25 mass%.

No. of Pages : 34 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008195 A

(19) INDIA

(22) Date of filing of Application :26/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : MOLD WITH QUICK CONNECTION AND DISCONNECTION

(51) International classification	:B29C0045260000, B29K0105000000, B29C0045170000, B29C0045400000, B29C0045330000
(31) Priority Document No	:62/724790
(32) Priority Date	:30/08/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/CA2019/051203
Filing Date	:29/08/2019
(87) International Publication No	:WO 2020/041887
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)HUSKY INJECTION MOLDING SYSTEMS LTD.**

Address of Applicant :500 Queen Street South Bolton, Ontario  
L7E 5S5 Canada

(72)Name of Inventor :

**1)KMOCH, Sven**

**2)FISCH, Ralf Walter**

**3)BOULAY, Cedric**

(57) Abstract :

A mold assembly includes a services block and a cavity plate defining at least a portion of a molding cavity. A quick connection mechanism can connect and disconnect the plate and the services block. The cavity plate may include a base block and a mold cavity block. A mold assembly may include two opposed combinations of such a service block and a cavity plate each mounted to an opposed platen. The base block may include a quick connection device operable connect with and disconnect from a quick connection device on the services block. A services channel in the cavity plate may connect with and disconnect from a service channel in the services block with a quick connection mechanism. A molding system may include a plurality of such cavity plates, each operable to connect with and disconnect from the same services block.

No. of Pages : 117 No. of Claims : 105

(54) Title of the invention : INFINITE HONGIK JOB CREATION BASIC INCOME SMART PLATFORM SYSTEM AND VIRTUOUS CYCLE RELAY DONATION PURCHASE METHOD

(51) International classification	:G06Q0030060000, G06Q0030020000, G06Q0010000000, G06N0003080000, G08G0001140000	(71)Name of Applicant : <b>1)RYU, Chang Yeol</b> Address of Applicant :(Sinheung-dong), 40, Talli-ro 52beon-gil, Sujeong-gu, Seongnam-si, Gyeonggi-do 13341 Republic of Korea
(31) Priority Document No	:10-2020-0015467	(72)Name of Inventor :
(32) Priority Date	:10/02/2020	<b>1)RYU, Chang Yeol</b>
(33) Name of priority country	:Republic of Korea	
(86) International Application No	:PCT/KR2020/002520	
Filing Date	:21/02/2020	
(87) International Publication No	:WO 2021/162164	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Provided are an infinite job creation basic income smart platform system and a virtuous cycle relay donation purchase method. The infinite job creation basic income smart platform system comprises: a database for storing donation member information, supplier information, product information, donation information, and donation revenue information; a DB server connection unit for managing the information stored in the database; a donation processing unit for processing donations made by each donation purchaser; a delivery system connection unit for delivering goods purchased and paid for by the donation purchaser to a designated donation beneficiary; a donation revenue calculation unit for calculating a final income of an initial donation purchaser on the basis of the following equation: final income=personal income-platform operating cost; and a smart platform server for performing a first movement control, in which the group number of the group with which the initial donation purchaser is affiliated is increased by one so that the initial donation purchaser is freed from the currently affiliated group and moved to the next group, when the number of people in the currently affiliated group reaches a set number, performing a second movement control in which each time the number of new donation purchasers for each of the remaining donation members of the currently affiliated group reaches a second set number, the remaining donation members are sequentially moved from the currently affiliated group to the next group, and calculating the final income of the initial donation purchaser and repeating the first and second movement control operations until a certain amount is exceeded.

No. of Pages : 22 No. of Claims : 10

(54) Title of the invention : STEEL BALL CONCEALED THREE-SECTION SLIDE RAIL STRUCTURE AND CABINET

(51) International classification :B60N0002070000,  
A47B0088493000,  
A47B0088437000,  
A47B0063060000,  
H02B0001480000

(31) Priority Document No :202010638729.7

(32) Priority Date :03/07/2020

(33) Name of priority country :China

(86) International Application No :PCT/CN2020/134735

Filing Date :09/12/2020

(87) International Publication No :WO 2022/001003

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)DONGGUAN DIGE HARDWARE PRODUCTS CO., LTD.**

Address of Applicant :No. 8 Wuyong Village Wanghong Road, Wangniudun Town Dongguan, Guangdong 523218 China

(72)Name of Inventor :

**1)HE, Quanfang**

(57) Abstract :

A steel ball (8) concealed three-section slide rail structure and a cabinet, relating to the technical field of furniture. The structure comprises: an upper rail (4), a middle rail (5), a bottom rail (6), and sliders; the upper rail (4) is slidably connected to the middle rail (5); the middle rail (5) is slidably connected to the bottom rail (6); the sliders are provided between the upper rail (4) and the middle rail (5), and the sliders are provided between the middle rail (5) and the bottom rail (6); the upper rail (4) is provided with a first insertion port; the bottom rail (6) is provided with a second insertion port; the first insertion port and the second insertion port are provided opposite to each other; the middle rail (5) comprises a first insertion part, a transition part (54), and a second insertion part connected in sequence; the first insertion part is inserted into the first insertion port to be slidably connected to the upper rail (4); the second insertion part is inserted into the second insertion port to be slidably connected to the bottom rail (6); at least three groups of sliders are provided between the first insertion part and the upper rail (4) and between the second insertion part and the bottom rail (6), respectively; the three groups of sliders are arranged on the cross section of the middle rail (5) in an isosceles triangle shape. The steel ball (8) concealed three-section slide rail structure and the cabinet are stable in sliding and small in occupied space, thereby improving the space utilization rate.

No. of Pages : 12 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008537 A

(19) INDIA

(22) Date of filing of Application :01/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : AN APPARATUS FOR THE BIO-REMEDIATION OF A WASTE WATER COMPOSITION

(51) International classification	:B01J0019240000, C02F0003200000, B01F0003040000, C02F0003100000, C02F0003120000	(71)Name of Applicant : <b>1)IMET CORPORATION</b> Address of Applicant :P.O. Box 470812 Cleveland, Ohio 44147 U.S.A.
(31) Priority Document No	:16/219096	(72)Name of Inventor :
(32) Priority Date	:13/12/2018	<b>1)GENCER, Mehmet A.</b>
(33) Name of priority country	:U.S.A.	<b>2)GENCER, Kaan</b>
(86) International Application No	:PCT/US2019/065158	<b>3)LANGMACK, Clark B.</b>
Filing Date	:09/12/2019	<b>4)ZAKRISKI, Paul M.</b>
(87) International Publication No	:WO 2020/123344	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

One or more new, or existing, or modified, open bottom bio-remediation reactors R are contained within a commercial, industrial, or municipal waste water aeration treatment facility or tank directly above existing and/or new stand-alone diffusers located on the bottom of the facility or tank. The reactors R increase solubility of air and/or oxygen in water, increase energy efficiency, increase through put of treated waste water, and improve bio-remediation of the waste water. Also, a tube reactor having no packing substrates in a non-tube area is described.

No. of Pages : 46 No. of Claims : 39

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008539 A

(19) INDIA

(22) Date of filing of Application :01/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : APPARATUS AND METHOD FOR ASSESSING EMOTION OF INFANTS AND YOUNG CHILDREN

(51) International classification	:A61B0005000000, A61B0005047600, A61B0005040000, A61B0005160000, A61B0005047800	(71)Name of Applicant : <b>1)Johnson &amp; Johnson Consumer Inc.</b> Address of Applicant :199 Grandview Road, Skillman, New Jersey 08558 U.S.A.
(31) Priority Document No	:62/726643	(72)Name of Inventor :
(32) Priority Date	:04/09/2018	<b>1)COUBART, Aurelie</b>
(33) Name of priority country	:U.S.A.	<b>2)GIL-LÓPEZ, Cristina</b>
(86) International Application No	:PCT/IB2019/057327	<b>3)ZUNINO, Helene</b>
Filing Date	:30/08/2019	
(87) International Publication No	:WO 2020/049430	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A system and apparatus for collecting electroencephalography (EEG) data from infants and young children is disclosed.

No. of Pages : 33 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008570 A

(19) INDIA

(22) Date of filing of Application :01/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : ANTI-TIGIT ANTIBODIES

(51) International classification	:C07K0016280000, A61K0039000000, A61K0047680000, A61K0045060000, A61P0035000000
(31) Priority Document No	:62/722063
(32) Priority Date	:23/08/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/047607
Filing Date	:22/08/2019
(87) International Publication No	:WO 2020/041541
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)SEAGEN, INC.**

Address of Applicant :21823 30th Drive SE Bothell,  
Washington 98021 U.S.A.

(72)Name of Inventor :

**1)PIASECKI, Julia, C.**

**2)BEERS, Courtney**

**3)PETERSON, Scott**

**4)PRINZ, Bianka**

**5)GARDAL, Shyra**

(57) Abstract :

Isolated antibodies that bind to human TIGIT (T-cell immunoreceptor with Ig and ITIM domains) are provided. In some embodiments, the antibody has a binding affinity (KD) for human TIGIT of less than 5 nM. In some embodiments, the anti-TIGIT antibody blocks binding of CD 155 and/or CD112 to TIGIT. In some embodiments, the antibodies are afucosylated.

No. of Pages : 138 No. of Claims : 184

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008576 A

(19) INDIA

(22) Date of filing of Application :01/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : CHILD-RESISTANT CONTAINERS AND PACKAGING

(51) International classification	:B65D0043160000, B65D0050000000, B65D0025140000, B65D0005380000, B65D0055020000
(31) Priority Document No	:62/712874
(32) Priority Date	:31/07/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/044561
Filing Date	:31/07/2019
(87) International Publication No	:WO 2020/028599
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)RAYMOND CHRISTOPHER ENTERPRISES LLC.**

Address of Applicant :38701 Seven Mile Road, Suite 160,  
Livonia, MI 48152 U.S.A.

(72)Name of Inventor :

**1)KACHIAN, Ruben**

**2)TOROYAN, Mike**

(57) Abstract :

The child-resistant container includes a receptacle having an inner cavity, a lid that selectively couples with the receptacle to enclose the inner cavity when in a locked position, and a lock movable between the locked position securing the lid to the receptacle to substantially prevent access to the inner cavity and an unlocked position permitting the lid to move relative to the receptacle to expose access to the inner cavity. The receptacle and lid combination may include a lid that pivots relative to a container about a hinge and locks thereto by locking catches in the container sidewalls; or may include an outer housing enclosing an inner storage container in slide-in relation, wherein a pair of safety tabs extend from the inner storage container and through the outer housing into a respective pair of locking channels formed therein.

No. of Pages : 14 No. of Claims : 28



(54) Title of the invention : COMPOSTABLE HOT MELT ADHESIVE

(51) International classification	:B65D0065460000, B32B0027220000, C08J0005120000, B32B0009020000, B32B0027100000	(71)Name of Applicant : <b>1)BOSTIK, INC.</b> Address of Applicant :11320 West Watertown Plank Road Wauwatosa, Wisconsin 53226 U.S.A.
(31) Priority Document No	:62/728424	(72)Name of Inventor :
(32) Priority Date	:07/09/2018	<b>1)KANDERSKI, Monina D.</b>
(33) Name of priority country	:U.S.A.	<b>2)VITRANO, Michael D.</b>
(86) International Application No	:PCT/US2019/049897	<b>3)KEULER, David P.</b>
Filing Date	:06/09/2019	<b>4)PUTHANPARAMBIL, Deepa</b>
(87) International Publication No	:WO 2020/051422	<b>5)LAMBERT, Jacqueline M.</b>
(61) Patent of Addition to Application Number	:NA	<b>6)MORROW, Brian J.</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A hot melt adhesive comprises a polylactide homopolymer or copolymer, such as polylactic acid; sulfonated copolyester; and at least one plasticizer, and is compostable. The plasticizer may be a solid plasticizer, such as a benzoate, and a second plasticizer may also be used. The adhesive is suitable for use in a variety of applications, such as case and carton applications, use with burlap or other compostable substrates for tree bulbs or plant seeds, and use with other compostable films, and is especially appropriate for dual-walled paperboard beverage cups. The adhesive demonstrates good bond performance comparable to non-compostable adhesives over a range of temperatures, reflective of the temperatures of hot and cold beverages.

No. of Pages : 28 No. of Claims : 30

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117008692 A

(19) INDIA

(22) Date of filing of Application :02/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : RESILIENT COMPOSITE STRUCTURAL SUPPORT

(51) International classification	:B01D0053220000, B32B0025080000, C08K0005053000, B32B0037120000, E04D0005140000	(71)Name of Applicant : <b>1)COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN</b> Address of Applicant :23 place des Carmes-Dechaux 63000 Clermont-Ferrand France <b>2)MILES, Kevin, Corbett</b> <b>3)CRON, Steven, M</b> <b>4)GAYLO, Ryan, Micheal</b>
(31) Priority Document No	:62/715270	(72)Name of Inventor : <b>1)MILES, Kevin, Corbett</b> <b>2)CRON, Steven, M</b> <b>3)GAYLO, Ryan, Micheal</b>
(32) Priority Date	:06/08/2018	
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2019/045254	
Filing Date	:06/08/2019	
(87) International Publication No	:WO 2020/033374	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An improved resilient composite structure for connecting two surfaces together where the structure includes an elastomeric joint body connected to one of the two surfaces and at least one reinforcement membrane at one end of the resilient composite structure, where the reinforcement membrane wraps around the end of the resilient composite structure such that one end of the reinforcement membrane is positioned along a side of the resilient composite structure and the other end of the reinforcement membrane is positioned on the opposite side of the resilient composite structure.

No. of Pages : 19 No. of Claims : 15

(54) Title of the invention : SLIDING RAIL ASSEMBLY AND CABINET COMPRISING SAME

(51) International classification	:A47B0088493000, F25D0025020000, E06B0009322000, A47B0088490000, A47B0088473000
(31) Priority Document No	:202010866740.9
(32) Priority Date	:25/08/2020
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2020/134730
Filing Date	:09/12/2020
(87) International Publication No	:WO 2022/041560
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)DONGGUAN DIGE HARDWARE PRODUCTS CO., LTD.**

Address of Applicant :No. 8 Wuyong Village, Wanghong Road, Wangniudun Town Dongguan, Guangdong 523218 China

(72)Name of Inventor :

**1)HE, Quanfang**

(57) Abstract :

A sliding rail assembly and a cabinet employing same. The sliding rail assembly comprises an upper rail (1), a middle rail (2), and a bottom rail (3). The upper rail (1) and the middle rail (2) achieve relative sliding by means of a first rolling element (5), and the middle rail (2) and the bottom rail (3) achieve relative sliding by means of a second rolling element (7), thus the sliding rail assembly can meet the requirements of pulling out and pushing in a drawer. Because a first bent portion (201) of the middle rail (2) is inserted into a first cavity (101) of the upper rail (1), and a second bent portion (203) is inserted into a second cavity (301) of the bottom rail (3), the height of the whole sliding rail assembly is decreased, and the space occupied by the sliding rail assembly below the drawer is reduced, so that more articles can be stored in the drawer. Because a gear (8) engaged with a first toothed edge (401) of a first support (4) and a second toothed edge (601) of a second support (6) is disposed between the two edges, the upper rail (1), the middle rail (2), and the bottom rail (3) can be linked, so that the sliding rail assembly operates more stably, silently and smoothly. The cabinet employing the sliding rail assembly has the advantages of large storage capacity, low noise, good quality.

No. of Pages : 10 No. of Claims : 10

(54) Title of the invention : MONEY TRANSFER INSTRUCTION DEVICE, MONEY TRANSFER INSTRUCTION METHOD, MONEY TRANSFER INSTRUCTION PROGRAM, AND MONEY TRANSFER INSTRUCTION SYSTEM

(51) International classification	:G06Q0020100000, G06F0009500000, G06F0012000000, G06Q0020380000, G06Q0020060000	(71)Name of Applicant : <b>1)TORII Kan</b> Address of Applicant :Shimizu Bldg. 5th Floor, 2-31-20, Ikejiri, Setagaya-ku, Tokyo 1540001 Japan
(31) Priority Document No	:2018-156010	(72)Name of Inventor : <b>1)TORII Kan</b>
(32) Priority Date	:23/08/2018	
(33) Name of priority country	:Japan	
(86) International Application No	:PCT/JP2019/014820	
Filing Date	:03/04/2019	
(87) International Publication No	:WO 2020/039645	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

This money transfer instruction device is provided with: a key information storage unit that stores a plurality of money transfer execution services and a plurality of pieces of key information for enabling a prescribed user to use each money transfer execution service in association with each other; an identification unit that identifies key information in the key information storage unit on the basis of a money transfer execution service designated by said prescribed user; and a money transfer instruction unit that instructs money transfer to a money transfer designation address corresponding to a money transfer designation designated regarding a money transfer amount of prescribed digital currency designated for a prescribed money transfer execution service by using key information identified on the basis of money transfer information in which the money transfer amount and the money transfer destination of the digital currency have been designated. A plurality of pieces of key information vary from one money transfer execution service to another, and include one or more keys and information which enables unique identification of the prescribed user in the money transfer execution service.

No. of Pages : 92 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117010043 A

(19) INDIA

(22) Date of filing of Application :10/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : NOVEL METHODS

(51) International classification	:A61K0045060000, A61K0009200000, C07D0417140000, A61K0031573000, A61K0031445000	(71)Name of Applicant : <b>1)INTRA-CELLULAR THERAPIES, INC.</b> Address of Applicant :430 EAST 29TH STREET SUITE 900 NEW YORK, New York 10016 U.S.A.
(31) Priority Document No	:62/725944	(72)Name of Inventor : <b>1)LI, Peng</b>
(32) Priority Date	:31/08/2018	<b>2)DAVIS, Robert</b>
(33) Name of priority country	:U.S.A.	<b>3)FINDLAY, William Paul</b>
(86) International Application No	:PCT/US2019/049061	
Filing Date	:30/08/2019	
(87) International Publication No	:WO 2020/047407	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure relates to solid oral dosage forms comprising lumateperone, in free, or pharmaceutically acceptable salt form, optionally in combination with one or more additional therapeutic agents, processes for manufacture thereof and methods of use in the treatment or prophylaxis of disease.

No. of Pages : 28 No. of Claims : 21

(54) Title of the invention : METHODS AND DEVICES FOR ENCODING AND DECODING A DATA STREAM REPRESENTING AT LEAST ONE IMAGE

(51) International classification	:H04N0019176000, H04N0019593000, H04N0019440000, H04N0019460000, H04N0019105000	(71)Name of Applicant : <b>1)ORANGE</b> Address of Applicant :78 rue Olivier de Serres 75015 PARIS France
(31) Priority Document No	:1858573	(72)Name of Inventor : <b>1)HENRY, Félix</b>
(32) Priority Date	:21/09/2018	<b>2)ABDOLI, Mohsen</b>
(33) Name of priority country	:France	<b>3)CLARE, Gordon</b>
(86) International Application No	:PCT/FR2019/052029	<b>4)PHILIPPE, Pierrick</b>
Filing Date	:03/09/2019	
(87) International Publication No	:WO 2020/058595	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The invention relates to a method for decoding a stream of encoded data representing at least one image that is split into blocks. For at least one block of the image, referred to as the current block, information indicating an encoding mode, out of a first and a second encoding mode, of the current block is decoded (E42) from the data stream, and the current block is decoded on the basis of this information. When the encoding mode of the current block corresponds to a second encoding mode, the current block is reconstructed on the basis of a prediction obtained, for each pixel, from another, previously decoded pixel belonging to the current block or to a previously decoded block of the image, and a decoded residual associated with said pixel. At least one processing method is applied to the reconstructed current block for at least one pixel of the current block, depending on the encoding mode of the current block and/or the encoding mode of the neighboring blocks.

No. of Pages : 25 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117009297 A

(19) INDIA

(22) Date of filing of Application :05/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : PROCESS FOR CATALYTIC CRACKING OF NAPHTHA USING MULTI-STAGE RADIAL FLOW MOVING BED REACTOR SYSTEM

(51) International classification	:B01J0008120000, B01J0008020000, B01J0008180000, C10G0003000000, C07C0001240000	(71)Name of Applicant : <b>1)SABIC GLOBAL TECHNOLOGIES B.V.</b> Address of Applicant :Plasticslaan 1 4612 PX Bergen Op Zoom Netherlands
(31) Priority Document No	:62/727978	(72)Name of Inventor : <b>1)ALARIFI, Abdulaziz S.</b>
(32) Priority Date	:06/09/2018	<b>2)AL-MAJNOUNI, Khalid A.</b>
(33) Name of priority country	:U.S.A.	<b>3)AL-ZENAIDI, Ahmed</b>
(86) International Application No	:PCT/IB2019/055646	<b>4)PECHIMUTHU, Nandini</b>
Filing Date	:02/07/2019	
(87) International Publication No	:WO 2020/049372	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

System and method for producing olefins are disclosed. The method includes using a radial flow moving bed reactor system to catalytically crack paraffins, in multiple stages with continuous catalyst regeneration, to form olefins. The system includes inter-stage heaters to facilitate increase in yield of olefins.

No. of Pages : 19 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117009298 A

(19) INDIA

(22) Date of filing of Application :05/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : CARBOXAMIDES AS UBIQUITIN-SPECIFIC PROTEASE INHIBITORS

(51) International classification	:A61P0035000000, C07D0495040000, C07D0471040000, C07K0016240000, A61K0031616000	(71)Name of Applicant : <b>1)VALO EARLY DISCOVERY, INC.</b> Address of Applicant :399 Boylston Street Boston, Massachusetts 02116 U.S.A.
(31) Priority Document No	:62/716744	(72)Name of Inventor : <b>1)GUERIN, David, J.</b>
(32) Priority Date	:09/08/2018	<b>2)NG, Pui, Yee</b>
(33) Name of priority country	:U.S.A.	<b>3)WANG, Zhongguo</b>
(86) International Application No	:PCT/US2019/045732	<b>4)SHELEKHIN, Tatiana</b>
Filing Date	:08/08/2019	<b>5)CARAVELLA, Justin</b>
(87) International Publication No	:WO 2020/033707	<b>6)ZABLOCKI, Mary-Margaret</b>
(61) Patent of Addition to Application Number	:NA	<b>7)DOWNING, Jennifer, R.</b>
Filing Date	:NA	<b>8)LI, Hongbin</b>
(62) Divisional to Application Number	:NA	<b>9)IOANNIDIS, Stephanos</b>
Filing Date	:NA	

(57) Abstract :

The present disclosure relates to modulators, such as inhibitors, of at least one pathway chosen from USP28 and USP25, pharmaceutical compositions comprising the inhibitors, and methods of using the inhibitors. The modulators, such as inhibitors, of at least one pathway chosen from USP28 and USP25 can be useful in the treatment of cancers, among other ailments.

No. of Pages : 635 No. of Claims : 17



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117009602 A

(19) INDIA

(22) Date of filing of Application :08/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : INFORMATION ELEMENT TRANSMISSION METHOD AND DEVICE, AND INFORMATION TRANSMISSION METHOD AND DEVICE

(51) International classification	:H04L0005000000, H04B0007060000, H04W0072040000, H04W0056000000, H04B0007041700	(71) <b>Name of Applicant :</b> <b>1)ZTE CORPORATION</b> Address of Applicant :ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan Shenzhen, Guangdong 518057 China
(31) Priority Document No	:201810904593.2	(72) <b>Name of Inventor :</b>
(32) Priority Date	:09/08/2018	<b>1)GAO, Bo</b>
(33) Name of priority country	:China	<b>2)LI, Yu Ngok</b>
(86) International Application No	:PCT/CN2019/099809	<b>3)LU, Zhaohua</b>
Filing Date	:08/08/2019	<b>4)YAO, Ke</b>
(87) International Publication No	:WO 2020/030049	<b>5)ZHANG, Shujuan</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present application provides an information element transmission method and device, and an information transmission method and device. The information element transmission method comprises: a first communication node receiving spatial relationship information configured for multiple uplink information elements and transmitted by a second communication node, and the first communication node transmitting multiple uplink information elements according to the spatial relationship information. Further disclosed are a terminal, a storage medium and an electronic device.

No. of Pages : 39 No. of Claims : 24

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117009607 A

(19) INDIA

(22) Date of filing of Application :08/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : GENOME EDITED FINE MAPPING AND CAUSAL GENE IDENTIFICATION

(51) International classification	:C12N0015820000, C12Q0001687400, A01H0005080000, H04N0019147000, C12Q0001688800	(71)Name of Applicant : <b>1)PIONEER HI-BRED INTERNATIONAL, INC.</b> Address of Applicant :7100 NW 62nd Avenue PO Box 1014 Johnston, Iowa 50131-1014 U.S.A.
(31) Priority Document No	:62/746259	(72)Name of Inventor :
(32) Priority Date	:16/10/2018	<b>1)HUMBERT, Sabrina</b>
(33) Name of priority country	:U.S.A.	<b>2)JUNG, Mark Timothy</b>
(86) International Application No	:PCT/US2019/051011	<b>3)LIU, Zhan-Bin</b>
Filing Date	:13/09/2019	<b>4)MEELEY, Robert B</b>
(87) International Publication No	:WO 2020/081173	<b>5)SHEN, Bo</b>
(61) Patent of Addition to Application Number	:NA	<b>6)SIMON, Marissa</b>
Filing Date	:NA	<b>7)WOLTERS, Petra J</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The field is molecular biology, and more specifically, methods for editing the genome of a plant cell to identify causal alleles of a desired trait or to fine map a desired trait to small region of the genome for gene identification.

No. of Pages : 59 No. of Claims : 79

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117009609 A

(19) INDIA

(22) Date of filing of Application :08/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : METHOD FOR PREPARATION OF POTASSIUM 5-iodo-2-CARBOXYBENZENE SULFONATE

(51) International classification	:C08G0063688000, C07C0245200000, C08K0005420000, D06M0013256000, C07C0017093000	(71)Name of Applicant : <b>1)Arxada AG</b> Address of Applicant :Lonzastrasse 2, 3930 Visp, Switzerland Switzerland
(31) Priority Document No	:18196688.8	(72)Name of Inventor :
(32) Priority Date	:25/09/2018	<b>1)KLEGRAF, Ellen</b>
(33) Name of priority country	:EPO	<b>2)SCHANEN, Patrick</b>
(86) International Application No	:PCT/EP2019/075740	<b>3)ZARAGOZA DOERWALD, Florencio</b>
Filing Date	:24/09/2019	
(87) International Publication No	:WO 2020/064753	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention discloses a method for the preparation of potassium 5-iodo-2-carboxybenzene sulfonate by diazotization of 5-amino-2-carboxybenzene sulfonate and subsequent reaction with KI.

No. of Pages : 11 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117009770 A

(19) INDIA

(22) Date of filing of Application :09/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : VEHICLE RANGE ESTIMATOR

(51) International classification	:B60L0058120000, B60L0058100000, B60W0050000000, B60W0010060000, B60L0003000000	(71)Name of Applicant : <b>1)CUMMINS INC.</b> Address of Applicant :500 Jackson Street Columbus, Indiana 47201 U.S.A.
(31) Priority Document No	:62/773691	(72)Name of Inventor :
(32) Priority Date	:30/11/2018	<b>1)BOOKS, Martin T.</b>
(33) Name of priority country	:U.S.A.	<b>2)BOOTH, Richard A.</b>
(86) International Application No	:PCT/US2019/063760	
Filing Date	:27/11/2019	
(87) International Publication No	:WO 2020/113107	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure provides a method for determining the range of an electric vehicle or a hybrid electric vehicle. The method determines the range by estimating a SOC of the vehicle battery and/or a fuel gain by segregating estimation events and weight averaging data samples based on distance traveled during a sample period. The present disclosure also provides a method for determining battery failure for vehicles.

No. of Pages : 26 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117009779 A

(19) INDIA

(22) Date of filing of Application :09/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : ARTIFICIAL INTELLIGENCE COMPUTING DEVICE, CONTROL METHOD AND APPARATUS, ENGINEER STATION, AND INDUSTRIAL AUTOMATION SYSTEM

(51) International classification	:G05B0019418000, G06N0005020000, G05B0019042000, H04L0012400000, G05B0019050000	(71)Name of Applicant : <b>1)SIEMENS AKTIENGESELLSCHAFT</b> Address of Applicant :Werner-von-Siemens-Strasse 1 80333 Munchen Germany <b>2)JIE, Ming</b> <b>3)XU, Bin</b> <b>4)FENG, Shangke</b> <b>5)XU, Yunlong</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)JIE, Ming</b> <b>2)XU, Bin</b> <b>3)FENG, Shangke</b> <b>4)XU, Yunlong</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:PCT/CN2018/101973	
Filing Date	:23/08/2018	
(87) International Publication No	:WO 2020/037608	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Provided is an artificial intelligence (AI) computing device (20) applied to an industrial automation system. The AI computing device (20) is connected to a field bus by means of a field bus interface and is communicated with a controller (40). The AI computing device (20) processes data sent by the controller (40) by using a built-in AI computing architecture, analyzes the data, and sends the analysis result to the controller (40). Also provided are a corresponding method and apparatus, an engineer station, and an industrial automation system.

No. of Pages : 36 No. of Claims : 32

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117006444 A

(19) INDIA

(22) Date of filing of Application :16/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : INORGANIC OXIDE ARTICLES WITH THIN, DURABLE ANTI-REFLECTIVE STRUCTURES

(51) International classification	:C03C0017340000, G02B0001140000, G02B0001115000, G01N0003420000, C03C0021000000	(71)Name of Applicant : <b>1)CORNING INCORPORATED</b> Address of Applicant :1 Riverfront Plaza Corning, New York 14831 U.S.A.
(31) Priority Document No	:62/765081	(72)Name of Inventor :
(32) Priority Date	:17/08/2018	<b>1)HART, Shandon, Dee</b>
(33) Name of priority country	:U.S.A.	<b>2)KOCH, Karl, William, III</b>
(86) International Application No	:PCT/US2019/046502	<b>3)LIN, Lin</b>
Filing Date	:14/08/2019	<b>4)PRICE, James, Joseph</b>
(87) International Publication No	:WO 2020/037042	<b>5)MAYOLET, Alexandre Michel</b>
(61) Patent of Addition to Application Number	:NA	<b>6)KOSIK WILLIAMS, Carlo Anthony</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An article that includes: an inorganic oxide substrate having opposing major surfaces; and an optical film structure disposed on a first major surface of the substrate, the optical film structure comprising one or more of a silicon-containing oxide, a silicon-containing nitride and a silicon-containing oxynitride and a physical thickness from about 50 nm to less than 500 nm. The article exhibits a hardness of 8 GPa or greater measured at an indentation depth of about 100 nm or a maximum hardness of 9 GPa or greater measured over an indentation depth range from about 100 nm to about 500 nm, the hardness and the maximum hardness measured by a Berkovich Indenter Hardness Test. Further, the article exhibits a single-side photopic average reflectance that is less than 1%.

No. of Pages : 57 No. of Claims : 41

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117010275 A

(19) INDIA

(22) Date of filing of Application :11/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : IMIDAZOPYRIDINONE COMPOUND

(51) International classification	:A61P0001040000, A61K0031192000, A61P0035000000, A61K0031166000, A61K0031436500	(71)Name of Applicant : <b>1)KISSEI PHARMACEUTICAL CO., LTD.</b> Address of Applicant :19-48, Yoshino, Matsumoto-shi, Nagano 3998710 Japan
(31) Priority Document No	:2018-171839	(72)Name of Inventor :
(32) Priority Date	:13/09/2018	<b>1)MORIYAMA Akihiro</b>
(33) Name of priority country	:Japan	<b>2)TAKIGAWA Yasushi</b>
(86) International Application No	:PCT/JP2019/035792	
Filing Date	:12/09/2019	
(87) International Publication No	:WO 2020/054788	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention addresses the problem of providing a novel compound which has an inhibitory effect on prolyl hydroxylases (PHDs), and which is useful as a therapeutic agent for inflammatory bowel diseases such as ulcerative colitis. The present invention relates to an imidazopyridinone compound represented by formula (I) or a pharmacologically acceptable salt thereof. A compound of the present invention or a pharmacologically acceptable salt thereof has an inhibitory effect on prolyl hydroxylases, and is thus useful as a therapeutic agent for inflammatory bowel diseases such as ulcerative colitis. One embodiment of the present invention relates to a method of therapy for inflammatory bowel diseases.

No. of Pages : 139 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117010276 A

(19) INDIA

(22) Date of filing of Application :11/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : DIRECTIONS FOR WIDE ANGLE INTRA PREDICTION

(51) International classification	:H04N0019176000, H04N0019593000, H04N0019110000, H04N0019119000, H04N0019140000	(71)Name of Applicant : <b>1)INTERDIGITAL VC HOLDINGS, INC.</b> Address of Applicant :200 Bellevue Parkway Suite 300 Wilmington, Delaware 19809 U.S.A.
(31) Priority Document No	:18290110.8	(72)Name of Inventor : <b>1)RATH, Gagan</b>
(32) Priority Date	:01/10/2018	<b>2)RACAPE, Fabien</b>
(33) Name of priority country	:EPO	<b>3)URBAN, Fabrice</b>
(86) International Application No	:PCT/US2019/052863	
Filing Date	:25/09/2019	
(87) International Publication No	:WO 2020/072249	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Methods and apparatus for using wide-angle intra prediction for rectangular blocks enable greater prediction angles. Wide-angle intra prediction enables intra prediction direction angles beyond the conventional 45 and -135 degrees. In one embodiment, when a video block to be coded or decoded is non-square, additional intra prediction directions are enabled in the direction of the longer block edge and more reference samples are available along that edge. An index is used to indicate the prediction direction and can be adapted according to the additional intra predictions in the longer direction, with correspondingly fewer prediction directions along the shorter block edge. This preserves the number of prediction modes that need to be indexed but allows their angles to correspond to the shape of the block.

No. of Pages : 31 No. of Claims : 15



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117010279 A

(19) INDIA

(22) Date of filing of Application :11/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : METHOD AND COMPOSITION FOR STIMULATING IMMUNE RESPONSE

(51) International classification	:A61K0039000000, A61K0039390000, A61K0031496000, A61K0039120000, A61K0039210000	(71)Name of Applicant : <b>1)BEYONDSRING PHARMACEUTICALS, INC.</b> Address of Applicant :28 Liberty Street 39th Floor New York, New York 10005 U.S.A.
(31) Priority Document No	:62/765099	(72)Name of Inventor : <b>1)MOHANLAL, Ramon</b>
(32) Priority Date	:16/08/2018	<b>2)HUANG, Lan</b>
(33) Name of priority country	:U.S.A.	<b>3)TONRA, James, R.</b>
(86) International Application No	:PCT/US2019/046944	
Filing Date	:16/08/2019	
(87) International Publication No	:WO 2020/037285	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A composition for administration to a subject is disclosed and the composition comprises a vaccine and plinabulin without or with an adjuvant to induce, enhance or boost humoral response. A method of treatment by administering a vaccine and plinabulin is disclosed. A method of enhancing an immune response to a vaccine in a subject by administering to the subject a vaccine and plinabulin is also disclosed. The vaccine and plinabulin can be administered concurrently or separately.

No. of Pages : 54 No. of Claims : 35

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117010281 A

(19) INDIA

(22) Date of filing of Application :11/03/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : SYSTEM AND METHOD FOR PREDICTING QUALITY OF A CHEMICAL COMPOUND AND/OR OF A FORMULATION THEREOF AS A PRODUCT OF A PRODUCTION PROCESS

(51) International classification	:H04L0012240000, G05B0023020000, G06Q0050040000, G06Q0010060000, G06Q0010040000	(71)Name of Applicant : <b>1)BAYER AKTIENGESELLSCHAFT</b> Address of Applicant :Kaiser-Wilhelm-Allee 1 51373 Leverkusen Germany
(31) Priority Document No	:18195266.4	(72)Name of Inventor :
(32) Priority Date	:18/09/2018	<b>1)MRZIGLOD, Thomas</b>
(33) Name of priority country	:EPO	<b>2)WÜRTH, Lynn</b>
(86) International Application No	:PCT/EP2019/074792	<b>3)MAES, Tom</b>
Filing Date	:17/09/2019	<b>4)WELLNER, Kai, Christopher</b>
(87) International Publication No	:WO 2020/058237	<b>5)TOSCH, Stephan</b>
(61) Patent of Addition to Application Number	:NA	<b>6)BOCK, Christian</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention generally relates to the field of model-based quality prediction of a chemical compound-and/ or of a formulation thereof as the outcome of a production process comprising more than one sub-process. It further relates to a solution for root cause analysis of variations of one or more quality attributes of said product or formulation thereof.

No. of Pages : 15 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117007982 A

(19) INDIA

(22) Date of filing of Application :25/02/2021

(43) Publication Date : 19/08/2022

(54) Title of the invention : BELT SENSOR SYSTEM

(51) International classification	:F16H0007080000, G01L0005040000, F16H0007120000, B60R0021015000, G06F0003035400
(31) Priority Document No	:16/045293
(32) Priority Date	:25/07/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/043013
Filing Date	:23/07/2019
(87) International Publication No	:WO 2020/023499
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)GATES CORPORATION**

Address of Applicant :1144 15th Street Suite 1400 Denver,  
Colorado 80202 U.S.A.

(72)Name of Inventor :

**1)CHINNEL, Kane**

**2)DUKE, JR., Joseph R.**

**3)BROWN, Leslee**

(57) Abstract :

A belt sensor system comprising a first IR sensor disposed adjacent to a belt to detect a belt surface proximity and to generate a first signal therefore, a second IR sensor disposed adjacent to a belt to detect a periodic signal from a second belt surface and to generate a second signal therefore, a signal processor operating on the first signal and second signal to calculate a dynamic belt tension, and displaying the dynamic belt tension on a GUI.

No. of Pages : 14 No. of Claims : 15

(54) Title of the invention : BAG ON VALVE TECHNOLOGY

(51) International classification	:B05B0011000000, B65D0083320000, B05B0007280000, B65D0083620000, B65D0083420000	(71)Name of Applicant : <b>1)SIMPLY BREATHE HOLDINGS LTD</b> Address of Applicant :Unit 4 Beverley Business Centre St. Nicholas Road Beverley HU17 0QT U.K.
(31) Priority Document No	:1812298.6	(72)Name of Inventor :
(32) Priority Date	:27/07/2018	<b>1)BARRATT, Joe Michael</b>
(33) Name of priority country	:U.K.	<b>2)SYGROVE, Matthew James</b>
(86) International Application No	:PCT/IB2019/056330	<b>3)SCHILLER, Dominic Christopher</b>
Filing Date	:24/07/2019	<b>4)RYAN, Thomas Anthony</b>
(87) International Publication No	:WO 2020/021473	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a dispenser (20) comprising a dispenser container (90) filled with a dispensing carrier gas (140) fitted with a valve assembly (10). An ingredient (100) for dispensing is contained in an ingredient containing reservoir (110/150; 110/160), and the ingredient containing reservoir (110/150) is operatively connected to the dispenser container (90) and a dip tube (80) via first and second tubes (82; 84) such that on actuation of the valve assembly (10) the ingredient (100) and carrier dispensing gas (140) travel along the first tube (82) and the second tube (84) respectively, and mix in the valve assembly (10) before exiting the dispenser container (90) via the actuator spray nozzle (200). Alternatively the carrier dispensing gas (140) travels along the second tube (84) into the ingredient containing reservoir (110/160) and carries the ingredient (100) along the first tube (82) where they mix in the valve assembly (10) before exiting the dispenser container (90) via the actuator spray nozzle (200).

No. of Pages : 15 No. of Claims : 14

**CONTINUED TO PART- 2**