पेटेंट कार्यालय शासकीय जर्नल

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DATE: 03/07/2020

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 01st 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.

(Om Prakash Gupta)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

3rd JULY, 2020

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THE PATENT OFFICE KOLKATA, 03/07/2020

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	Near Antop Hill Post Office, S.M. Road, Antop Hill,		G.S.T. Road, Guindy,
	Mumbai – 400 037		Chennai - 600 032.
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	E-mail: cgpdtm@nic.in		E-mail: chennai-patent@nic.in
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			Nadu and the Union Territories of
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2	The Patent Office,		
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	Plot No. 32., Sector-14, Dwarka,		
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	Chandigarh.		
<u></u>	Chanaigain.		

Website: <u>www.ipindia.nic.in</u> 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 26/06/2020 • 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 है:-

1	कार्यालय : महानियंत्रक, एकस्व, अभिकल्प	4	पेटेंट कार्यालय, भारत सरकार
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	एंटोप हिल डाकघर के समीप,		एसआईडीसीओ आरएमडी गोडाउन एरिया
	एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, भारत,		एडजसेन्ट टु ईगल फ्लास्क, जी. एस. टी. रोड,
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			चेन्नई - 600 032.
	फ़ैक्स: (91) (22) 24123322		_ `
	ई. मेल: cgpdtm@nic.in		फोन: (91)(44) 2250 2081-84
			फ़ैक्स: (91) (44) 2250-2066
			ई. मेल: chennai-patent@nic.in
			अान्ध्र प्रदेश, तेलंगाना, कर्नाटक, केरल, तमिलनाडु
			तथा पुडुचेरी राज्य क्षेत्र एवं संघ शासित क्षेत्र,
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~	लक्षदीप
2	पेटेंट कार्यालय, भारत सरकार	5	पेटेंट कार्यालय, भारत सरकार
	बौद्धिक संपदा भवन,		कोलकाता, (प्रधान कार्यालय)
	एंटोप हिल डाकघर के समीप,		बौद्धिक संपदा भवन,
	एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037,		सीपी-2, सेक्टर- v, साल्ट लेक सिटी,
	फोनः (91) (22) 24137701		कोलकाता-700 091, भारत.
	फ़ैक्स: (91) (22) 24130387		फोन: (91)(33) 2367 1943/44/45/46/87
	ई. मेल: Mumbai-patent@nic.in		फ़ैक्स:/Fax: (91)(33) 2367 1988
	💠 🍨 गुजरात, महाराष्ट्र, मध्य प्रदेश, गोवा तथा छत्तीसगढ़ राज्य क्षेत्र एवं संघ शासित		ई. मेल: kolkata-patent@nic.in
	क्षेत्र, दमन तथा दीव, दादर और नगर हवेली •		
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3	पेटेंट कार्यालय, भारत सरकार		
	बौद्धिक संपदा भवन,		
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	उत्तर प्रदेश, दिल्ली तथा उत्तरांचल राज्य क्षेत्रों, एवं संघ शासित		
	क्षेत्र चंडीगढ़		
<u> </u>	<del></del>		

वेबसाइट: http://www.ipindia.nic.in www.patentoffice.nic.in

पेटेंट अधिनियम, 1970 तथा पेटेंट (संशोधन) अधिनियम, 2005 अथवा पेटेंट (संशोधन) नियम, 2006 द्वारा वांछित सभी आवेदन, सूचनाए, 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.

(Om Prakash Gupta)
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 18th 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.201911017617 A

(19) INDIA

(22) Date of filing of Application :02/05/2019 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: OLIVE EXTRACT-CONTAINING COMPOSITIONS AND METHODS OF USE THEREOF

(51) International classification	:A23F0003220000, B65D0085808000, A23F0003300000, A23F0003360000, B65D0085816000	(71)Name of Applicant: 1)Alok Jain Tijaria Address of Applicant: Tijaria Kunj F-32 Ghiya Marg Bani Park Jaipur 302016 Rajasthan India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Alok Jain Tijaria
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention relates to an infusion product for making a beverage, more specifically to a plant-based composition for making a beverage, and to an herbal composition or bouquet garni, for food, medicinal or aromatic applications. The plants (raw materials) are herbs, medicinal plants, tea, and/or spices. The invention further relates to a method for producing said compositions or infusion product, its use for making a (tea) beverage, and a (tea) beverage so obtained. Further, the present invention relates to a fiber-web, preferably a tea bag, made from said herbs, medicinal plants, tea and/or spices.

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

(22) Date of filing of Application :20/05/2019 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: A GAS SENSOR ANALYSING APPARATUS

(51) International classification	:G01N0033000000, G01N0027407000, G08B0021160000, F25J00010000000, F23N0005240000	(71)Name of Applicant:  1)Chitkara Innovation Incubator Foundation Address of Applicant: SCO: 160-161, Sector -9c, Madhya Marg, Chandigarh- 160009, India. Chandigarh India (72)Name of Inventor:
(31) Priority Document No	:NA	1)PUNETHA, Deepak
(32) Priority Date	:NA	2)SINGH, Sartajvir
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(F7) A1		·

#### (57) Abstract:

An apparatus to evaluate a gas sensor is disclosed. According to an embodiment the apparatus can include a housing. The housing includes: a platform configured to hold the gas sensor; one or more inlets to allow inflow of one or more gases, wherein the gas sensor interacts with the one or more gases to produce a detectable change in the gas sensor configuration; and at least two probes electrically coupled to the gas sensor, said at least two probes operatively coupled to one or more processors of a control unit, the control unit configured to: receive a first signal from the gas sensor before the gas sensor interacts with the one or more gases; and receive a second signal from the gas sensor after the gas sensor interacts with the one or more gases, wherein comparison of response of the gas sensor to a predetermined response of a reference gas sensor enables evaluation of efficiency of the gas sensor.

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

(22) Date of filing of Application :23/05/2019 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: ENERGY MANAGEMENT SYSTEM AND METHOD THEREOF

(51) International classification	:H02J0013000000, B60W0010080000, H02J0003140000, F21S00060000000, A61B0018140000	(71)Name of Applicant:  1)Aviconn Solutions Pvt Ltd Address of Applicant:510, Eros City Square, Sector 49, Gurgaon (Haryana), India - 122018 Haryana India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Tapan Kapoor
(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	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention provide an energy management solution by controlling electrical energy for large premises by creating a unique system by creating electrical isolation between sensor and switch with an option to bypass the sensor while controlling plurality of power source driving plurality of loads.

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

(22) Date of filing of Application :25/02/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : DEWDROPS ON COBWEB INDICATE THE EQUILIBRIUM COMPOSITION OF WATER AND OTHER OUTCOMES

	:G06F0017500000, F25B0040000000,	(71)Name of Applicant: 1)Dr.Panckaj Garg
(51) International classification	B60C0011030000,	
		University, Vedaant Gyan Valley, Village-Jharna, Mahala Jobner
	A61N0001378000	Link Road, Jaipur Ajmer Express Way, NH-8, Jaipur-303122,
(31) Priority Document No	:NA	Rajasthan (INDIA) Rajasthan India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)Dr.Shobha Lal
(86) International Application No	:NA	2)Jitendra Joshi
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Rain drops are circular in nature usually due to surface tension. Maintaining the internal heat of any physical substance, it is necessary to resist the heat radiation and for over all existing shapes in the university only a circular shape has lowest surface area. On the Cobwebs, some dewdrops were found on the grass. Only less portion of a field was traced like such Cobwebs and dewdrops on them. Composition of soil and heat radiation from the surface of the land in a certain area is constituent of an equilibrium chain that may determine the strength of the soil. In the winter season cobwebs on the certain points only are an indication of creating a model and simulation of the same for the sandy place of Rajasthan.

No. of Pages: 8 No. of Claims: 7

(22) Date of filing of Application :14/05/2020 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: A NOVEL FACE AND VOICE RECOGNITION BIOMETRIC SYSTEM

(51) International classification	:G06K 9/00 G07C 9/00 G10L 17/26	(71)Name of Applicant: 1)DR. DOLLY THANKACHAN Address of Applicant: C/O MR. PANKAJ MESHRAM FLAT NO14, BLOCK C-10, RADIO COLONY NEAR PARMANAND CHOUK, NEW DELHI-110009, INDIA Delhi India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)DR. DOLLY THANKACHAN
(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	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The invention provides for a very reliable biometric identification system wherein the authentication of the user is carried out by acquiring an image and also a voice/ speech sample. The main object of the invention is to extract the facial features, the speech parameters, extracting the eccentricity parameters of the face for emotional status recognition and to correctly identify the person using the relationship between the image and voice parameters. The invention also provides to develop a relationship between facial feature parameters, eccentricity parameter and acoustical speech parameters for identifying person. Therefore, it is an object of the present invention to provide a system which can identify the user rehably even when the user presents himself / herself under varied emotional state, through a combination of image and voice input. (Fig. 1)

No. of Pages: 41 No. of Claims: 9

(22) Date of filing of Application :10/06/2020 (43) Publication Date : 03/07/2020

(54) Title of the invention: CAR MOVE DL-TECHNOLOGY: CONTROLLING FORCED ROBBERY, ALSO VERIFICATION OF SEAT BELT STATUS (ALLOWED ONLY WHO IS WITH A VALID DRIVING LICENSE AND ALLOWED TO DRIVE (PERMISSION GIVEN BY ADMINISTRATOR)

(51) International classification	22/48 G07C	SCHOLAR)
	9/00 B60R	Address of Applicant :DEPT. OF COMPUTER SCIENCE, BBA UNIVERSITY (A CENTRAL UNIVERSITY) LUCKNOW,
		U.P-226025, INDIA. E-mail: jitu.samriya@gmail.com Uttar
(31) Priority Document No	:NA	Pradesh India
(32) Priority Date	:NA	2)NEETISH KUMAR (RESEARCH SCHOLAR)
(33) Name of priority country	:NA	3)Dr. KUNWAR SINGH VAISLA (PROFESSOR & HEAD)
(86) International Application No	:NA	4)Dr. G. SRIDHAR (PROFESSOR)
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)JITENDRA KUMAR SAMRIYA (RESEARCH
(61) Patent of Addition to Application Number	:NA	SCHOLAR)
Filing Date	:NA	2)NEETISH KUMAR (RESEARCH SCHOLAR)
(62) Divisional to Application Number	:NA	3)Dr. KUNWAR SINGH VAISLA (PROFESSOR & HEAD)
Filing Date	:NA	4)Dr. G. SRIDHAR (PROFESSOR)

#### (57) Abstract:

My Invention Car Move DI-Technology is an according to various surveys 21% of the road accident cases involved those without a regular driving license. The main intention is to build a model which allows people to drive only if he/she has an authorized license and also to encourage drivers to affix their seat belts for their safety. Using this project, initially we capture the finger prints of the person driving the vehicle from the key when he is trying to start the engine. In case the fingerprints do not match with the database the driver would not be allowed to start the engine. Two sensors are fixed one to the steering and one to the seat belt. If the finger prints match in the initial step and a proper connection is established successfully between the two sensors only then will the clutch and accelerator be unlocked. Else the driver would not be able to start the engine. If at any point of time the driver would like to remove the seatbelt, he/she should stop the engine and only then will the seat belt be unlocked. In our invention, we need to identify people who are driving without authorized driving license and who do not wear seat belt during the process of driving for their safety. In summary, allowing driving only to those people who have a valid driving license (via verifying biometric) and stooping robbery (by external force) using biometric (iris scan) of owner after a time period (10 Sec, 10 meter). Note that as first phase, biometric details (at the time of opening Vehicles gate) are connected to central database, if verified response is ok, Then Vehicle can be open for user, otherwise door will not be open. Further as a second phase, when vehicle need to be started, it will check for seat belt status, if seat is not wear, vehicles will not start. Finally, after starting of vehicle, it will ask for valid confirmation of owner of vehicles (this permission will be given by an administrator/ owner of a vehicles) and will be stopped in case of any forced robbery.

No. of Pages: 18 No. of Claims: 7

(22) Date of filing of Application :16/04/2019 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: IN HOUSE BIO GAS PLANT.

		(71)Name of Applicant :
(51) International classification	:C02F3/00	1)SEEMA TIWARI
(31) Priority Document No	:NA	Address of Applicant :903, ROSE, PARK SPRING,
(32) Priority Date	:NA	PORWAL ROAD, PUNE, MAHARASHTRA, INDIA, PIN CODE:
(33) Name of priority country	:NA	411015 Maharashtra India
(86) International Application No	:NA	2)NIDHI JAIN
Filing Date	:NA	3)SANGRAM CHANDRAKANT PATIL
(87) International Publication No	: NA	4)HUZAIF UMARSHARIF MUJAWAR
(61) Patent of Addition to Application Number	:NA	(72)Name of Inventor :
Filing Date	:NA	1)SEEMA TIWARI
(62) Divisional to Application Number	:NA	2)NIDHI JAIN
Filing Date	:NA	3)SANGRAM CHANDRAKANT PATIL
		4)HUZAIF UMARSHARIF MUJAWAR

#### (57) Abstract:

The invention is basically designed to address the everyday challenges of disposing and recycling the dry as well as wet waste into a more productive use i.e. BIOGAS. The setup or the in-house biogas plant has been designed with, taking all the waste or unusable space that is left in the kitchen. The set up will be placed below the sink or anywhere less near the gas stove as a whole compartment. A gas pipe connecting the box to the gas stove. The device at first takes seven days to produce the gas but can later be used regularly. It is also easy to clean without any leaks of odour as it is coated with a special lubricant. This device is cost effective, used to overcome the cost of our regular LPG which will be used to segregate the incoming waste into DRY and WET

No. of Pages: 7 No. of Claims: 10

(22) Date of filing of Application :03/06/2019 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: ASSORTING GEMSTONES

(51) International classification	:G01N0033533000, H05B0031000000, B01J0020286000, C02F0003280000, B63C0007260000	(71)Name of Applicant: 1)SAHAJANAND TECHNOLOGIES PRIVATE LIMITED Address of Applicant: A1, Sahajanand Estate, Wakharia Wadi, Near Dabholi Char Rasta, Ved Road, Surat Gujarat 395004, India Gujarat India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)OZA, Chirag, Dineshchandra
(33) Name of priority country	:NA	2)VAISHNANI, Piyush, Himmatbhai
(86) International Application No	:NA	3)GAJJAR, Munjalkumar, Dhirajlal
Filing Date	:NA	4)GAYWALA, Rahul, Mahendra Kumar
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT ASSORTING GEMSTONES A gemstone sorting unit (100) that performs sorting of rough gemstones includes a base (102), rotating disc (104), a sensor (118), a drive mechanism, an image capturing device and a controller. The rotating disc includes a plurality of bins (106) and is operably coupled to the drive mechanism. The controller is operably coupled to the sensor (118), the drive mechanism and the image capturing device. Each of the plurality of bins (106) is associated with one of many processing parameters that can be used to sort the rough gemstone. The controller identifies the processing parameters for the rough gemstones based on 3D profiles of the rough gemstones. Based on the processing parameters, the controller sorts the rough gemstones into one of the bins (106). Further, each of the bins (106) may be processed separately to obtain the finished gemstones.

No. of Pages: 23 No. of Claims: 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201921023492 A

(19) INDIA

(22) Date of filing of Application :13/06/2019 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: AN ELECTRONIC DICE

		(71)Name of Applicant:
(W4) T	G11B0017049000,	1)RELIANCE LIFESTYLE HOLDINGS LIMITED
(51) International classification	G03G0015080000,	Address of Applicant :5th Floor, Court House, Lokmanya
	A24D0003060000,	Tilak Marg, Dhobi Talao, Mumbai -400002, Maharashtra, India
	B65D0006220000	Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)AVASTHI ABHIJIT
(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	:NA	
Number	:NA	
Filing Date	11111	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(FE) 11		·

#### (57) Abstract:

ABSTRACT AN ELECTRONIC DICE The present disclosure envisages an electronic dice (100) that defines a hollow body (102) with faceted wall(s) (104) having a recognizable indicium and an electronic circuit (200) securely housed inside the hollow body (102). The electronic circuit (200) comprises a motion sensing unit (302) configured to sense rolling movement of the dice (100) and generate a detection signal, light source (304) for emitting light of a defined colour and a controller (202). The controller (202) comprises a transition detection module (306-1) configured to cooperate with said motion sensing unit (302) to detect transition of the dice (100) from rolling movement to non-movement based on said detection signal, a timer unit (306-2) configured to introduce a predefined time delay after the detection of the transition and an activation module (306-3) configured to activate the light source (304) following expiry of the pre-defined time delay.

No. of Pages: 32 No. of Claims: 16

(22) Date of filing of Application :07/10/2019

(43) Publication Date: 03/07/2020

#### (54) Title of the invention: DEVICE FOR POWER CONSUMPTION REDUCTION IN RING FRAME/SPINNING

(51) International classification	F02N0011080000,	(71)Name of Applicant: 1)M/S BHAGYASHREE INNOVATIVE TEXTILE MACHINERY PRIVATE LIMITED Address of Applicant:SHOP NO. 26, SHUBH SHAGUN COMPLEX, RISHIKESH CHSL, PLOT NO29,30 & 31,
(31) Priority Document No	:NA	SECTOR-34, KAMOTHE, NAVI MUMBAI, MAHARASHTRA,
(32) Priority Date	:NA	INDIA. Maharashtra India
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)MR. PRASHANT KHANDU NARAWADE
Filing Date	:NA	2)MR. VEDANT KAILAS MAVAL
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT DEVICE FOR POWER CONSUMPTION REDUCTION IN RING FRAME/SPINNING Present invention discloses device for power consumption reduction in ring frame/spinning. The present invention consists of a suction head (101) connected to a threaded holder (102), the threaded holder (102) is connected to impeller assembly (103) on duct (110) having an impeller fan (104), the motor (105) is connected to impeller fan (104) with a motor shaft, the motor start/stop is controlled by optical sensor placed in sensor box (208). The device of present invention has increased portability and efficiency required for cleaning of fluff & dirt. The device of present invention is a device for power consumption reduction in ring frame/spinning machine which saves power required to remove/suck the broken thread end fibrous fleece on ring frame/spinning.

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

(22) Date of filing of Application :02/01/2020 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: OPEN EDGE FOLDING AND CLOSER MACHINE FOR PINCH BOTTOM BAG

(51) International classification	:B29C0065000000, B29C0065100000, B29C0065780000, B29C0049000000, B29C0065480000	(71)Name of Applicant:  1)Rashminbhai Tulsibhai Patel Address of Applicant: 7/B Park avenue, Thaltej Opp Gulab Tower, Bodakdev Ahmedabad 380054 Gujarat India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Jayeshkumar Dahyabhai Patel
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The packing / closing comprise of Structure Assembly (1), Sealing Station Assembly (2), Station Lifting Assembly (3) & Control Panel Assembly. Sealing Station is adjusted Up & Down level accordingly Bag height with respect to Bag Feeding Conveyor (5) with help of Lifting Motor (4) Sealing Station Assembly(2)comprises of Bag Edge Guide Unit (6), Carrier Belt Section (7), Edge Folding Section (8), Hot Air Sealing Section (9), and Compression Rollers Section (10), a controlled Compressed Air passed through the Hot Air Tool (17) which heat the air according to set temperature & controlled temperature hot air pass between two inner layers of folded edge through Air Nozzle (18). By passing the hot air between two Layers there is hot air cloud generated between compression rollers & Air Nozzle area, With this Hot air the thin inner surface layers of the folded bag top edge is melts & folded layers forms a heat sealing. Now Folded Top edge bags with melted inner folded layers moves further toward Compression Rollers Section, Compression Rollers Section (10) comprise Fix Compression Roller Assembly (19), Movable Compression Roller (20), Compression Rollers Drive (21), and Coupling (22) for Power transition of Roller drive to Rollers & Rollers Cooling arrangement.

No. of Pages: 25 No. of Claims: 8

(22) Date of filing of Application :27/01/2020 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: IMPROVED VEHICLE WHEEL ROTATION APPARATUS

(51) International classification	F02M0035100000, F02B0031000000,	(71)Name of Applicant: 1)PRAMOD LADDHA Address of Applicant:17, Vishram Nagar, Wardha Road, Nagpur 440015 Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)PRAMOD LADDHA
(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	r :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present disclosure describes an improved vehicle wheel rotation apparatus. The apparatus 300 comprises a combustion chamber 301, one or more turbines (302,311) and at least one non-return valve 306. An auxiliary attachment 305 is retrofitted at surface of each bar 304 present in each turbine. The auxiliary attachment 305 comprises 3-tube arrangement, wherein two tubes (305a,305b) of the attachment 305 enable entry of jet of exhaust gases into the attachment 305 and further facilitate the plurality of bars 304 for initiating rotation of the runner 303. The jet of exhaust gases, exiting the attachment 305 through last tube 305c, comprises reducing cross-section near opening, enabling further increment in velocity of exhaust gas, resulting in thrust to the bar 304 to which the attachment 305 is already fitted, thus providing additional rotations to the runner 303 and eventually to one or more wheels of the vehicle.

No. of Pages: 22 No. of Claims: 18

(22) Date of filing of Application: 19/03/2020 (43) Publication Date: 03/07/2020

# (54) Title of the invention : APPARATUS FOR NON-DESTRUCTIVE EVALUATION OF CYLINDRICAL OBJECTS USING GAMMA RAY EMITTING RADIOISOTOPE SOURCE

(32) Priority Date :NA 1)Rajesh V Acharya (33) Name of priority country :NA 2)Umesh Kumar  (86) International Application No :NA Filing Date :NA (87) International Publication No : NA
(86) International Application No :NA Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number Siling Date :NA:
(62) Divisional to Application Number :NA
Filing Date :NA

#### (57) Abstract:

A Computed Tomography Imaging Apparatus used for non-destructive evaluation of cylindrical objects using gamma ray emitting radio isotopic source. The apparatus consists of a baseband, which is fixed using spring tension taking necessary support from the cylindrical specimen. Outer ring is supported on the baseband using wheel assembly. Outer ring is driven freely using crawler moving on baseband. It can be used for understanding the invariant fluid patterns and flow anomalies to get Process Tomography data. Other applications include understanding of internals of a sample with moderate spatial and contrast resolution (i.e. application not restricted to process tomography). It relates to the development, demonstration and deployment of a transportable prototype Industrial Computed Tomography imaging apparatus using sealed radio-isotopic gamma ray source and discreet detector system. It has many advantages such as easy installation, transportable due to low weight, installation can be done along the horizontal, vertical or inclined objects.

No. of Pages: 32 No. of Claims: 12

(22) Date of filing of Application :20/03/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A SECRET HIDING METHOD WITH EDGE BASED CLASSIFIER FOR IMAGE STEGANOGRAPHY USING LSB WITH ENHANCED CEASER CIPHER CRYPTOGRAPHY

(51) Y	G0 (F01 /00	
(51) International classification	:G06F21/00	(71)Name of Applicant:
(31) Priority Document No	:NA	1)DR. RAMAKRISHNA HEGDE
(32) Priority Date	:NA	Address of Applicant :A1-304, SHREYANS SOCITY,
(33) Name of priority country	:NA	PUNAWALE, PUNE - 411033, MAHARASHTRA, INDIA
(86) International Application No	:NA	Maharashtra India
Filing Date	:NA	2)DR. SOUMYASRI S. M
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)DR. RAMAKRISHNA HEGDE
Filing Date	:NA	2)DR. SOUMYASRI S. M
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

In recent years, Steganography is the field of user authentication and data privacy. This paper introduced a novel, principled concept to detect LSB steganography in digital video. It is exposed that the hidden messages length is embedded within least significant bits of image data and it could be assessed through comparatively maximum accuracy. This novel steganalysis approach is based some edge based classifier like Fuzzy Random Forest (FRF) classifier. Here the edge detection is carried out with the improved canny edge detector. Edge detected and non-edge detected pixels are used for the embedding process and in which X and Y secret bits from the Modified Caesar cipher is hidden in the corresponding edge and non-edge pixels. The resulting methodology is simple and fast. To examine the robustness of the proposed methodology, result is compared with the two recent techniques. The result shows our prosed work is secured in case of high embedding efficiency.

No. of Pages: 6 No. of Claims: 3

(22) Date of filing of Application :20/03/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : AN OPTIMAL MODIFIED MATRIX ENCODING TECHNIQUE FOR SECRET WRITING IN MPEG VIDEO USING ECC

(51) International classification	:G06F21/00	(71)Name of Applicant:
(31) Priority Document No	:NA	1)DR. RAMAKRISHNA HEGDE
(32) Priority Date	:NA	Address of Applicant :A1-304, SHREYANS SOCITY,
(33) Name of priority country	:NA	PUNAWALE, PUNE - 411033, MAHARASHTRA, INDIA
(86) International Application No	:NA	Maharashtra India
Filing Date	:NA	2)DR. SOUMYASRI S. M
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)DR. RAMAKRISHNA HEGDE
Filing Date	:NA	2)DR. SOUMYASRI S. M
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

In recent years, Information Security in the field of digital communication is a relevant part because the advancement hiked the fear of receiving the data snooped at the time of sending it from the sender to the receiver. So, a secure technique is designed by amalgamate both Cryptography and Steganography. Initially, users confidential details are encrypted using the more secure Multi curve Elliptic Curve Cryptography (ECC) technique. Next, the encrypted cipher is embedded into the H.264 Video using a novel proposed Optimized Modified Matrix Encoding (OMME) steganographytechnique to embed the secret data. While embedding the encrypted confidential details into the video, pixels from the frames can be selected using an optimization algorithm called Artificial Bee Colony (ABC) in order to reduce distortion of stego video. Finally, the users secret data embedded in the H.264 Video is extracted and it is deciphered. This proposed technique increases the level of security and robustness against attacks in terms of carrier capacity and embedding efficiency when compared to existing methodologies. The proposed work is implemented in the working platform of Matlab and provide data hiding in MPEG video files

No. of Pages: 6 No. of Claims: 3

(22) Date of filing of Application :03/04/2020

(43) Publication Date: 03/07/2020

#### (54) Title of the invention: THE PROCESS FOR PREPARATION OF ROSIN DERIVATIVE OF POLYETHYLENE GLYCOL

(51) International classification	:C08G0063672000, C08L0023060000, C09F0001040000, C08L0093040000, G02C0007020000	(71)Name of Applicant:  1)Burakale Pramod Vitthalrao Address of Applicant: IBBS TM s Dr. Rajendra Gode College of Pharmacy Malkapur Dist. Buldana, Maharashtra India Maharashtra India
(31) Priority Document No	:NA	2)Sudke Suresh Gendappa
(32) Priority Date	:NA	3)Sakarkar Dinesh Mannoharrao
(33) Name of priority country	:NA	4)Bhise Manish Rameshrao
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Burakale Pramod Vitthalrao
(87) International Publication No	: NA	2)Sudke Suresh Gendappa
(61) Patent of Addition to Application Numb	er:NA	3)Sakarkar Dinesh Mannoharrao
Filing Date	:NA	4)Bhise Manish Rameshrao
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

⁽⁵⁷⁾ Abstract:

The present invention relates to the process for preparation of Rosin Ester derivatives of polyethylene glycol of formula 1. The present invention further relates to the optimization and characterization of the Rosin Ester Derivatives of Polyethylene glycol.

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

(22) Date of filing of Application :10/04/2020 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: AN APPARATUS AND METHOD TO GENERATE POWER FROM WINDMILL TOWER

(51) International classification	:H01M0008045370, H01M0016000000, F03G0007080000, F16H0003093000, F01K0011020000	(71)Name of Applicant:  1)Meet Lalitbhai Prajapati Address of Applicant: Student of GTU Affiliated college 34 Bhagyalaxami society, near darbar chowkdi, Manjalpur, Vadodara, Gujarat, India-390011 Gujarat India
(31) Priority Document No	:NA	2)Jay Jayeshbhai Rao
(32) Priority Date	:NA	3)Ishan Rajendra Shinde
(33) Name of priority country	:NA	4)Kailash Kaushal Kumar Gupta
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Meet Lalitbhai Prajapati
(87) International Publication No	: NA	2)Ishan Rajendra Shinde
(61) Patent of Addition to Application Number Filing Date	:NA :NA	3)Jay Jayeshbhai Rao 4)Kailash Kaushal Kumar Gupta
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

An apparatus and method to generate power from windmill tower which generates electricity by means of gravitational force. The present invention relates to a power generation method. The present invention relates to hybrid windmill tower generation method and apparatus.

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

(22) Date of filing of Application :11/04/2020 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: A MEDICAL FACE MASK DEMOLISHER

(51) International classification	:C23C0022730000, H04N0005640000, A61L0009160000, C02F0011060000,	(71)Name of Applicant:  1)Milind J. Umekar Address of Applicant: Smt. Kishoritai Bhoyar College of Pharmacy, Kamptee, Nagpur- 441002, India Maharashtra India
	C02F00011000000,	2)Kamlesh J. Wadher
(31) Priority Document No	:NA	3)Neha S. Raut
(32) Priority Date	:NA	4)Sanjay J. Dhoble
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)Milind J. Umekar
Filing Date	:NA	2)Kamlesh J. Wadher
(87) International Publication No	: NA	3)Neha S. Raut
(61) Patent of Addition to Application Number	r:NA	4)Sanjay J. Dhoble
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention relates to a medical face mask demolisher. The object is to provide a device for controlling passive effect of various micro-organisms. The preferred embodiment comprises of three steps- UV sterilization, incineration sterilization and carbon water treatment. A UV cabinet is assembled in connection with incinerator to dispose used face mask for complete inactivation of microorganisms. Herein at first step sterilization the inlet chamber for mask is connected by conveyer belt to UV cabinet for stipulated period of time to kill almost all the micro-organism and viruses. Further the UV cabinet connected to incinerator for second step of heat sterilization. Further the hazardous fumes which come after incineration can be collected in third step at chamber consist of charcoal and water for environmental protection. Following invention is described in detail with the help of Figure 1 of sheet 1 showing the proposed three stages of the invention.

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

(22) Date of filing of Application :25/04/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: A SPIN COATING APPARATUS FOR POLYMERIC SUBSTANCES

	:B05C0011080000,	(71)Name of Applicant:
	B05D0001000000,	1)Amit R. Bansod
(51) International classification	G03F0007160000,	Address of Applicant :Department of Physics, Dr. Ambedkar
	C12Q0001680600,	College, Nagpur-440010, India Maharashtra India
	H01L0051000000	2)Atul R. Khobragade
(31) Priority Document No	:NA	3)Sanjay J. Dhoble
(32) Priority Date	:NA	4)Omprakash P. Chimankar
(33) Name of priority country	:NA	5)Kishor G. Rewatkar
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Amit R. Bansod
(87) International Publication No	: NA	2)Atul R. Khobragade
(61) Patent of Addition to Application Numb	er:NA	3)Sanjay J. Dhoble
Filing Date	:NA	4)Omprakash P. Chimankar
(62) Divisional to Application Number	:NA	5)Kishor G. Rewatkar
Filing Date	:NA	
		•

#### (57) Abstract:

The present invention relates to a spin coating apparatus for polymeric substances. The proposed invention provides an apparatus for spin-coating thin films of polymer based solvent or solute particularly on glass substrates, used in the spin-coating methods. Herein the circular thin sheet of stainless steel is used as a disc (3) for rotation along its central axis. Four clamps (11)are attached at four corners to pluck the glass on its surface and acting as a substrate. Following invention is described in detail with the help of Figure 1 of sheet 1 showing the spin coating apparatus for polymeric substances.

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

(22) Date of filing of Application :29/04/2020 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: AN ULTRA VIOLET RADIATION BASED SANITIZATION DEVICE FOR PUBLIC TRANSPORT

(51) International classification	:A61L0002040000, A61L0002220000, A61L0002000000, A61L0002100000, B32B0005260000	(71)Name of Applicant:  1)Kamlesh J. Wadher  Address of Applicant: Smt. Kishoritai Bhoyar College of Pharmacy, Kamptee, Nagpur- 441002, India Maharashtra India  2)Milind J. Umekar
(31) Priority Document No	:NA	3)Sanjay J. Dhoble
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)Kamlesh J. Wadher
(86) International Application No	:NA	2)Milind J. Umekar
Filing Date	:NA	3)Sanjay J. Dhoble
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention relates to an ultra violet radiation based sanitization device for public transport. The object of the proposed invention is to provide UV sterilization fixed tunnel unit to clean and sterilize the public transport. In the embodiment the UV exposure of 15 minutes by fixed tunnel unit can cause the virus to become ineffective and reduced viral activity to a non-infectious state. Second preventative hot air cycle after UV treatment can complete inactivate and kill the corona virus and other microorganism. This reduces the spread of the virus on public transport which helped eventually to break the spreading of the corona virus disease. Following invention is described in detail with the help of Figure 1 of sheet 1 showing arrangement of UV light strips for internal and external sanitization and Figure 2 of sheet 1 shows UV light strips for top and bottom sanitization of vehicle.

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

(22) Date of filing of Application :30/04/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A PROCESS FOR SYNTHESIS OF METAL DOPED ALUMINISOILICATE PHOTOCATALYST FOR WASTE WATER TREATMENT

	:C09K0011770000,	(71)Name of Applicant:
	G02B0005300000,	1)Vijay B. Pawade
(51) International classification	B01J0035000000,	Address of Applicant :Department of Applied Physics,
	C02F0001720000,	Laxminarayan Institute of Technology R.T.M. Nagpur University,
	C02F0001300000	Nagpur-440033,India Maharashtra India
(31) Priority Document No	:NA	2)Bharat A. Bhanvase
(32) Priority Date	:NA	3)Sanjay J. Dhoble
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)Vijay B. Pawade
Filing Date	:NA	2)Bharat A. Bhanvase
(87) International Publication No	: NA	3)Sanjay J. Dhoble
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention relates to a synthesis of aluminisoilicate based photocatalyst for waste water treatment. Metal doped nontoxic aluminisoilicate based photocatalyst has been synthesized by simple combustion methods routes using individual metal nitrates and urea. Here, monovalent metal cation used as dopant. The whole synthesis process carried out at 5500C furnace temperature in one step, no further heat treatment is required. Within short time a white phosphor product is obtained and used for characterization. Photocatalyst materials shows the broad band excitation and emission band in near UV and whole visible spectral region, so that, materials have the ability to utilized component of solar light radiation in photo catalytic dye degradation process. From the experimental investigation, it is seen that present materials effectively removed MB dye up to 29.14 % in 120 min under natural sun light illumination.

No. of Pages: 13 No. of Claims: 2

(22) Date of filing of Application :07/05/2020 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: A SYNTHESIS OF CAAL2SI4O12:DY3+BLUE PHOSPHOR FOR LED APPLICATION

	:C09K0011770000, H01L0033500000,	(71)Name of Applicant : 1)Chaitali M. Mehare
(51) International classification	C09K0011080000,	, ·
	C23C0014060000,	University, Nagpur-440033, India Maharashtra India
	H01J0011420000	2)Renu Nayar
(31) Priority Document No	:NA	3)Nirupama S. Dhoble
(32) Priority Date	:NA	4)Sanjay J. Dhoble
(33) Name of priority country	:NA	(72)Name of Inventor :
(86) International Application No	:NA	1)Chaitali M. Mehare
Filing Date	:NA	2)Renu Nayar
(87) International Publication No	: NA	3)Nirupama S. Dhoble
(61) Patent of Addition to Application Numb	er:NA	4)Sanjay J. Dhoble
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention relates to a process for the synthesis of blue phosphor for LED application. The object is to provide a process for synthesis of novel CaAl2Si4O12:Dy3+blue phosphor by using combustion method. The formation of crystal structure and surface morphology is analyzed by X-ray diffraction pattern and scanning electron microscopy techniques. The photoluminescence analysis reveals that prepared phosphor material exhibits an excellent emission at 422 nm, with two peaks around 479 nm and 575 nm monitor at excitation wavelength of near UV 369 nm. In addition, CIE color chromaticity confirms the emission colors locate at the blue light region. This blue emission supports the UV-excited white LED as a one of the candidate of blue emitting material. Following invention is described in detail with the help of Figure 1 of sheet 1 showing flow chart for synthesis CaAl2Si4O12:xDy3+ (0.05 x 7.0 mole%) phosphor by combustion method.

No. of Pages: 17 No. of Claims: 2

(22) Date of filing of Application :09/05/2020

(43) Publication Date: 03/07/2020

(54) Title of the invention: DO IT YOURSELF (DIY) UVC LIGHT STERILIZATION BOX: PREVENT THE SPREAD OF VIRUSES AND BACTERIA BY USING ULTRAVIOLET LIGHT TO DECONTAMINATE AND STERILIZE VEGETABLES, GROCERIES, SUPPLIES AND OTHER ITEMS.

(51) International classification	A61L0002000000, A61L0002260000, A61L0009200000,	MOHAN NAGAR, CHINCHWAD EAST, PUNE-411019, MH,
(31) Priority Document No	A61L0002240000 :NA	INDIA. Date 0f Birth: 18 February 2006 Aadhaar No: 626935075384 E-mail: adityablue2006@gmail.com Maharashtra
(32) Priority Date	:NA	India
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)MR. ADITYA SANDEEP PACHPANDE
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Patent Title: Do it Yourself (DIY) UVC Light Sterilization Box: Prevent the spread of viruses and bacteria by using ultraviolet light to decontaminate and sterilize vegetables, groceries, supplies and other items. ABSTRACT My Invention Do it Yourself (DIY) UVC Light Sterilization Box I aspired to contribute to this crisis and could not see my mother struggle anymore. So, I decided to put all of my years of learnings of design thinking into practice to come up with a proper solution towards this. That made me wonder, and I thought to myself, what is the best thing in the world that can kill any virus or bacteria Sunlight! This solution is inspired by using nature's natural disinfectant: ultraviolet light. I believe that sunlight is the most natural disinfectant of all. For many centuries, humans have been using sunlight as a natural disinfectant. The natural sunlight is not suitable for all items as the heat in sunlight can spoil them and is also not amazingly effective because the UVC does not make it through Earth's atmosphere. If we use UVC light in a controlled environment, it will give better outcomes without the heat in natural sunlight. And, after researching, I found out about UVC lights which emit light to kill microorganisms. It has a wavelength of 200 to 400 nm, which is perfect to kill most of the known viruses and bacteria. It has also been proven and is used to sterilize medical equipment such as gloves, masks, and many more. These observations led me to the idea of using UVC for my sterilization box. Invented box Do it Yourself (DIY) UVC Light Sterilization Box • is an ultraviolet (UV) light disinfection technology is provided that disinfects items such as vegetables, fruits, grocery items and supplies, and other items by direct exposure to ultraviolet light. The disinfecting UV light eliminates viruses, bacteria, fungi and microorganisms from the surfaces that it illuminates. There are many applications to this box but the main one is that it is used for disinfecting in various items that we bring into our homes and ensure that they are safe to use and It can be used to disinfect almost anything like are everyday items such as groceries, paper, electronics, plastic and packed items, toiletries and many more. This can potentially be a simple super easy solution in crisis such as the COVID19 pandemic to help prevent spread of viruses and bacteria. It saves the common people from the cleaning hardships faced by them everyday rand saving them of daily anxiety and tensions. It also saves and helps the environment as itTMs a dry and chemical free sterilization. Decontaminates without use of water, alcohol and other chemicals used traditionally. The solution is reusable, scalable, practical, super easy to assemble and can used in a variety of places with slight modifications and tweaks.

No. of Pages: 23 No. of Claims: 9

(22) Date of filing of Application :09/05/2020

(43) Publication Date: 03/07/2020

#### (54) Title of the invention: A MORTUARY CABINET FOR DISINFECTION OF VIRUS INFECTED DEAD BODIES

(51) International classification	:A61G0017060000, A61L0002100000, A01N0001000000, C02F0001320000, A61L0002180000	(71)Name of Applicant: 1)Nilesh M. Mahajan Address of Applicant: Department of Pharmaceutics, Dadasaheb Balpande College of Pharmacy, Nagpur- 440037, MS, India Maharashtra India
(31) Priority Document No	:NA	2)Nirupama S. Dhoble
(32) Priority Date	:NA	3)Sanjay J. Dhoble
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)Nilesh M. Mahajan
Filing Date	:NA	2)Nirupama S. Dhoble
(87) International Publication No	: NA	3)Sanjay J. Dhoble
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention relates to a mortuary cabinet for disinfection of virus infected dead bodies. The object of the proposed invention is to provide a sanitization cabinet using UV radiation for corona affected dismissal of dead body (3) for protecting the families and relatives from getting infected. The proposed unit has height, width and length as 4-4-7.5 ft3 respectively. All side wall of the cabinet is constructed by thick plastics. UVC lamp i.e. 200 nm to 280 nm wavelength are used for UV exposure purposed. UVC light crushed the NRA of virus and lamps with a radiation peak at around 254 nm for germicidal action for UV sensitization. Following invention is described in detail with the help of Figure 1 of sheet 1 showing the mortuary unit containing dead body (3) for UV radiation exposure, Figure 2 of sheet 1 showing mortuary unit containing dead body (3) wrapped in a plastic.

No. of Pages: 10 No. of Claims: 3

(22) Date of filing of Application :11/05/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A DEVICE TO OPERATE THE CLUTCH LEVER IN MOTORCYCLEBY ACCELERATOR ROLLER HANDLE GRIP

(51) International classification	B62K0023060000, B60W0030180000,	(71)Name of Applicant: 1)SOHAM PAREKH Address of Applicant: Student of GTU Affiliated college F-18, Paramdham Society, Harniwarsya Ring Road Vadodara, Gujarat,
	B62K0011140000	India 390006 Gujarat India
(31) Priority Document No	:NA	2)PANCHAL MRUNAL P.
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)SOHAM PAREKH
(86) International Application No	:NA	2)PANCHAL MRUNAL P.
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numl	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Abstract A device to operate the clutch lever in motorcycle by accelerator roller handle grip comprises an accelerator roller handle grip with a cam attached to the handle grip, being held by a cable holding clamp device, which is connected at one end with cam and another end is connected with a clutch lever where accelerator roller and lever means in conjunction with the cam surface, serves to actuate the motorcycle clutch. The present invention has been implemented so that a lever is controlled by accelerator roller handle grip an aspect of the operation of a motorcycle. [Figure 3]

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

(22) Date of filing of Application :11/05/2020 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: SEATING ARRANGEMENT IN A PASSENGER VEHICLE

(51) International classification	:B62D0063020000, B62K0003000000, B31B0050250000, B62D0047000000, B62D0021140000	(71)Name of Applicant:  1)SOLANKI, Gulab Singh Address of Applicant: House No. 869, Near Kargil Chowk, Sundar Nagar, Raipur, Chhattisgarh - 492001, India. Chattisgarh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)SOLANKI, Gulab Singh
(33) Name of priority country	:NA	2)SOLANKI, Mohit
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present disclosure relates to a passenger vehicle comprising: a vehicle body (102) fitted on a chassis of the passenger vehicle (100); at least two wheels (108) mounted on a floor of the vehicle body (102), configured to perform axis of rotation at the geometrical centre of the polygon, wherein said wheels being operatively coupled to an engine to the passenger vehicle (100) to thereby transmit torque from the engine to the surface in opposition to a desired travel direction of said vehicle; a drive member (104) movably configured with said wheels (108) to revolve around the at least two wheels (108); and one or more seats (106) having central longitudinal axis movably disposed at a distance above a vehicle floor; wherein each seats (106) are coupled to said drive member (104) such that one or more seats revolve around the at least two wheels (108), when said drive member (104) revolves around the at least two wheels (108).

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

(22) Date of filing of Application :21/05/2020 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: CALCULATING DEVICE TO PERFORM BINARY OPERATIONS

(51) International classification	:G09G0003328300, H04L0009000000, G07G0001000000, A63F0009240000, H03K0019230000	(71)Name of Applicant: 1)Prof. PALASH JAIN Address of Applicant: Assistant Professor, Department of Electronics & Communication Engineering, Sagar Institute of Research & Technology, Ayodhya Bypass Road, Opposite Minal
(31) Priority Document No	:NA	Residency, Bhopal, Madhya Pradesh, India, (Pin code - 462041)
(32) Priority Date	:NA	Madhya Pradesh India
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)Prof. PALASH JAIN
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Disclosed is a calculating device (100) that includes a keypad (102), a microcontroller (202), and a display screen (104). The keypad (102) is adapted to receive a plurality of binary input values of up to four bits. The microcontroller (202) stores the plurality of binary input values of up to four bits into a first register. The display screen (104) displays the plurality of binary input values. The keypad (102) receives one or more inputs corresponding to one or more binary operations to be performed on the plurality of binary input values. The keypad (102) receives a second binary input value. The microcontroller (202) stores the second binary input value in a second register. The keypad (102) receives an execution command from a user. The microcontroller (202) performs the binary operations of up to four bits on receiving the execution command to obtain an output value. The display screen (104) displays the output value obtained by the microcontroller (202). The most illustrative drawing: FIG. 1.

No. of Pages: 30 No. of Claims: 6

(22) Date of filing of Application :26/05/2020 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: A SYSTEM FOR IONTOPHORESIS POWER SUPPLY AND DATA ACQUISITION

	I
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A61N0001320000,	1)Surekha Vishnupant Munde
A61N0001300000,	Address of Applicant :F-15, Dakshin Vihar, Nath Valley
G01R0019250000,	School, Aurangabad- 431002, Maharashtra Maharashtra India
A61B0005040200	2)Abdul Jaleel Abdul Haque
:NA	3)Kranti Ramdas Zakde
:NA	4)Abdul Raoof Khan
:NA	5)Yusuf Hanif Shaikh
:NA	6)Mazahar Ahmed Nazeeruddin Farooqui
:NA	(72)Name of Inventor:
: NA	1)Surekha Vishnupant Munde
.NI A	2)Abdul Jaleel Abdul Haque
	3)Kranti Ramdas Zakde
:NA	4)Abdul Raoof Khan
:NA	5)Yusuf Hanif Shaikh
:NA	6)Mazahar Ahmed Nazeeruddin Farooqui
	A61N0001320000, A61N0001300000, G01R0019250000, A61B0005040200 :NA :NA :NA :NA :NA :NA :NA :NA

#### (57) Abstract:

The present invention relates to a system for iontophoresis power supply and data acquisition. The object is to provide system for drug transport across membrane under the influence of electric pulses. It has data acquisition system to read two analogue signals with full scale range of 0 to 5 V. Microcontroller based development board is used in which program is loaded to generate the voltage pulse by switching the relay at desired regular intervals. It can sense any of the two analogue inputs or both at regular intervals of time as set by user or at one minute and send the measured value as serial data to computer using USB port. The readings are displayed on computer screen in graphical form and data is saved in file. Following invention is described in detail with the help of Figure 1 of sheet 1 showing block diagram of the proposed system.

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

(21) Application No.202021022574 A

(19) INDIA

(22) Date of filing of Application :29/05/2020 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: INSTANT COLD THERAPEUTIC APPARATUS

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> </ul>	:A61F7/00 :NA :NA :NA :NA :NA : NA : NA	(71)Name of Applicant: 1)HITESH SHAH Address of Applicant: House No. A3002 Beau Monde Towers Street Appasaheb Marathe Marg, Prabhadevi City Mumbai State Maharashtra Country India Pin code 400025 Maharashtra India 2)DEVARYA H. SHAH (72)Name of Inventor: 1)DEVARYA H. SHAH
Filing Date (62) Divisional to Application Number Filing Date	:NA :NA :NA	

#### (57) Abstract:

ABSTRACT An instant cold therapeutic apparatus, comprising: at least one squeezable packet (1) associated with the apparatus, wherein the packet is gently squeezed by a user, a first burstable pouch (2) present inside the packet filled with first non-toxic reactant and a second burstable pouch (3) available inside the packet having a second non-toxic reactant, wherein the pouches present inside the packet include two non-toxic reactants, which react to produce cooling sensation at the infected portion of the user body.

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

(22) Date of filing of Application :29/05/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: FOLDABLE FURNITURE ASSEMBLY MOUNTED ON A VERTICAL PLANE

(51) International classification	:A47C7/00	(71)Name of Applicant:
(31) Priority Document No	:NA	1)Harshil Jayesh Ribinwala (Student of GTU)
(32) Priority Date	:NA	Address of Applicant :B- 301, Parvat plaza Apt., Parvat Gam,
(33) Name of priority country	:NA	Godadara, Surat 395010 Gujarat India
(86) International Application No	:NA	2)Jayesh Chhaganlal Ribinwala (Beneficiary of GTU IP
Filing Date	:NA	Filing Scheme)
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)Harshil Jayesh Ribinwala (Student of GTU)
Filing Date	:NA	2)Jayesh Chhaganlal Ribinwala (Beneficiary of GTU IP
(62) Divisional to Application Number	:NA	Filing Scheme)
Filing Date	:NA	

#### (57) Abstract:

Foldable furniture which can be mounted on a vertical plane, such as wall of a room or can be stored in a closet and the foldable furniture is flexible with work space as it can be changed from a horizontal usable position to a vertical storage position. It is easy to install the foldable furniture in any interior living space because of its simple construction and mechanism.

(22) Date of filing of Application :29/05/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : NOVEL DEVICE TO RECORD THE WEIGHT OF LOAD FOR A VEHICLE AT ANY TIME ANY WHERE 24X7

(51) Intermetional algorification	.E16D2/00	(71)Nome of Applicant
(51) International classification		(71)Name of Applicant:
(31) Priority Document No	:NA	1)RANSARIYA NILESHBHAI BALUBHAI
(32) Priority Date	:NA	Address of Applicant :32, Marutinagar, Ravapar Road, Morvi,
(33) Name of priority country	:NA	Morbi Mdg. Rajkot, Gujarat 363641 Gujarat India
(86) International Application No	:NA	2)GANDHI DHIREN VINODKANT
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RANSARIYA NILESHBHAI BALUBHAI
(61) Patent of Addition to Application Number	:NA	2)GANDHI DHIREN VINODKANT
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

This invention relates to a Novel device to record the weight of load in vehicle 24X7. The present invention is mainly use in transporting the goods from one place to other, by tracking the current status of loading goods in the vehicle and using the of this records for different analysis in the benefit of owner, country and mankind. The present invented device can be fixed on to any automobiles such as rickshaws, cars, buses, tempos, trucks, tractor trolleys, multi excel, dumpers, long vehicles and train bogies and wagons. To day, rickshaws are available for 3 seats, cars are available for 4 to 8 seats. Busses are available with 14 to 56 seats and trucks / dumpers / trolleys are available with 700 Kg. to 100,000 Kg. loading capacity.

(22) Date of filing of Application :29/05/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: PUNCTURE BREAKDOWN SAFE AND BURST PROOF TIRE

(51) International classification	:F16D3/00	(71)Name of Applicant:
(31) Priority Document No	:NA	1)RANSARIYA NILESHBHAI BALUBHAI
(32) Priority Date	:NA	Address of Applicant :32, Marutinagar, Ravapar Road, Morvi,
(33) Name of priority country	:NA	Morbi Mdg. Rajkot, Gujarat 363641 Gujarat India
(86) International Application No	:NA	2)GANDHI DHIREN VINODKANT
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RANSARIYA NILESHBHAI BALUBHAI
(61) Patent of Addition to Application Number	:NA	2)GANDHI DHIREN VINODKANT
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

This invention relates to Puncture- breakdown safe and burst proof tire design. The present invention relates to burst safe tire technology for vehicles, and more particularly, to explosion-proof security tires for vehicles.

(22) Date of filing of Application :30/05/2020 (43) Publication Date: 03/07/2020

(54) Title of the invention: TRI-HYBRID BIKE

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> <li>(57) Abstract :</li> </ul>	:B60K6/00 :NA :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant:  1)Shashank Rajesh Bahale    Address of Applicant:Flat no 101, durga residency, maloo layout, Kaloti nagar Amravati. Maharashtra India (72)Name of Inventor:  1)Shashank Rajesh Bahale  2)Abhijeet Manoj Dhulekar  3)Akash Satish Mohod  4)Nayana Kashinath jadhao  5)Rekha Prabhakar Shawale  6)Supriya Sunil Waghmare  7)Saurabh Ramdasrao Bhopat  8)Pooja Ramesh Kaikade  9)Tejas Anil Mahajan  10)Nikita Nandkishor Gulhane  11)Parth Vilas deshpande  12)Shubhangi Pradiprao Chinche  13)Akash Avinash Sundarkar  14)Viraj Sunil Deshmuk  15)Pranav Prakashrao Solav  16)Nikita Gajananrao Gawhale  17)Rohit Diliprao Gulalkari  18)Rahul Dadarao Gawai  19)Sachin Shankarlal Chaudhari  20)Nikhil Subhashrao Khade  21)Prajwal Vandeorao Bansod  22)Nishad Eknath Bhule  23)Sakshi Mohan Thakare  24)Prajwal Pradiprao bhujade  25)Chetan Dadarao Pohokar
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This invention electric vehicle (EV) can be operated of three modes there is a combination of the pedal, electric motor, and IC engine so that this EV is more reliable and lucrative to users also help to save fuel consumption. This EV available at moderate cost rather than another EVTMS so this might become main attention to the consumer, An electric bike is described and includes a three type of driven mode pedal assistant, electric motor and IC engine mode combine together to split-up input power as three conventional methods and to support at the economical vehicle. In this innovative automobile model which made at an affordable cost for commercial users apart from that to control CO2 emission and to reduce the pollution level of atmosphere. This innovation will help customers to compare E-Bikes and IC-Engine bikes. This product has both drives IC-Engine drive and Electric drive and also a third drive piddle assist drive which makes it more attractive and helps customers to be healthy. Present invention in general relates to the field of mechanical and electrical engineering and more specifically relates to the field of automobile engineering and more specifically to hybrid vehicle system have low traveling range, high charging time, and high in cost.

(22) Date of filing of Application :02/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : SYSTEM AND METHOD FOR MOBILE HEALTHCARE KIOSK TO BRIDGE OUT THE HEALTH SERVICE BARRIERS

(51) International classification	:A61F7/00	(71)Name of Applicant:
(31) Priority Document No	:NA	1)Yuvitel Technologies Private Limited
(32) Priority Date	:NA	Address of Applicant :88, Manohar vatika, Nagda, District
(33) Name of priority country	:NA	Ujjain, Madhya Pradesh. Madhya Pradesh India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Vibhor chopra
(87) 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 Invention relates to a system and method for mobile healthcare kiosk for remote health consultation, diagnosis and advice to bridge out the health service barriers. It consist of a general diagnosis monitor unit which can perform a number of diagnostic test and consult the medical health expert on the real time basis. It has a special real time handwriting prescription display function which makes it reliable to use at patient end. It has the option of document sharing and magnification of images and videos calling through real time connectivity for remote consultation and diagnosis. The present system can connect to a number of devices and healthcare gadgets used by patients and display the values of health parameters at doctorTMs end without need of prior configuration or API file but with only supporting applications like apk or ipa file with our unique function in our system. The system is very composite and can be driven on motorcycle thus making it flexible and cost effective. The most important application is the availability of distancing diagnosis and treatment without need of physically contacting in time of Covid-19 and post Covid-19. This makes the invention of remote diagnosis system and method to enable people to consult the experts and doctors with the technology without need of physically present and thereby reducing travel expenses of physical contact making it economical and helping towards healthcare for all.

(22) Date of filing of Application :02/06/2020

(43) Publication Date: 03/07/2020

# (54) Title of the invention : PROCESS FOR SYNTHESIS OF DIESEL OIL BY CATALYTIC PYROLYSIS OF THERMO SOFTENING PLASTIC WASTES

(51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date (83) International Publication No (84) Patent of Addition to Application Number Filing Date (85) Divisional to Application Number Substitute Su	A A A A JA A A	(71)Name of Applicant:  1)Sangeeta Hanumant Deshpande Address of Applicant: B-401, Poonam Gardens, Upper Indira Nagar, Bibwewadi, Pune-411037 Maharashtra India  2)Jayant Ambadas Kher 3)Shirish Alias Ratnakar Nilkanth Phadatare 4)Medha Hari Tadpatrikar 5)Nandini Venkat Iyer 6)Manisha Yogesh Khaladkar 7)Ganesh Labhas Agawane 8)Kaustubh Vyankatesh Ghamande (72)Name of Inventor: 1)Sangeeta Hanumant Deshpande 2)Jayant Ambadas Kher 3)Shirish Alias Ratnakar Nilkanth Phadatare 4)Medha Hari Tadpatrikar 5)Nandini Venkat Iyer 6)Manisha Yogesh Khaladkar 7)Ganesh Labhas Agawane 8)Kaustubh Vyankatesh Ghamande
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#### (57) Abstract:

The present invention relates to process for synthesis of diesel oil /petroleum fractions by catalytic pyrolysis of thermo softening plastic wastes. The object of the proposed invention is to provide a method for recovering valuable petroleum resources from waste plastic. In the embodiment the separated waste plastics are clean with acetone and wash with water to remove dirt, dust and other contaminations followed by drying. The plastic wastes are shredded and heated with catalyst in the proportion of 1:10 at temperature of 50°C to 300°C in the presence of catalyst such as Zeolite and Zeolite+ Alumina. Due to heating, the material gets soften first and melts into liquid. Following invention is described in detail with the help of Figure 1 of sheet 1 showing the working flow diagram of the proposed process.

(22) Date of filing of Application :04/06/2020

(43) Publication Date: 03/07/2020

# (54) Title of the invention : SYSTEM AND METHOD TO FORECAST SOLAR ENERGY PRODUCTION AND RECOMMEND ENERGY ALLOCATION FOR ELECTRONIC DEVICES

(51) International classification  (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Siling Date (10) Patent (11) Patent (12) Patent (13) Patent (14) Patent (15) Patent (16) Patent (17) Patent (18) Pat	School, Sahakarnagar No-02, Pune - 411009, Maharashtra, India.  Maharashtra India  2)ARCHANA GHOTKAR  3)ANISH DHAGE  4)APOORV KAKADE  5)GAUTAM NAHAR  6)MAYURESH PINGALE
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#### (57) Abstract:

The present disclosure pertains to a system and method (300) for forecasting solar energy production of a solar panel (110) in a region. The system includes a first Internet of Things (IoT) device (120a) to obtain data associated with the solar panel (110), one or more processors (202) of a computing device (104) coupled to the first IoT device (120a), wherein the processors (202) are configured to receive a meteorological data associated with a predicted weather condition; estimate a solar intensity value for the location at a particular interval of time in future based on the received meteorological data,; and estimate, based on the expected solar intensity value and the obtained data associated with the solar panel, an expected solar energy value. The energy predicted can be used for a smart energy allocation recommendation system for solar devices in a smart home.

(22) Date of filing of Application :05/06/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: A JERK FREE HYDRAULIC LIFT WITH IMPROVED CONTROL VALVE

(51) International classification	:F16D3/00	(71)Name of Applicant:
(31) Priority Document No	:NA	1)Kalapi Auto Industries
(32) Priority Date	:NA	Address of Applicant :Sadbhavana Industrial Area, Opp. Hotel
(33) Name of priority country	:NA	Krishna Park, Near Rolex Ring Pvt. Ltd., Unit No.: 2, Gondal
(86) International Application No	:NA	Road, Kotharia, Rajkot 360002, Gujarat, India Gujarat India
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)Dobaria Sagar Dineshbhai
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

ABSTRACT A JERK FREE HYDRAULIC LIFT WITH IMPROVED CONTROL VALVE The present invention relates to a Jerk Free Hydraulic Lift with improved Control Valve. A Jerk free hydraulic lift with improved control valve comprising, an inner assembly of the hydraulic lift, an improved control valve assembly (1), a plunger assembly (2), a ram cylinder assembly (3), a top linkage assembly (4) and a hydraulic lift body (63). In the present invention, the Control valve is a heart of the whole hydraulic lift in tractor. In state of the art, hydraulic lift used 4mm spool control valve which is not worked properly at a time of farming, because of the jerk problem and/or buckling effect and Lower lifting capacity. In order to overcome this difficulty, the present invention has improved control valve which has 6 mm spool and make a new design which solves the jerk problem and/or buckling effect or increase lift holding step.

(22) Date of filing of Application :05/06/2020

(43) Publication Date: 03/07/2020

# (54) Title of the invention: A SYSTEM FOR RECOMMENDING A RELEVANT QUERY USING A STATISTICAL METHOD

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:G06F19/00 :NA :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant:  1)ARCHANA GHOTKAR Address of Applicant:Survey No. 32/4, Venkateshwara Homes, Row House No 05, Behind Bharati Vidyapeeth, In front of Ganesh Supermarket, Ambegaon (BK), Pune - 411046, Maharashtra, India. Maharashtra India  2)SHRINIWAS NAYAK 3)HRUSHABH HIRUDKAR 4)ANUJ KANETKAR 5)SHEETAL SONAWANE (72)Name of Inventor: 1)ARCHANA GHOTKAR 2)SHRINIWAS NAYAK 3)HRUSHABH HIRUDKAR 4)ANUJ KANETKAR 5)SHEETAL SONAWANE
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#### (57) Abstract:

The present disclosure relates to a computing device (104), system (100) and method (300) for recommending at least one relevant query at least partially based on an input query received from a user (102). The computing device (104) comprises one or more processors (202) to receive the input query on a display, compute, in response to the input query, an output recommending at least one relevant query selected from one or more queries in a dataset, wherein the output is computed based on a similarity between the input query and each of the one or more queries at an evaluated optimum value of a weight factor (L) to recommend the at least one relevant query to the user (102) in response to the input query and display, for selection by the user (102), the output on the at least one relevant query on the display of the computing device (104).

(22) Date of filing of Application :05/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: AUTOMATIC THERMAL SCANNER FOR A PERSON WITH FURTHER PROCESSING OF DATA

(51) International classification	:G06T7/00	(71)Name of Applicant:
(31) Priority Document No	:NA	1)RANSARIYA NILESHBHAI BALUBHAI
(32) Priority Date	:NA	Address of Applicant :32, Marutinagar, Ravapar Road, Morvi,
(33) Name of priority country	:NA	Morbi Mdg. Rajkot, Gujarat 363641 Gujarat India
(86) International Application No	:NA	2)GANDHI DHIREN VINODKANT
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RANSARIYA NILESHBHAI BALUBHAI
(61) Patent of Addition to Application Number	:NA	2)GANDHI DHIREN VINODKANT
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention is related to Automatic thermal scanner for a person with further processing of data. The present invention relates to the field of security inspection, in particular to an Automatically adjustable body temperature measurement and inspection system • . The present invention is mainly use at entry and exit of passengers, employees, individuals carrying or shipping may be transmitted infectious diseases.

(22) Date of filing of Application :05/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A FABRIC COATING COMPOSITION FOR REUSABLE PERSONAL PROTECTIVE EQUIPMENT (PPE)

	A 41DQ 400 /00	
(51) International classification		(71)Name of Applicant :
(31) Priority Document No	:NA	1)Manan J. Gondalia
(32) Priority Date	:NA	Address of Applicant :6/A, Aagam Heritage, Near Vatsaliya
(33) Name of priority country	:NA	Bunglows, Vesu, Surat, 395007, Gujarat, India Gujarat India
(86) International Application No	:NA	(72)Name of Inventor :
Filing Date	:NA	1)Manan J. Gondalia
(87) 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:

Coating composition and method for applying coating composition to personal protective equipment (PPE) fabric are described. The fabric coating composition for reusable personal protective equipment (PPE) includes a mixture of polymeric component and antimicrobial component; one or more cross linking agents; one or more wetting agents; an acetic acid; and C-6 fluorocarbon. Pad batch process is used for applying coating composition to personal protective equipment (PPE) fabric. The fabric coating composition makes personal protective equipment (PPE) reusable after coating the fabric with coating composition, which makes use of personal protective equipment (PPE) cost effective.

(22) Date of filing of Application :06/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : ELECTRIC VEHICLE , BICYCLE AND MACHINE DETACHABLE BATTERY CASING AND FRAME MOUNTED ADJUSTABLE BATTERY CASING HOLDER

(51) International classification	:B60L53/00	(71)Name of Applicant:
(31) Priority Document No	:NA	1)Kaustubh Kishor Deshpande
(32) Priority Date	:NA	Address of Applicant :276/9, Manik Colony, Pimpri
(33) Name of priority country	:NA	Chinchwad Link Road, Pune, Maharashtra, India, Pincode-
(86) International Application No	:NA	411033 Maharashtra India
Filing Date	:NA	2)Sachin Dashrath Belgaonkar
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)Kaustubh Kishor Deshpande
Filing Date	:NA	2)Sachin Dashrath Belgaonkar
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT TITLE: ELECTRIC VEHICLE, BICYCLE AND MACHINE DETACHABLE BATTERY CASING AND FRAME MOUNTED ADJUSTABLE BATTERY CASING HOLDER The present invention relates to a Removable battery System consisting of Detachable Battery Casing (001) and Frame mounted Adjustable Battery Casing holder (009). The applications like Electric vehicle bicycle and machines need mobile electrical power to operate. This power can be provided via battery mounted to these applications but it significantly hinders the operations as battery need charging and this time is considered as downtime. This invention provides a easy to Design, manufacture, maintain and low cost Removable battery system which satisfy the requirement as good as the existing removable battery system. The Detachable Battery Casing houses the Battery (004), Battery thermal management system (BTMS)(015), Accessories and locking mechanism(006) and has angled slopes on either ends. The Frame mounted battery casing holder has angled guide rails(010) on either ends which are connected by solid plate having holes for countersink nut(011B), lock plunger hole(06C) and power socket plug hole(05C). The Detachable battery casing has angled slopes on each end which form tapered projections which interlock with the notch formed by the guide rails on the battery casing holder this Dovetail mechanism secures/constrains 2 of the 3 Axis of movement and the remaining movement on 1 axis is secured/constrained by the lock plunger on battery casing interlocking with guide hole on battery casing holder. The system provides very good restraining and can endure forces and vibration better than other removable systems. The BTMS which consists of multiple heat conducting strips(012A) woven through the array individual cells(014) transfer the heat to and fro from the battery to the Casing sidewalls or heat exchanger(013) which dissipate the heat to the atmosphere and maintain optimal battery temperature.

(22) Date of filing of Application :08/06/2020

(43) Publication Date: 03/07/2020

# (54) Title of the invention: A TRIPLE LAYER BIODEGRADABLE TRANSPARENT MULTI-FUNCTIONAL MASK

### (57) Abstract:

The present invention relates to a triple layer transparent multi-functional mask which is having stickiness or moisture control functioning along with one or more antimicrobial agents. The multi-functional mask assembly consists of two transparent mesh reinforced breathable film (101 and 102) made of a low density polyethylene polymer and one middle layer (103) as sheet module of fine cotton mesh wherein antimicrobial agent is coated on the middle layer (103) though spray deposition method. Following invention described in details with the help of Figure 1 of sheet 1 which shows the preferred embodiment of present disclosure.

(22) Date of filing of Application :09/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A METHOD FOR MITIGATING/MASKING THE BITTER AFTERTASTE OF STEVIA EXTRACT USING HERBAL ADJUVANTS.

(51) International classification	:A23L27/00	(71)Name of Applicant:
(31) Priority Document No	:NA	1)TIWARI, GYANENDRA
(32) Priority Date	:NA	Address of Applicant :DEPARTMENT OF PLANT
(33) Name of priority country	:NA	PHYSIOLOGY, JAWAHARLAL NEHRU KRISHI VISHWA
(86) International Application No	:NA	VIDYALAYA, JABALPUR, MADHYA PRADESH, INDIA -
Filing Date	:NA	482 004. Madhya Pradesh India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)TIWARI, GYANENDRA
Filing Date	:NA	2)UPADHYAY, ANUBHA
(62) Divisional to Application Number	:NA	3)TRIPATHI, NIRAJ
Filing Date	:NA	4)SAGAR, PREETI

#### (57) Abstract:

ABSTRACT A METHOD FOR MITIGATING/MASKING THE BITTER AFTERTASTE OF STEVIA EXTRACT USING NATURAL ADJUVANTS Present invention discloses a method to reduce or masking the bitterness of Stevia extract. Stevia is one the most popular natural low calorie sweeteners used extensively in the food and pharmaceutical industries. The leaves of herb have been used to substitute the sugar to counteract the bitter taste of plant based medicine and for treatment of diabetic person. It is 10-15 times sweeter than sucrose, but its metallic bitter aftertaste after use limits its overall acceptability for general consumers. In order to reduce or mask the bitter aftertaste of stevia extract three herbal adjuvants were used before hot water extraction (first method) and after hot water extraction (second method) and compared with control (hot water extraction without any adjuvants). Evaluation of masking effect was done using organoleptic/sensory test. On the basis of sensory evaluation the second method was found more appropriate in masking bitterness of liquid extraction and overall acceptibility. In this method stevia leaves was extracted individually and adjuvants were mixed in hot water extract while it was hot and kept it for 24 hours before filtration. After that it took for sensory evaluation test. On the other hand in first method stevia leaves mixed with three herbal adjuvants and extracted and filtered before sensory evaluation test. In the methods sweet basil, lemongrass and mint leaves were found better in overall acceptability in organoleptic test.

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021024459 A

(19) INDIA

(22) Date of filing of Application :10/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: INACTIVATED COVID-19 VACCINE

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li></ul>	:A61K 36/00 :NA :NA	(71)Name of Applicant:  1)KUNAL SAMBHAJI LOHAGAONKAR  Address of Applicant:Rajgruha Near Rajiv Gandhi College Naik Nagar Near Anand Nagar Nanded Maharashtra India
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No Filing Date	:NA :NA	1)KUNAL SAMBHAJI LOHAGAONKAR 2)MANISHA KUNAL LOHAGAONKAR
(87) International Publication No (61) Patent of Addition to Application Number	: NA :NA	
Filing Date	:NA	
(62) Divisional to Application Number Filing Date	:NA :NA	

### (57) Abstract:

INACTIVATED COVID-19 VACCINE ABSTRACT An inactivated COVID-19 Vaccine derived from SARS CoV-2 seeds strain or SARS CoV-2 strain bulk suspensions for safe and effective immunization against COVID-19 is provided. A process of preparation for such vaccine and formulations thereof are also provided.

(22) Date of filing of Application :11/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : HPTLC METHOD FOR DETECTION OF PHTHALATE METABOLITES IN BIOLOGICAL MATERIAL

(31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number	A61K 36/00 NA NA NA NA NA NA NA NA NA	(71)Name of Applicant:  1)Thummar Kashyap Naranbhai Address of Applicant:Faculty of GTU Block No. 45, Alay Residency Part 1, Satya Sai Hospital Road, Rajkot 360005, Gujarat, India. Gujarat India 2)Dama Bindiya Shankarbhai 3)Ladolkar Harsh Hasmukhbhai 4)Vaishnav Devendra Jayantilal 5)Sheth Navin Ramanlal (72)Name of Inventor: 1)Thummar Kashyap Naranbhai 2)Dama Bindiya Shankarbhai 3)Ladolkar Harsh Hasmukhbhai 4)Vaishnav Devendra Jayantilal 5)Sheth Navin Ramanlal
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#### (57) Abstract:

HPTLC method for detection of phthalate metabolites in biological material This method is used to analyze phthalate metabolites from urine samples of human beings to detect the contamination of phthalates in human body which occurs due to exposure to plastics. Phthalate contamination leads to problems like male infertility and can be toxic to human health. Four phthalate metabolites namely mono-methyl phthalate, mono-butyl phthalate, mono-benzyl phthalate and mono-ethyl-hexyl phthalate can be simultaneously detected using the HPTLC method of the present invention. This method has been validated and found to be specific and having carryover, accuracy, precision, dilution integrity and stability within acceptable criteria. This HPTLC method had been successfully used to analyze urine samples of 37 infertile men and 14 patients with continuous IV administration. Presence of significant quantities of phthalate metabolites in the samples proved the contamination of phthalates in the body due to the exposure of plastics. Fig. 4

(22) Date of filing of Application :11/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : HPTLC METHOD FOR DETECTION OF PHTHALATES AS EXTRACTABLES AND LEACHABLES FROM PHARMACEUTICAL PRODUCTS

(51) International classification		(71)Name of Applicant:
(31) Priority Document No	31/00 :NA	1)Thummar Kashyap Naranbhai Address of Applicant :Faculty of GTU Block No. 45, Alay
(32) Priority Date	:NA	Residency Part 1, Satya Sai Hospital Road, Rajkot 360005,
(33) Name of priority country	:NA	Gujarat, India. Gujarat India
(86) International Application No	:NA	2)Sheth Navin Ramanlal
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)Thummar Kashyap Naranbhai
(61) Patent of Addition to Application Number	:NA	2)Sheth Navin Ramanlal
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

HPTLC method for detection of phthalates as extractables and leachables from pharmaceutical products This method is used to analyze phthalates from pharmaceutical products filled in plastic containers. Phthalates can be extracted from containers of pharmaceutical products and sometimes also get leached in the content present inside the containers. Four phthalates namely Dimethyl Phthalate (DMP), Diethyl Phthalate (DEP), Dibutyl Phthalate (DBP) and Di(2-Ethyl Hexyl) Phthalate (DEHP) can be simultaneously detected using the HPTLC method of the present invention. The sample preparation, extraction and analysis method of the present invention is very simple and easy. This method was applied to 13 parenteral products packed in plastic containers which were prepared and analyzed for determination of extractables and leachables. All 13 samples showed the presence of DEHP, both as extractables and leachables, along with other phthalates thereby confirming plastic contamination which would flow in the human body along with the pharmaceutical product. Fig. 4

(22) Date of filing of Application :25/04/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention : DESIGN AND FABRICATION OF MULTIPURPOSE MACHINE FOR AGRICULTURAL OPERATIONS

(51) International classification	:A23K0020147000, C12P0019040000, B82Y0030000000, C22B0003000000, C08L0097020000	(71)Name of Applicant:  1)Mr.M.THIRUNAVUKARASU  Address of Applicant: DEPT OF MECH. ENGG, MIT,  KALITHEERTHALKUPPAM, PONDICHERRY, INDIA - 605  107. Tamil Nadu India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Mr.M.THIRUNAVUKARASU
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract : NOT SUBMITTED

(22) Date of filing of Application :30/06/2019 (43) Publication Date : 03/07/2020

### (54) Title of the invention: ADVANCED AUTOMATED SYSTEM OR INSTRUMENT FOR THERAPEUTIC EMESIS

(51) International classification	C12P0019040000, B82Y0030000000, C22B0003000000, C08L0097020000	(71)Name of Applicant:  1)Dr. B Sreenivasa Prasad Address of Applicant: KAHER™s Shri BMK Ayurveda Mahavidyalaya, Shahapur, Belagavi Karnataka India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Dr. B Sreenivasa Prasad
(32) Priority Date	:NA	2)Dr Basavraj Katageri
(33) Name of priority country	:NA	3)Dr Koralli Anil
(86) International Application No	:NA	4)Dr Rajashri Khanai
Filing Date	:NA	5)Dr Sheela Kore
(87) International Publication No	: NA	6)Ms. Swati Pai
(61) Patent of Addition to Application Number Filing Date	:NA :NA	7)Ms. Priya Shirahatti 8)Mr. Chetan Patange 9)Mr. Santosh Hiremath
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ADVANCED AUTOMATED SYSTEM OR INSTRUMENT FOR THERAPEUTIC EMESIS Abstract: The present invention relates to the development of advanced automated system or instrument or apparatus or device or equipment for carrying out the Therapeutic Emesis (Vamana Karma) which will make the process of Vamana Karma effective and modernize the Ayurveda practices. More particularly, the invention relates to the development of advanced automated system or instrument or apparatus or device or equipment for carrying out the Therapeutic Emesis having the automatic height adjustable table along with hygienic modern sink along with the display of the required parameters such as weight, viscosity, pH and temperature of the vomitus values instantaneously. The invention also pertains to the development of method for practicing the use of advanced automated system or instrument or apparatus or device or equipment for carrying out the Therapeutic Emesis.

(22) Date of filing of Application :30/06/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: ADVANCED FLUID HANDLING SYSTEM FOR THERAPEUTIC EMESIS

(51) International classification	C12P0019040000, B82Y0030000000, C22B0003000000, C08L0097020000	(71)Name of Applicant:  1)Dr. B Sreenivasa Prasad Address of Applicant: KAHER™s Shri BMK Ayurveda Mahavidyalaya, Shahapur, Belagavi Karnataka India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Dr. B Sreenivasa Prasad
(32) Priority Date (33) Name of priority country	:NA :NA	2)Dr Basavraj Katageri 3)Dr Koralli Anil
(86) International Application No	:NA	4)Dr Rajashri Khanai
Filing Date	:NA	5)Dr Sheela Kore
(87) International Publication No	: NA	6)Ms. Swati Pai
(61) Patent of Addition to Application Number	:NA :NA	7)Ms. Priya Shirahatti 8)Mr. Chetan Patange
Filing Date		9)Mr. Santosh Hiremath
(62) Divisional to Application Number Filing Date	:NA :NA	

#### (57) Abstract:

Abstract: The present invention relates to the development of advanced fluid handling system or sink for carrying out the Therapeutic Emesis (Vamana Karma) which will make the process of Vamana Karma hygienic, effective and modernize the Ayurveda practices. More particularly, the invention relates to the development of advanced fluid handling system in that vomitus must not rebound back and hygienic. The modern advanced fluid handling system or sink for carrying out the Therapeutic Emesis can be connected with the devices for analyzing the required parameters such as weight, viscosity, pH and temperature. The invention also pertains to the development of method for practicing the use of advanced fluid handling system or sink for carrying out the Therapeutic Emesis.

(22) Date of filing of Application :30/06/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: AUTOMATIC CLEANING SYSTEM FOR SINK IN THERAPEUTIC EMESIS

<ul><li>(51) International classification</li><li>(31) Priority Document No</li></ul>	:A23K0020147000, C12P0019040000, B82Y0030000000, C22B0003000000, C08L0097020000 :NA	(71)Name of Applicant:  1)Dr. B Sreenivasa Prasad Address of Applicant: KAHER TM s Shri BMK Ayurveda Mahavidyalaya, Shahapur, Belagavi Karnataka India (72)Name of Inventor:  1)Dr. B Sreenivasa Prasad
(32) Priority Date	:NA	2)Dr Basavraj Katageri
(33) Name of priority country	:NA	3)Dr Koralli Anil
(86) International Application No	:NA	4)Dr Rajashri Khanai
Filing Date	:NA	5)Dr Sheela Kore
(87) International Publication No	: NA	6)Ms. Swati Pai
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	7)Ms. Priya Shirahatti 8)Mr. Chetan Patange 9)Mr. Santosh Hiremath
(62) Divisional to Application Number Filing Date	:NA :NA	

#### (57) Abstract:

AUTOMATIC CLEANING SYSTEM FOR SINK USED IN THERAPEUTIC EMESIS Abstract: The present invention relates to the development of automatic cleaning system for sink in carrying out the Therapeutic Emesis (Vamana Karma) which will make the process of Vamana Karma hygienic, effective and modernize the Ayurveda practices. More particularly, the invention relates to the development of automatic cleaning system for sink having a rotatory cleaning system which will clean the sink automatically. The modern advanced automatic cleaning system for sink in carrying out the Therapeutic Emesis is connected to the water pumping system, water oozing from these outlets will help in cleaning. The invention also pertains to the development of method for practicing the use of automatic cleaning system for sink in carrying out the Therapeutic Emesis process.

(22) Date of filing of Application :08/08/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: NANOPARTICLES FOR SINGLE CYLINDER SPARK IGNITION ENGINE

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No</li> </ul>	:F02B 75/16 :NA :NA :NA	(71)Name of Applicant:  1)Dr.GURRAM ARUN MANOHAR  Address of Applicant:50-94-25/12, ARUN APARTMENTS SHANTIPURAM, VISAKHAPATNAM, ANDHRA PRADESH- 530016, INDIA. Andhra Pradesh India 2)Dr.G.Arun Manohar
Filing Date  (87) International Publication No  (61) Patent of Addition to Application Number  Filing Date  (62) Divisional to Application Number  Filing Date	:NA :NA :NA :NA :NA	(72)Name of Inventor: 1)Dr.GURRAM ARUN MANOHAR 2)Dr.G.Arun Manohar 3)Dr.D.Nageswara Rao 4)Dr.D. NAGESWARA RAO

#### (57) Abstract:

ABSTRACT: Title: Nanoparticles for Single Cylinder Spark Ignition Engine The present disclosure discloses usage of biodegradable sisal nanoparticles in the combustion chamber of a single cylinder spark ignition engine along with air fuel mixtures. The nanoparticle addition assembly 100 comprises a fuel measuring unit 101, an air measuring unit 102, a temperature measuring unit 103 and a nanoparticle regulating unit 104. The nanoparticle regulating unit 104 is configured to add biodegradable sisal nanoparticles into the cylinder. The nanoparticle regulating unit 104 further comprises a flow channel pipe 105, a storage chamber 106, and a valve 107 positioned before the storage chamber. The method allows a drop in the pollutant formations of CO and HC with the addition of sisal nanoparticles. The combustion efficiency is measured in terms of the maximum temperature attained in the cylinder.

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201941046817 A

(19) INDIA

(22) Date of filing of Application :18/11/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: MODULAR GROUND WATER REJUVENATOR

(51) International classification	E21B0043120000, F16K0017020000,	Address of Applicant :Sterling Villa Grande, Villa no. C32,
	E03C0001050000, E01B0019000000	Seegehalli, Whitefield, Bangalore -560067 Karnataka India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Sreeparna Nandy
(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	::NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

The various embodiments of the present invention provide a modular ground water rejuvenator system. The modular ground water rejuvenator system comprising a water mat unit, a sensor unit and a piping unit. The water mater unit is installed through a modular base via a motor over a preferred surface. The sensor unit is installed on the modular base connected to a processing unit and further to the motor. The piping unit is connected to the water mat unit and resides on the modular base for percolating the water to a ground collector.

(22) Date of filing of Application :03/02/2020

(43) Publication Date: 03/07/2020

# (54) Title of the invention : IMPROVED PROCESS FOR MANUFACTURING DURABLE AND EASY TO DISPERSE TITANIUM DIOXIDE RUTILE PIGMENT

(51) International classification	C12P0019040000, B82Y0030000000, C22B0003000000, C08L0097020000	(71)Name of Applicant:  1)The Kerala Minerals and Metals Limited Address of Applicant: The Kerala Minerals and Metals Limited, Sankaramangalam, Chavara, Kollam, Kerala, Pin - 691583, India Kerala India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)John George
(33) Name of priority country	:NA	2)Gopalakrishnan Chathangat Cheroolil
(86) International Application No	:NA	3)Antony Francis
Filing Date	:NA	4)Manikuttan PK
(87) International Publication No	: NA	5)Sureshbabu G
(61) Patent of Addition to Application Number Filing Date	:NA :NA	6)Chandrabose Janardhanan
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present invention discloses a rutile titanium dioxide pigment comprising a pigmentary core of titanium dioxide (TiO2), a first coating of hydrous oxide of zirconium and silicon layer on TiO2 and a second outer coating of alumina from aluminum citrate as a precursor thereon and a process for preparing said titanium dioxide pigment. Zirconia-silica composite layers and alumina layers improve the quality of the layer formed over the TiO2 pigment and thereby improve the properties of the pigments such as durability, optical performance, and dispersion.

(22) Date of filing of Application :22/02/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: PROCESS FOR PREPARATION OF FULLERENE FROM SHUNGITE

(51) International classification	:C01B0032152000, B82Y0040000000, C01B0032150000, C08F0008120000, B01J0020200000	(71)Name of Applicant:  1)VAKKANTI, Koteshwer Rao Address of Applicant: H No 2-8, Komati Kunta Village, Palakeedu Mandal, Suryapet Dist, Telangana - 508218, India. Telangana India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)VAKKANTI, Koteshwer Rao
(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	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

The present invention generally relates to process of preparing fullerene using mineraloid material. Specifically, the present invention relates to process for preparation of high pure fullerene from shungite which is simple and cost effective.

(22) Date of filing of Application :26/03/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: AN AQUACULTURE MONITORING AND CONTROL SYSTEM AND METHOD

(51) International classification	:C02F0001000000, G01N0033180000, G05B0019418000, F02D0041260000, C02F0001780000	, ,
(31) Priority Document No	:NA	1)B. Girirajan
(32) Priority Date	:NA	2)Leo Joseph
(33) Name of priority country	:NA	3)Ravichander Janapati
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numbe	r :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Disclosed is an aquaculture monitoring and control system (100), the system (100) comprising: sensors (102a-102n) installed in water reservoirs (104a-104m), wherein the sensors (102a-102n) are configured to sense signals representing water quality parameters; and a controller (108) configured to receive the sensed signals from each of the sensors (102a-102n). The controller (108) is configured to: determine values of each of the water quality parameters from the received signals; compare each of the determined values of the water quality parameter stored in a database (110); generate a first notification when one of the determined values of the water quality parameter is less than the corresponding predefined threshold; and activate control units (114a-114o) based on the generated first notification, wherein the control units (114a-114o) are configured to regulate the water quality parameters of the water reservoirs (104a-104m). Claims: 10, Figures: 3 Figure 1 is selected.

(22) Date of filing of Application :26/03/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: A WEARABLE OBSTACLE DETECTOR •

	:G01S0015930000,	(71)Name of Applicant:
	G06F0003010000,	1)Ch. Rajendra Prasad
(51) International classification	A61N0001368000,	Address of Applicant :S R Engineering College,
	G02B0027010000,	Ananthasagar, Warangal, Telangana, India Telangana India
	E05F0015430000	(72)Name of Inventor:
(31) Priority Document No	:NA	1)Ch. Rajendra Prasad
(32) Priority Date	:NA	2)M. Rahman Baig
(33) Name of priority country	:NA	3)P. Mary Velangini
(86) International Application No	:NA	4)K. Sri Chandana
Filing Date	:NA	5)B. Naveen Kumar
(87) International Publication No	: NA	6)Dr. J Tarun Kumar
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
		•

#### (57) Abstract:

Disclosed is a wearable obstacle detector (100), the wearable obstacle detector (100) comprising: a wearable (102) to be worn by a user, wherein the wearable (102) comprises; sensors (104a-104n) configured to sense signals representing a distance of an obstacle from the user; and a controller (106) configured to: receive the sensed signals from each of the sensors (104a-104n); determine the distance of the obstacle from the user based on the received sensed signals; compare the determined distance of the obstacle with a threshold value of the distance stored in a memory (116); and generate a sound in a buzzer (110) when the determined distance of the obstacle is less than the threshold value, wherein the generated sound increases dynamically corresponding to a decrease in the determined distance of the obstacle from the user. Claims: 10, Figures: 3 Figure 1 is selected.

(22) Date of filing of Application :26/03/2020

(43) Publication Date: 03/07/2020

# (54) Title of the invention: COTTON-LEAF DISEASE RECOGNITION SYSTEM AND METHOD THEREOF

(51) International classification	G06T0007000000, G06K0009460000, G06T0007110000, G10L0015020000	<ul> <li>(71)Name of Applicant:</li> <li>1)Dr. Pappula Praveen     Address of Applicant: S R Engineering College,</li> <li>Ananthasagar, Warangal, Telangana, India Telangana India</li> <li>(72)Name of Inventor:</li> </ul>
(31) Priority Document No	:NA	1)Dr. Pappula Praveen
(32) Priority Date	:NA	2)T Sampath Kumar
(33) Name of priority country	:NA	3)D. Srinivas
(86) International Application No	:NA	4)Mohammad Ali Shaik
Filing Date	:NA	5)R. Ravi Kumar
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Disclosed is a cotton-leaf disease recognition system (100) comprising, an image processing module (118) to pre-process a captured cotton-leaf image; a segmentation module (120) to segment the pre-processed image into segments by using a scaling technique; a feature extraction module (122) to extract features from each of the segments; a clustering module (124) to generate clusters of the segments having comparable extracted features by using a grid-based clustering; a classification module (126) to classify each of the generated clusters into one of a cotton-leaf disease by comparing each of the extracted features of each cluster with features corresponding to each of the diseases stored in a training database (108); a reporting module (128) to generate a report corresponding to the cotton-leaf disease based on the classification of the clusters; and a notification module (130) to transmit the generated report to a user. Claims: 10, Figure: 3 Figure 1 is selected.

(22) Date of filing of Application :26/03/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: ORGANIC FERTILIZER MANUFACTURING SYSTEM AND METHOD

(51) International classification	A47J0043080000, A47J0043070000,	(71)Name of Applicant:  1)K. Sreedhar Reddy Address of Applicant: S R Engineering College, Ananthasagar, Warangal, Telangana, India Telangana India
	B01F00070000000	(72)Name of Inventor:
(31) Priority Document No	:NA	1)K. Sreedhar Reddy
(32) Priority Date	:NA	2)J. Tarun Kumar
(33) Name of priority country	:NA	3)B. Girirajan
(86) International Application No	:NA	4)Md. Mujahid Irfan
Filing Date	:NA	5)Leo Joseph
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	per:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(55) 11		•

#### (57) Abstract:

Disclosed is a fertilizer manufacturing system (100), comprising: a vertical mixer (102) having blenders (204a-204n); a motor (208) connected to the blenders (204a-204n); and a controller (210) configured to: compare a current time of the timer (212) with a predefined activation time of the blenders (204a-204n) stored in a database (106); rotate the blenders (204a-204n) when the current time of the timer (212) is equal to the predefined activation time, wherein the blenders (204a-204n) are rotated in a clockwise direction using the motor (208); compare the current time of the timer (212) with a predefined deactivation time of the blenders (204a-204n) stored in the database (106); and deactivate the rotation of the blenders (204a-204n), when the current time of the timer (212) is equal to the predefined deactivation time, wherein a time span between the predefined activation time and the predefined deactivation time is 5 minutes. Claims: 10, Figure: 4 Figure 1 is selected.

(22) Date of filing of Application :31/03/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: VARIABLE LEVEL LIQUID DISPENSER •

	:B01L0003020000,	(71)Name of Applicant :
	G01F0013000000,	1)Ch. Rajendra Prasad
(51) International classification	B67D0007340000,	Address of Applicant :S R Engineering College,
	G06Q0050120000,	Ananthasagar, Warangal, Telangana, India Telangana India
	G01F0023292000	(72)Name of Inventor:
(31) Priority Document No	:NA	1)Ch. Rajendra Prasad
(32) Priority Date	:NA	2)Syed Amar Ali
(33) Name of priority country	:NA	3)Prasanth Rebba
(86) International Application No	:NA	4)Akhila Mokirala
Filing Date	:NA	5)Sangineni Siri Vandhana
(87) International Publication No	: NA	6)Dr. J Tarun Kumar
(61) Patent of Addition to Application Numb	oer:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
		•

#### (57) Abstract:

Title: VARIABLE LEVEL LIQUID DISPENSER ABSTRACT A variable level liquid dispenser (100), the dispenser (100) comprising: sensors (112a-112n); a controller (120) connected to the sensor (112a-112n), the switch board (114), and the motor (116), configured to: detect a presence of the container (106) on the platform (104) of the dispenser (100); receive the sensed signals from the sensor (112a-112n) representing the attributes of the container (106); determine a volume of the container (106); receive an input parameter through the switch board (114) from a user, wherein the input parameter comprises a volume of the liquid to be dispensed into the container (106); and automatically control a volume of the liquid dispensed into the container (106) using a solenoid valve (118) connected to the motor (116) such that the volume of the dispensed liquid is equal to the input parameter when the input parameter is less than the determined volume of the container (106). Claims: 10, Figures: 3 Figure 1A is selected.

(22) Date of filing of Application :31/03/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: INTRAVENOUS BAG ALERTING AND MONITORING SYSTEM AND METHOD •

(51) International classification	:A61M0005140000, A61M0005168000, A61N0001368000, A61J0001140000, B29C0065000000	(71)Name of Applicant:  1)Ch. Rajendra Prasad Address of Applicant: S R Engineering College, Ananthasagar, Warangal, Telangana, India Telangana India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Ch. Rajendra Prasad
(32) Priority Date	:NA	2)Vedantham Sreeharika
(33) Name of priority country	:NA	3)Matta Preethi
(86) International Application No	:NA	4)Sandhi Supreetham
Filing Date	:NA	5)Puli Sanjay
(87) International Publication No	: NA	6)Dr. J Tarun Kumar
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Title: INTRAVENOUS BAG MONITORING AND ALERTING SYSTEM AND METHOD ABSTRACT An Intravenous (IV) bag monitoring system (100) comprising: a sensor (122) installed near a drip chamber (118) of an Intravenous (IV) bag (102) configured to sense signals representing a parameter of the drip chamber (118); a servo motor (106); a monitoring device (114) connected to the sensor (122), and the servo motor (106) configured to: receive the sensed signals from the sensor (122); detect a drop of a liquid dripping inside the drip chamber (118) based on the received sensed signals; rotate the tubing (120) to an angle of 90° using the servo motor (106) such that tubing is compressed and a reverse flow of the liquid is restricted when the drop of the liquid dripping inside the drip chamber (118) is not detected for a predetermined time period, wherein the predetermined time period is 30 seconds; and generate a sound using a buzzer (108) for alerting a user. Claims: 10, Figures: 4 Figure 1A is selected.

(22) Date of filing of Application :31/03/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: SALINE BOTTLE MONITORING SYSTEM •

(51) International classification	G01G0019414000, A61N0001368000,	
	G01R0029080000, F04B0051000000	
(31) Priority Document No	:NA	(72)Name of Inventor : 1)A Rajeshwar Rao
(32) Priority Date	:NA	2)A Pranith
(33) Name of priority country	:NA	3)B Pranay Kumar
(86) International Application No	:NA	4)D Preethi
Filing Date	:NA	5)A Sai Srija
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(55) A1		·

#### (57) Abstract:

Title: SALINE BOTTLE MONITORING SYSTEM AND METHOD ABSTRACT A saline bottle monitoring system (100) comprising: a sensor (120) installed in a case (118) of a saline bottle (102). The sensor (120) is configured to sense signals representing a weight of the saline bottle (102); a servo motor (106); a controller (114) connected to the sensor (120), and the servo motor (106) configured to: receive the sensed signals from the sensor (120) representing the weight of the saline bottle (102) over a communication network (110); determine the weight of the saline bottle (102) based on the sensed signals; compare the determined weight of the saline bottle (102) with a predefined threshold weight of the saline bottle (102); and compress a clamp (124) connected to the tube (122) using the servo motor (106) when the determined weight of the saline bottle (102) is less than or equal to the predefined threshold weight of the saline bottle (102). Claims: 10, Figures:4 Figure 1A is selected.

(22) Date of filing of Application :20/04/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : METHOD FOR MANUFACTURING OF MAGNETIC NANO-FIELDS USING MICRO-EDM PROCESS $\bullet$

(51) International classification	:B23H0001020000, B23H0011000000, B23H0007260000, B23H0009140000, B23H0009000000	(71)Name of Applicant:  1)Dr. Pankaj Kumar  Address of Applicant: S R Engineering College,  Ananthasagar, Warangal, Telangana, India Telangana India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Dr. Pankaj Kumar
(32) Priority Date	:NA	2)Dr. Manowar Hussain
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Title: METHOD FOR MANUFACTURING OF MAGNETIC NANO-FLUIDS USING MICRO-EDM PROCESS ABSTRACT A method for producing magnetic Nano-fluids, the method comprising steps of: installing a tool (102) and a work piece (104) onto a micro Electrical Discharge Machining (EDM) apparatus (100); wherein the tool (102) is a nickel rod and the work piece (104) is a nickel plate; introducing a base fluid (116) into a container (106) of the micro EDM apparatus (100), wherein the base fluid (116) is a Deionized (DI) water; controlling micro EDM parameters using a pulse generator (114) to control a shape and a size of Nano-particles of a produced Nano-fluid, wherein the micro EDM parameters are selected from one of, a pulse-on time, a gap voltage, or a combination thereof; collecting the produced Nano-fluid in a glass vial, wherein the produced Nano-fluid is a nickel-DI water Nano-fluid; and controlling an agglomeration of Nano-particles in the produced Nano-fluid using an ultra-sonication process. Claims: 10, Figures: 3 Figure 1 is selected.

(22) Date of filing of Application :20/04/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: UTILITY BAG FOR CARRY SURVEYING TOOLS •

	G01C0015000000,	(71)Name of Applicant: 1)ALOK GOVIL
(51) International classification	C08L0023120000,	
(31) Priority Document No	:NA	1)ALOK GOVIL
(32) Priority Date	:NA	2)Saipriya Pillalamarri
(33) Name of priority country	:NA	3)Syed Shoaib Zakki
(86) International Application No	:NA	4)Revanth Aluvala
Filing Date	:NA	5)Lavudiya Nandhini
(87) International Publication No	: NA	6)Ansar Uddin
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
<ul> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number</li> </ul>	G01C0015100000, A45C0005140000 :NA :NA :NA :NA :NA :NA :NA :NA :NA :NA	Ananthasagar, Warangal, Telangana, India Telangana India (72)Name of Inventor: 1)ALOK GOVIL 2)Saipriya Pillalamarri 3)Syed Shoaib Zakki 4)Revanth Aluvala 5)Lavudiya Nandhini

#### (57) Abstract:

Title: UTILITY BAG FOR CARRY SURVEYING TOOLS ABSTRACT A utility bag (100) comprising: an upper compartment (110) comprising: an arrow and peg pocket (200) having a board comprising hollow openings configured to hold pegs and arrows; a compass pocket (202) having a diameter of 14 cm and a width of 3 cm; a chain pocket (204) having a diameter of 42 cm and a height of 18 cm; a tape pocket (206) having a diameter of 1 cm and a width of 2.5 cm; and a plumb bob pocket (208) having a diameter of 4 cm and a height in a range of 5 cm to 10 cm; a lower compartment (112) configured to store a total station box, wherein a length of the lower compartment is 40 cm, a width of the lower compartment is 22 cm and a height of the lower compartment is 22 cm; a detachable stool attached to the lower compartment (112). Claims: 10, Figures: 3 Figure 1A is selected.

(22) Date of filing of Application :20/04/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: SYSTEM AND METHOD FOR MONITORING A FAULT IN A TRANSFORMER •

(51) International classification	G01N0033280000, H01F0027140000,	, ,
(31) Priority Document No	:NA	1)D Rajababu
(32) Priority Date	:NA	2)A Rajeshwar Rao
(33) Name of priority country	:NA	3)K Ramsha
(86) International Application No	:NA	4)B Sathyavani
Filing Date	:NA	5)Bura Vijay Kumar
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Title: SYSTEM AND METHOD FOR MONITORING A FAULT IN A TRANSFORMER ABSTRACT A method for monitoring a fault in a transformer (102) comprising steps of: receiving sensed signals from sensors (116a-116n) representing parameters inside the transformer (102), determining the temperature of the oil inside the transformer (102) based on the received sensed signals; comparing the determined temperature of the oil inside the transformer (102) with a predefined threshold oil temperature; activating fans (118a-118m) to lower the temperature of the oil inside the transformer (102) when the determined temperature of the oil inside the transformer (102); segreter than the predefined threshold oil temperature; determining the lowered temperature of the oil inside the transformer (102); comparing the determined lowered temperature of the oil inside the transformer (102) with the predefined threshold oil temperature; and disconnecting a load (126) by activating a relay (124) when the determined lowered temperature of the oil inside the transformer (102) is greater than the predefined threshold oil temperature. Claims: 10, Figures: 5 Figure 1A is selected.

(22) Date of filing of Application :20/04/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: PROTECTIVE HEALTH MONITORING SYSTEM AND METHOD •

(51) International classification	:A61B0005000000, A42B0003040000, H04W0036000000, G16H0050200000, A61B0005045200	(71)Name of Applicant:  1)Dr. P. Murthi  Address of Applicant: S R Engineering College, Ananthasagar, Warangal Telangana India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Dr. P. Murthi
(32) Priority Date	:NA	2)Dr. K. Poongodi
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Title: PROTECTIVE HEALTH MONITORING SYSTEM AND METHOD Disclosed is a protective health monitoring system (100) comprising: a helmet (102) to be worn by a worker, wherein the helmet (102) comprises: sensors (118a-118n) configured to sense signals representing one of, health parameters of the worker, environmental parameters, load parameters, or a combination thereof; a controller (120) configured to: receive the sensed signals from each of the sensors (118a-118n); determine, the health parameters of the worker, the environmental parameters and the load parameters based on the received sensed signals; match each of the determined health parameters with threshold values of each of the health parameters stored in a database (106) corresponding to the determined environmental parameters, and the determined load parameters; and generate a notification when at least one of the determined health parameters is unmatched with the threshold value, representing an abnormal fatigue level, wherein the notification generates a sound through a buzzer (122) of the helmet (102). Claims: 10, Figures: 4 Figure 1 is selected.

(22) Date of filing of Application :27/04/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: SYSTEM AND METHOD FOR CREATING INTERFACES

	:G06F0017500000,	(71)Name of Applicant:
	G06F0017240000,	1)ZIVRO ONLINE SOLUTIONS LLP
(51) International classification	G05B0013040000,	Address of Applicant :503, BRIGADE RUBIX,
	G03B0021000000,	YESHWANTPUR, BENGALURU 560022, KARNATAKA,
	G06F0007000000	INDIA Karnataka India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)KARTHIK KUMAR SEETHALAKSHMI
(33) Name of priority country	:NA	KRISHNAMOORTHI
(86) International Application No	:NA	2)PALLAVI DURAIRAJA SINNANCHI
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

SYSTEM AND METHOD FOR CREATING INTERFACES ABSTRACT A system and a method for creating interfaces is disclosed. The system includes an input receiving subsystem configured to receive one or more user inputs. The system also includes a model creation subsystem configured to create a data model relevant to the one or more user inputs received by the input receiving subsystem from a database using a data driven technique. The system also includes a design generation subsystem configured to generate one or more designs based on the data model created by the model creation subsystem using a design generation technique for creating the interfaces. FIG. 2

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

(22) Date of filing of Application :05/05/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: SYSTEM FOR PROVIDING FEEDBACK TO A USER IN A VIRTUAL ENVIRONMENT

(51) International classification	A61M0005145000, A61B00050000000,	(71)Name of Applicant:  1)AUFENBACH PRIVATE LIMITED  Address of Applicant: 12-2-118, Murad Nagar, Mehdipatnam, Hyderabad, Telangana - 500028, India. Telangana India (72)Name of Inventor:
(31) Priority Document No	:NA	1)MOHAMED AZMAN
(32) Priority Date	:NA	2)CHIRAYU RANKAWAT
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

A system for providing a feedback to a user in a virtual environment is disclosed. The system includes a wearable device comprising at least a channel and a module having fluid filled within, the fluid having adjustable mechanical properties and kinetics. Further is provided a reservoir operatively coupled with at least the channel and the module, the reservoir configured to vary the mechanical properties and/or the kinetics within at least the channel, the module and the reservoir. Furthermore, is provided a controller configured to receive an input, and in response to receiving the input, applying an electric field within the channel via the reservoir to alter the adjustable mechanical properties of the fluid to a state so as to provide the feedback to a user wearing the wearable device.

No. of Pages: 28 No. of Claims: 19

(22) Date of filing of Application :12/05/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: A CRANK OF A SLIDER-CRANK MECHANISM

(51) International classification	:F04B0039000000, B62M0003000000, H01Q0009040000, F01B0009020000, E06B0009000000	'' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Infant Maria Ronald. M
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The invention relates to a crank 100 of a slider-crank mechanism. The crank 100 includes a first elongated member 102 pivotally mounted on a first cylindrical member 110 of a frame, and a second elongated member 112 pivotally mounted on a second cylindrical member 120 of the frame, such that the second elongated member 112 is arranged parallel to the first elongated member 102. The crank 100 further includes an intermediate element 122 connecting the first elongated member 102 to the second elongated member 112. The intermediate element 122 is configured to transfer motion between the first elongated member 102 and the second elongated member 112. The crank 100 further includes a crankpin 132 having a first extension 138 and a second extension 140. The first extension 138 is pivotally coupled to the first elongated member 102 and the second extension 140 is pivotally coupled to the second elongated member 112.

No. of Pages: 27 No. of Claims: 18

(22) Date of filing of Application :16/05/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: AEROSOL TRAP AND TREATMENT FACILITATOR

(51) International classification	:A61M0039020000, A61B0090400000, A61M0035000000, A61B0090000000, A61B0090300000	(71)Name of Applicant: 1)Dr. Abraham Oomman Address of Applicant: New no 10/4 (Old No.12/4), 2nd Floor SEAGULL APARTMENTS, 4th STREET GOPALAPURAM CHENNAI Tamil Nadu India
(31) Priority Document No	:NA	2)Dr. Soosan Jacob
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)Dr. Abraham Oomman
(86) International Application No	:NA	2)Dr. Soosan Jacob
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

AEROSOL TRAP AND TREATMENT FACILITATOR The present invention relates to trapping device (100) and treatment facilitator to be used during surgery or procedures performed on the living body or during care of infected or potentially infected individual or while dealing with potentially contaminated, infected or harmful material outside the human body to trap contaminants or for using it for treatment/ therapy to introduce various substances into the interior of the device while being used in both infected and non-infected individuals/situations. The device is a hollow chamber (5) with special properties that completely seals off the area of interest. One or more access holes (50) with special sleeves or conduits (60) allow air-tight sealed passage of instruments into device (100). Further, a set of valves and tubes, disinfectant and delivery mechanisms help in delivering various forms of treatment and safely performing procedures, surgeries or other forms of manipulations while trapping contaminants. Figure: 1(a)

No. of Pages: 30 No. of Claims: 15

(22) Date of filing of Application :28/05/2020 (43) 1

(43) Publication Date: 03/07/2020

# (54) Title of the invention: SMART FOLLOWER EMBEDDED IN COMBAT BOOTS FOR SOLDIERS UNDER IOT NETWORK

<ul><li>(51) International classification</li><li>(31) Priority Document No</li></ul>	:H04L0029080000, H04W0004029000, G16H0050800000, H04W0004020000, G01N0033680000	Address of Applicant :Alpha College of Engineering, Assistant Professor, Computer Science, No.34, Udayavar koil Street, Dr. Grace George Nagar, Thirumazhisai, Chennai-600124, Tamilnadu Tamil Nadu India
(32) Priority Date	:NA	2)G. Tony Santhosh
(33) Name of priority country	:NA	3)I Andrews Juben Ratchanyaraj
(86) International Application No	:NA	4)Binu Dennis 5)Rajakumar B. R.
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)Prasath R
(61) Patent of Addition to Application Numb	er:NA	· /
Filing Date	:NA	2)G. Tony Santhosh
(62) Divisional to Application Number	:NA	3)I Andrews Juben Ratchanyaraj
Filing Date	:NA	4)Binu Dennis 5)Rajakumar B. R.

## (57) Abstract:

The present invention discloses the smart follower inbuilt in combat boots for soldierTMs security, which comprises the IoT device (camera, microphone, and GPS) and IoT head. The main contribution of the present invention is to follow the soldiers by tracking and monitoring them during their military operations for their safety purposes. Generally, the military plays a major role in every country. The soldiers are risking their lives for protecting the country and people. In this present invention, the smart follower follows the location of soldiers, recognizes their voice, and captures the surrounding area for protecting the soldiers from terrorists. The smart follower sends every information to the IoT via the internet, and the IoT head gives command based on nearby terrorists, soldierTMs standing position, and controlling every event in the battles field. [To be published with Figure.1]

No. of Pages: 18 No. of Claims: 3

(22) Date of filing of Application :28/05/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: AN APPARATUS, METHOD AND SYSTEM FOR CYBER SIGNALLING AND TRAIN TRAFFIC CONTROL AT RAILWAY YARD

		(71)Name of Applicant :
(51) International classification	B61L0003120000, B61L0027000000,	1)LAB TO MARKET INNOVATIONS PRIVATE LIMITED
(6.1) 11161111111111111111111111111111111	B61L0001160000,	Address of Applicant :1st Floor, Entrepreneurship Centre,
	B61L0025020000	Society for Innovation and Development (SID), Indian Institute of
(31) Priority Document No	:NA	Science, Bengaluru 560012, Karnataka, India Karnataka India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)Sinha S K
(86) International Application No	:NA	2)Ganapa Shreenivasa Rao
Filing Date	:NA	3)Jose Ashlin
(87) International Publication No	: NA	4)S Kiran
(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 an apparatus, system and method for real time managing of trainsTM traffic in railway yard. Embodiment of the present invention comprises plurality of FBG sensors, local control unit (LCU), control unit (CU) and communication network. Local control unit (LCU) calculates the number of train axles on detection points (DP) in a point and point zone status information to control unit (CU). The control unit (CU) compares the number of train axles of two or more detection points (DP) to find track occupancy and point zone status. The Human Machine Interface (HMI) device of users displays the track and point zone status. The authorized users of HMI devices are able to operate specific point machines (PM) for train route setting and computerized signalling. The system and method improves safety and efficiency of trains operation at railway yard.

No. of Pages: 30 No. of Claims: 19

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041024929 A

(19) INDIA

(22) Date of filing of Application :13/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A SYSTEM FOR FACILITATE FOOD AND DRINKS IN VARIOUS PLACES(ACCORDINGLY NEEDS) THROUGH VOICE VENDING MACHINE $^{\text{TMTM}}$

(51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country	53/00 :NA :NA :NA	(71)Name of Applicant:  1)Pratap  Address of Applicant: 4/79 ,Saidapur hosaoni,gulaganjikoppa Dharwad,Hubballi-Dharwad city. Karnataka India (72)Name of Inventor:
(86) International Application No Filing Date	:NA :NA	1)Pratap
(87) 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 system for facilitate food and drinks in various places(accordingly needs) through Voice vending machine TMTM This invention relates to a system for facilitate food and drinks to customers accordingly their requirements, comprising of device connect to electric power in which device dispensing desired items automatically to customer by voice communication. This invention Is without restricting scope of the invention to the same.

No. of Pages: 8 No. of Claims: 4

(22) Date of filing of Application :15/06/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: IOT BASED SYSTEM AND METHOD TO ASSIST VISUALLY IMPAIRED PEOPLE

(54) Title of the invention: IOT BASED SYSTEM A	IND METHO	(71)Name of Applicant:
		1)Dr.S.Balamurugan
		Address of Applicant :irector-Research & Development,
		Intelligent Research Consultancy Services, No.21, Kalloori Nagar, Peelamedu, Coimbatore-641004, Tamilnadu, India Tamil Nadu
		India
		2)Dr.Anand Mohan
		3)M.K.Mariam Bee
		4)Dr. Inamul Hasan Madar
		5)Dr. Ghazala Sultan
	:G09B	
(51) International classification	21/00	7)Dr. Surya Deo Choudhary
(31) Priority Document No	:NA	8)Dr. Anupama
(32) Priority Date	:NA	9)Manish Kumar
(33) Name of priority country	:NA	10)Dr. Gunasekaran Manogaran
(86) International Application No	:NA	11)Dr. BalaAnand Muthu
Filing Date	:NA	12)Dr. Neel Kamal
(87) International Publication No	: NA	13)Mr.Suvir Kumar
(61) Patent of Addition to Application Number	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Dr.S.Balamurugan
(62) Divisional to Application Number	:NA	2)Dr.Anand Mohan
Filing Date	:NA	3)M.K.Mariam Bee
		4)Dr. Inamul Hasan Madar
		5)Dr. Ghazala Sultan
		6)Dr. Iftikhar Aslam Tayubi
		7)Dr. Surya Deo Choudhary 8)Dr. Anupama
		9)Manish Kumar
		10)Dr. Gunasekaran Manogaran
		11)Dr. BalaAnand Muthu
		12)Dr. Neel Kamal
		13)Mr.Suvir Kumar

## (57) Abstract:

In this proposed system we are using artificial intelligence (AI) to guide the blind people to walk around them. In one aspect the blind people want to mall to purchase something before he is going to start the journey he will wear the AI device in hear ear through his her voice recognition he will command to the device to make a route map to the mall the AI device it will narrate a routes based on an instruction he or she should walk. We have multiple sensors are fixed in a device the sensor like humidity sensor, gyro sensor, Ambient sensor this sensor is attached in a device then if the person wants to get a bus the device will read the bus number and a bus destination city which the bus is going to stop with this information the person should get into a bus. Then the device will instruct the surrounding information whether the bus has any seat is available it will instruct the conductor is near to you are far away to you based on the bus conductor dress code AI device will narrate it.we are pre-loaded the map of the city and it will store the before history was the person went. Then with the help of the data is stored we can access the device. Then with the help of the device every step, we can find the length of the empty space and breath in which the person should take their legs to move forward are backward the device should decide to instruct the person.

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

(22) Date of filing of Application :16/06/2020 (43) Publication Date : 03/07/2020

(54) Title of the invention: CORONAVIRUS DETECTION 5-G MOBILE APP: AN APP WHICH ENABLES A MOBILE PHONE TO DETECT THE CORONAVIRUS.

		(71)Name of Applicant:
		1)DASARI NATARAJ (ASSOCIATE PROFESSOR)
		Address of Applicant :PRAGATI ENGINEERING
		COLLEGE, KAKINADA, EAST GODAVARI (DT), A.P-
(51) Intermetical elegation	:H04M	533437, INDIA. E-Mail: dasari.nataraj@gmail.com Andhra
(51) International classification	1/72	Pradesh India
(31) Priority Document No	:NA	2)MANDRAKURITI BALAKRISHNA (SR. ASSISTANT
(32) Priority Date	:NA	PROFESSOR)
(33) Name of priority country	:NA	3)Dr. BONULA RAMARAO (PROFESSOR)
(86) International Application No	:NA	4)K.S. CHAKRADHAR (ASSOCIATE PROFESSOR)
Filing Date	:NA	5)G. VINUTNA UJWALA (ASSISTANT PROFESSOR)
(87) International Publication No	: NA	6)T. VISHNU MURTY (ASSISTANT PROFESSOR)
(61) Patent of Addition to Application Number	:NA	(72)Name of Inventor:
Filing Date	:NA	1)DASARI NATARAJ (ASSOCIATE PROFESSOR)
(62) Divisional to Application Number	:NA	2)MANDRAKURITI BALAKRISHNA (SR. ASSISTANT
Filing Date	:NA	PROFESSOR)
		3)Dr. BONULA RAMARAO (PROFESSOR)
		4)K.S. CHAKRADHAR (ASSOCIATE PROFESSOR)
		5)G. VINUTNA UJWALA (ASSISTANT PROFESSOR)
		6)T. VISHNU MURTY (ASSISTANT PROFESSOR)

#### (57) Abstract:

Patent Title: Coronavirus Detection 5-G Mobile App: AN APP WHICH ENABLES A MOBILE PHONE TO DETECT THE CORONAVIRUS. ABSTRACT My Invention Coronavirus Detection 5-G Mobile App • is the invention provided are the nucleic acid available sequence of the SARS-CoV genome and the amino acid sequences of the SARS-CoV open reading frames and give the virus indication. The Technology /methods of using these molecules to detect a coronavirus/SARS-CoV and detect infections therewith. The lab Immune stimulatory compositions are also provided, along with methods of their use. The invention provides a technique for step by step complex identification and quantitation of bacteria by mobile apps, amplification of a segment of bacterial nucleic acid followed by analysis by mass spectrometry. The invention apps provide for characterization of the molecular masses and base compositions of bacterial nucleic acids and their increasing sequence which are used to rapidly identify bacteria. This invention provides: a technology/method for detecting / coronavirus / SARS pathogenic viruses with high sensitivity and rapidity for diagnosing severe acute respiratory syndrome (SARS), an oligonucleotide primer that can specifically hybridize with any nucleotide sequence constructed based on the nucleotide sequence of RNA polymerase of the SARS coronavirus, a technology/method for nucleic acid amplification using such primer. A Technology/method for diagnosing infection with the SARS coronavirus via detection of nucleic acid amplification. The 4-G Mobile Can detect microbes like virus is 120 to 140 nanometer/0.01244 to 0.344 micrometer and if 5-G mobile phone only. The 5-G mobile apps technology Droplet-based digital bioassays enable highly sensitive and quantitative performance care of biomolecules, and are thought to be suitable for point-to point care deep diagnosis. The invention digital bioassays generally require fluorescence microscopy for detection, testing, prediction, which is too large for point-to point testing. Here, we developed a advanced 5-G smartphone-based mobile imaging platform for digital bioassays. The size of the mobile imaging platform was (24 — 12 — 9 cm) (length — width — height) this size according to increase, decrease. The detected number of point fluorescence spots showed good linearity using fourier series against the virus titer, suggesting that sensitivity and quantification were achieved, although the imaging with the mobile platform detected 79% to 93% of influenza virus particles that were identified with conventional fluorescence microscopy. The Android apps technology influenza virus counting with the mobile imaging platform still showed 98 times greater sensitivity than that with a commercial rapid influenza test kit.

No. of Pages: 25 No. of Claims: 9

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: AUTOMATIC TOUCHLESS MIST SPRAY SANITIZER DISPENSER

## (57) Abstract:

The main aim of the present invention is to provide smart cost automatic touchless mist spray sanitizer dispenser machine to fight against novel pandemic viruses. This invention consists of two sensors namely LDR and proximity which connected in series to work around the clock. This automatic machine designed in such a way that which can fix in indoor as well as outdoor. This invention is build and enclosed with non corrosive metals to give safety and also to ensure long life. High pressure pump along with the adjustable nozzle is used to convert liquid sanitizer into mist spray. The liquid sanitizer level indicator also included with this invention to ensure safety operations.

No. of Pages: 8 No. of Claims: 6

(12) PATENT APPLICATION PUBLICATION

(22) Date of filing of Application: 17/06/2020

(21) Application No.202041025399 A

(43) Publication Date: 03/07/2020

# (54) Title of the invention: SMART WATERING POT

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:A01G 27/00 :NA :NA :NA :NA :NA	(71)Name of Applicant: 1)Anusha Preetham Address of Applicant:#3/14 Shiva Kripa, Nellikatte, Near RamaKrishna Seva Samaj, Puttur, D.K, Karnataka, 574201 Karnataka India 2)Shrinivasrao B Kulkarni 3)Binu Dennis 4)Rajakumar B. R. (72)Name of Inventor: 1)Anusha Preetham 2)Shrinivasrao B Kulkarni 3)Binu Dennis 4)Rajakumar B. R.
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#### (57) Abstract:

(19) INDIA

The present invention discloses the smart watering pot for plant farming. This system of the present invention comprises both an intelligent camera unit and a smart sprinkler device. The major contribution of the present invention is to sprinkle the water with the mixing of required fertilizers, and pesticides for plants. Here, an intelligent camera unit and smart sprinkler device are inbuilt within the smart watering pot for detecting the leaf disease and also detecting the required amount of water for plants using the image processor. The required quantity of water is mixed with the essential fertilizers, and pesticides by means of a mixer. After that, the smart watering pot sprinkles the mixed water to the plant. Thus, this watering pot is very useful for every farmer in the field of agriculture, and plant farming. [To be published with Figure.1]

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

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: PULSE RATE MEASUREMENT USING ANDROID SMARTPHONE

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No</li> </ul>	:A61B 5/02 :NA :NA :NA :NA	(71)Name of Applicant: 1)VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES(VISTAS) Address of Applicant: VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES(VISTAS), VELAN NAGAR, PV VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date	:NA	CHENNAI, TAMIL NADU-600 117, INDIA. Tamil Nadu India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)Ms. DEVAKI. V
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

Photo-plethysmography is an optical technique which is used to measure the blood volume changes in the arterial blood in the peripheral circulation using a pulse oximeter. A pulse oximeter uses a bright LED at one end and a detector on the other end to measure the pulse rate and oxygen saturation. A low cost, homecare device that is easily operable by an individual can be designed using an android smart phone. The existing method of measuring the pulse rate consists of a Light Emitting Diode on one side and a detector on other side to measure the volume of blood changes. This paper proposes the methodology that is employed to measure the pulse rate from the video signal obtained using an available mobile phones camera. The Smartphone equipped with a LED flash light is applied for the intensity recording of the light reflected from the index finger due to the changes in blood volume. The mean values of the red channels are calculated and filtered using a butterworth band pass filter. In each frame, the red channel of the RGB signals that is recorded using a smart phone returned the useful plethysmographic information. The power spectral density analysis was performed on the filtered signal. Thus pulse rate can be estimated, using this method. Both the normal and hypertensive patients are used as the subjects and the accuracy of the estimated value is calculated. The use of smart phone in medical imaging is the most encouraging one in the home based care or personal.

No. of Pages: 7 No. of Claims: 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041025413 A

(19) INDIA

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: EMERGENCY MEDICAL KIT PROVIDING ROBOT

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No</li> </ul>	:A61F 17/00 :NA :NA :NA :NA	(71)Name of Applicant: 1)VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES(VISTAS) Address of Applicant: VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES(VISTAS), VELAN NAGAR, PV VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date	:NA	CHENNAI, TAMIL NADU-600 117, INDIA. Tamil Nadu India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)Dr. USHARANI B
Filing Date	:NA	2)Mr. SANJAI B
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

We come across many accidents and injuries in the active streets/ platform of metropolitan cities. The invention is a line follower medibot with a emergency first aid medical kit. The medibot is placed in a shed (small case) adjacent to pillar/ platform. A closed medical lane (path)can be drawn on the ground surface which starts and ends at the home point with a obstacle sensor which aids in moving the medibot via obstacles. In case of emergency, the person at the emergency point can press the buzzer that is interconnected to one another and the signal shall reach the shed, a pushrod acts as an actuator, touches the power button of the vehicle and the medibot gets activated. The , robot will start moving and reach the place where the person in need of medi kit. The person at the accident site can access the medical kit and treat the patient. The robot will return back to its shed in its closed path.

No. of Pages: 7 No. of Claims: 5

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : MEDIATING ROLE OF BRAND AWARENESS TOWARDS CONSUMER PRODUCT KNOWLEDGE AND CONSUMER BUYING BEHAVIOUR

(51) International classification	-	(71)Name of Applicant :
()	30/02	1) VELS INSTITUTE OF SCIENCE, TECHNOLOGY &
(31) Priority Document No	:NA	ADVANCED STUDIES(VISTAS)
(32) Priority Date	:NA	Address of Applicant :VELAN NAGAR, P V
(33) Name of priority country	:NA	VAITHIYALINGAM ROAD, PALLAVARAM, CHENNAI,
(86) International Application No	:NA	TAMILNADU-600117, INDIA. Tamil Nadu India
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)Dr. S.SUDHA
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The mediating role of brand awareness towards consumer product knowledge and consumer buying behavior relating to general life insurance in Chennai. The survey was carried among 100 life insurance customers. No literature studies on consumer product knowledge and brand awareness on insurance is found which forms the research gap. The finding reveals brand awareness on insurance is found to be a powerful mediator towards consumer product knowledge on insurance and consumer buying behavior. Insurance companies need to build strong brand value for their products. They need to test their product brand value among the consumers periodically. Through this insurance companies can know who their competitors and the status of their company insurance product are too.

No. of Pages: 6 No. of Claims: 3

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: DEVELOPMENT OF DRUG DELIVERY SYSTEM FOR HELMINTHIASIS

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No</li> </ul>	39/08 :NA :NA :NA :NA	(71)Name of Applicant:  1)VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)  Address of Applicant: VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS) VELAN NAGAR, PV VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date (87) International Publication No (61) Patent of Addition to Application Number	:NA : NA :NA	CHENNAI, TAMIL NADU-600 117, INDIA. Tamil Nadu India (72)Name of Inventor:  1)DR. M. KOMALA
Filing Date (62) Divisional to Application Number Filing Date	:NA :NA :NA	2)DR.SATHESH KUMAR 3)MRS. J. PADMAVATHY

### (57) Abstract:

Children are more prone to helminthiasis around the world. Conventional dosage form commonly available for treating worm infections includes suspensions and tablets. Among the available dosage form, chewing gum formulation will show more acceptance for children compared to the other dosage forms available in the market. Chewing gum has become a conspicuous waste management problem around the world. Zein is a natural product, both edible and biodegradable. Physical and Theological properties of zein compounds suggest their potential application as chewing gum base. This invention aims in the use of biodegradable gum base which is non toxic in formulation of medicated chewing gum for treating helminthiasis particularly for children. Albendazole a broad spectrum anthelmintic is used for formulating the various chewing gum formulations and carrying out the evaluation parameters

No. of Pages: 6 No. of Claims: 3

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A SMART IRIS BASED DOCUMENT MONITORING SYSTEM FOR SECURED FILE COMMUNICATION

(31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number	G06K /00 NA NA NA NA NA NA NA NA NA	(71)Name of Applicant:  1)Dr T PARAMESWARAN Address of Applicant: Professor, Department of CSE, Swarnandhra College of Engineering and Technology, Seetharampuram, Narsapur, West Godavari District Andhra Pradesh India (72)Name of Inventor: 1)Dr T PARAMESWARAN 2)Dr. S. KIRUBAKARAN 3)Dr. BALAMURUGAN KRISHNAN 4)Dr. S. SURESH KUMAR 5)Dr. S. RAKOTH KANDAN 6)Dr. N. KOPPERUNDEVI 7)Mr. K. PRABHKAR 8)Ms. S. CELIN
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## (57) Abstract:

The preparation and sharing of a huge volume of data having a lot of challenges while sending to the recipients. The ensuring of the right end-user will increase document security. The People whoever knows the password of the protected document can open and read the content in the data file. Most of the banking attachments are having regular passwords or guessing passwords. Mostly the passwords are the combination of Name, DOB, PAN numbers, etc. Nowadays many private and government agencies are asking the above details and made it mandatory. So that they can easily identify the password for documents and files. To avoid these kinds of difficulties, the proposed Smart Iris based Monitoring System for file security includes protection based on human iris and strictly restrict the unauthorized access of the documents and files. The document is secured with end-user Iris by the authorized person and the same will be sent to the concerned persons. The same document can only open by the concerned person and the system has continuous monitoring by matching end-user Iris with the Iris pattern of the secured document. During the continuous monitoring, the threshold of Iris blinking is fixed as 2 Second. The system also supports different kinds of file formats. It also ensures the protection form simultaneous reading of multiple persons, protection from copying, taking screenshots, clipping/snipping, save as operations and taking a photo of the opened file or documents.

No. of Pages: 21 No. of Claims: 3

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: SYNTHESIS OF 2-CHLORO-4'-METHOXY BENZILIC ACID AND ITS BIOLOGICAL ACTIVITY

(51) International classification		(71)Name of Applicant :
(C1) morning suggestions	211/46	
(31) Priority Document No	:NA	ADVANCED STUDIES (VISTAS)
(32) Priority Date	:NA	Address of Applicant :VELS INSTITUTE OF SCIENCE,
(33) Name of priority country	:NA	TECHNOLOGY & ADVANCED STUDIES (vISTAS) VELAN
(86) International Application No	:NA	NAGAR, PV VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date	:NA	CHENNAI, TAMIL NADU-600 117, INDIA. Tamil Nadu India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)DR. R. SUDHA
Filing Date	:NA	2)DR.G. NITHYA
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

ABSTRACT OF THE INVENTION The synthesised compound was obtained through benzil-benzilic acid rearrangement via benzoin condensation. The tiltle compound shows potent effect towards the biological activity. The various biological activity studies were performed by in vitro analysis and compared the same with computational study. This result clearly reveals that 2-chloro-4-methoy benzilic acid with the higher inhibition against Gram-positive bacteria compared.

No. of Pages: 11 No. of Claims: 2

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: ZN METAL BASED ANTICANCER DRUG

(51) International classification		(71)Name of Applicant:
(51) International Glassification	4/48	1)VELS INSTITUTE OF SCIENCE, TECHNOLOGY &
(31) Priority Document No	:NA	ADVANCED STUDIES (VISTAS)
(32) Priority Date	:NA	Address of Applicant :VELAN NAGAR PV
(33) Name of priority country	:NA	VAITHIYALINGAM ROAD, PALLAVARAM, CHENNAI,
(86) International Application No	:NA	TAMIL NADU, INDIA 600117 Tamil Nadu India
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)DR. KOSIHA A
(61) Patent of Addition to Application Number	:NA	2)DR. DEVENDIRAN M
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

Majority of the anti-cancer drugs are either natural or synthetic products based on organic compounds. Although, most commercially available drugs are carbon based compounds, considerable attention has been paid to investigate the therapeutic properties of coordination compounds also.. Thus, the biocompatibility of the compounds needs to be demonstrated by in vitro and in vivo studies before they enter clinical trials. The development of modern medicinal inorganic chemistry, stimulated by the discovery of cisdichlorodiammine platinum(II) [cisplatin] and its subsequent use as a drug in the treatment of several human tumors has been facilitated by the inorganic chemists extensive knowledge of the coordinating property and redox properties of metal ions. However Cisplatin based drugs cause serious side effects, so for transition metal complexes other than platinum complexes as potential anticancer agents. We have synthesized and investigate the Zn(II) complex of amino-naphthoquinone derivative showed comparable IC50 values with that of standard cisplatin against MCF-7 cell lines. Likewise, Zn(II) complex of another amino-naphthoquinone derivative exhibited pronounced cytotoxicity against A-549 cells equal to that of cisplatin. These complexes had the potential to develop as antiproliferative agents

No. of Pages: 10 No. of Claims: 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041025425 A

(19) INDIA

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: MUSA BANDAID TO HEAL BURN WOUNDS

(51) International classification		(71)Name of Applicant:
(51) international elassification	45/06	1)VELS INSTITUTE OF SCIENCE, TECHNOLOGY &
(31) Priority Document No	:NA	ADVANCED STUDIES (VISTAS)
(32) Priority Date	:NA	Address of Applicant : VELS INSTITUTE OF SCIENCE,
(33) Name of priority country	:NA	TECHNOLOGY & ADVANCED STUDIES (VISTAS) VELAN
(86) International Application No	:NA	NAGAR PV VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date	:NA	CHENNAI, TAMIL NADU, INDIA 600117 Tamil Nadu India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)MS.A.KEERTHANA
Filing Date	:NA	2)DR.R.J.HEMALATHA
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

Burns are tissue damage that results from heat, overexposure to the sun or other radiation, or chemical or electrical contact. Burns can be minor medical problems or life-threatening emergencies. The treatment of burns depends on the location and severity of the damage. A plant extract of the plantakon plant was extracted after soaking it ethanol solution for about 48 hours through Maceration. The extracted solution was tested to check the human compatibility. Later the material was selected and was soaked in the extract for about 48 Hrs. After this the soaked material was well dried at room temperature. The soaked material and the leaf of the required measure was later autoclaved. The materials that are now autoclave was stuck together using natural gurn. This wound dresser is now sterilized and later skin tested. The main objective of this work is to design a musa wound dresser which will help to heal the wounds due to burns, that will help the caretaker and the patient comfortable and will help in healing the wound.

No. of Pages: 7 No. of Claims: 4

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: REVERSAL OF DIABETIC RETINOPATHY IN MODIFIED PROLIFERATIVE DIABETIC RETINOPATHY MODEL IN RATS USING TRADITIONAL INDIAN MEDICINAL PLANTS

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li><li>(33) Name of priority country</li></ul>	21/76 :NA :NA :NA	(71)Name of Applicant: 1)VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES(VISTAS) Address of Applicant: VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES(VISTAS), VELAN
(86) International Application No	:NA	NAGAR, P V VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date	:NA	CHENNAI, TAMILNADU-600117, INDIA. Tamil Nadu India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)DR.R.GANDHIMATHI
Filing Date	:NA	2)DR.A.SARAVANAKUMAR
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Diabetic Retinopathy is the most common microvascular complication of diabetes and is one of the leading causes of visual impairment worldwide. Diabetic Retinopathy is a chronic eye disease that eventually can result in legal blindness due to the evolution towards the major vision-threatening disorder proliferative diabetic retinopathy. The present study is undertaken to prove the reversal of diabetic retinopathy potency of Grewia tiliaefolia Vahl, | Albizzia lucida Benth. and Chloris barbata (SW.) in experimental diabetic retinopathy. All extracts were freshly prepared, as required, a suspension at the appropriate concentration and suspended in 1% Carboxymethyl Cellulose (CMC). To assess the safety, the ethyl acetate and methanol extract of Grewia tiliaefolia Vahl stem bark, Albizzia lucida Benth. bark and Chloris barbata (SW.) leaves were subjected to acute oral toxicity studies as per OECD 423 guidelines. Chronic toxicity study (for the period of 90 days) was also done by measuring haematological, biochemical and histopathological parameters by using 400mg/kg, p.o dose of all the extracts. The reversal of diabetic retinopathy potency of Grewia tiliaefolia, Albizzia lucida Benth. and Chloris barbata (SW.) extracts were evaluated using STZ + Single suture induced proliferative diabetic retinopathy innovative model in rats. Biochemical parameters such as Blood glucose, HbAiC, aldose reductase and sorbitol levels were estimated which is related to diabetic retinopathy and angiogenesis. The test extracts possesses better control in above parameters. Various extracts of stem bark of Grewia tiliaefolia Vahl, bark of Albizzia lucida Benth. and leaves of Chloris barbata (SW.) exhibited promising reversal of diabetic retinopathy in innovative & effective experimental model.

No. of Pages: 7 No. of Claims: 4

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: EXPERIMENTAL ANALYSIS ON SELF COMPACTING CONCRETE USING NANO SILICA GEL

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		Dhulapally, Secunderabad-500100 Telangana India
(51) International classification	:C04B	
	28/00	3)Dr. P. Santosh Kumar Patra Principal & Professor / CSE
(31) Priority Document No	:NA	4)K. Shiva Prasad, Student/ CIVIL
(32) Priority Date	:NA	5)V.Nikhila,Student/ CIVIL
(33) Name of priority country	:NA	6)B. Naveen,Student / CIVIL
(86) International Application No	:NA	7)Md. Fahad
Filing Date	:NA	8)Ms. R. Niveda, Asst.Prof Civil Engineering
(87) International Publication No	: NA	(72)Name of Inventor:
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Filing Date	:NA	2)Dr. D.V. Sreekanth, Professor/ MECH
(62) Divisional to Application Number	:NA	3)Dr. P. Santosh Kumar Patra Principal & Professor / CSE
Filing Date	:NA	4)K. Shiva Prasad, Student/ CIVIL
•		5)V.Nikhila,Student/ CIVIL
		6)B. Naveen,Student / CIVIL
		7)Md. Fahad
		8)Ms. R. Niveda, Asst.Prof Civil Engineering

#### (57) Abstract:

A self-constricting concrete (SCC) is a special concrete developed by adding super plasticizer to nominal concrete. That has ability to easily flow and passes through reinforcement and fill the formwork without any external force saves time, energy and cost of construction. To improve the properties of SCC we are adding Nano silica gel to concrete. The present work deals with addition of Nano-silica gel to self-compacting concrete as partial replacement to cement in 2%, 2.5% & 3% dosages respectively by weight of cement. Based on early research M20 grade concrete has been chosen for this work. In the present work 15 numbers of specimens were casted with addition of Nano-silica gel in different proportions which are tested for workability properties and compressive strength. In addition to these test SEM (scanning electron microscope) analysis is also being conducted to study the behavior of SCC with Nano silica gel at micro scales. Addition of Nano silica gel to self-compacting concrete is found to have greater compaction rate even at micro levels leading to greater results of workability and compression tests. And SEM analysis is the evidence of presence of Nano silica gel in SCC.

No. of Pages: 8 No. of Claims: 4

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: PIN NUMBER THEFT RECOGNITION USING SIXTH SENSE

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li><li>(33) Name of priority country</li></ul>	22/06 :NA :NA :NA	(71)Name of Applicant: 1)VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES(VISTAS) Address of Applicant: VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES(VISTAS), VELAN
(86) International Application No	:NA	NAGAR, PV VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date	:NA	CHENNAI, TAMIL NADU-600 117, INDIA. Tamil Nadu India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)Mr. PRADEEP KUMAR. S
Filing Date	:NA	2)MrS. SUGANIYA. M
(62) Divisional to Application Number	:NA	3)MrS. RUBINI. B
Filing Date	:NA	

### (57) Abstract:

Pin number theft and ATM Security has always been one of the most prominent issues concerning the daily users. The proposed system will eliminate the pin number theft and improve the security concern of the ATM machines. The module uses Holographic infra red sensor based keypad to do all the transaction which is done by pressing the keys in an ATM machine. The system has two modes - Contactless ATM Mode & Security ATM Mode. Contactless ATM Mode - We use the Holographic keypad used in Sixth sense Technology to do all the Transaction which is done by not pressing the keys in a ATM machine which eliminate tracking pin numbers from Touch & contacting the ATM machines. Security ATM Mode - A temperature sensor connected to the ATM machinery which registers the temperature and avoids the possibility of ATM machine being Cracked by using a heat source, A Vibration or a XYZ accelerometer is connected to the machine to find whether the machine is shaked a possibility of a theft in these case can also be saved by generating a alarm

No. of Pages: 8 No. of Claims: 6

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : PERYLENE-DI IMIDES ANALOGUES AS POTENT APOPTOSIS INDUCER AND EFFICACIOUS ANTICANCER AGENT

(51) International design of the second	:C07C	(71)Name of Applicant:
(51) International classification	49/70	1)Vels Institute of Science Technology & Advanced
(31) Priority Document No	:NA	Studies(VISTAS)
(32) Priority Date	:NA	Address of Applicant :Velan Nagar, PV Vaithiyalingam Rd,
(33) Name of priority country	:NA	Pallavaram, Chennai, Tamil Nadu, India, 600117 Tamil Nadu
(86) International Application No	:NA	India
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)Dr. M. Vijey Aanandhi
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The human telomeric G-Quadruplex structure is a promising target for the design of cancer drugs. The aim of this study was to investigate the anti-cancer activity of perylene derivatives by using in silica computational approach. The Perylene derivatives are designed by QSAR studies using VLife MDS Software and activities for these new compounds are predicted. The best predicted activity compounds are screened by G-Quadruplex Ligand Database. Around 59 compounds are selected for docking study. Molecular docking using G-Quadruplex Ligand Database has been carried out and from the study 9 compounds showed high binding affinities for the targets. Finally, from the QSAR and docking studies, 2 compounds showed good biological activity possessing a strong correlation coefficient, endorsing the fact that Perylene derivatives are having strong affinity with the targets. With these compounds, we also observed bestptf/values, which shows that they inhibit the targets and may be effective for anti-cancer therapy.

No. of Pages: 6 No. of Claims: 3

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : SYNTHESIS OF ZINC OXIDE NANOPARTICLE USING COCOS NUCIFERA MALE FLOWER EXTRACT AND ANALYSIS THEIR ANTIMICROBIAL ACTIVITY

(51) International classification	:C01G	(71)Name of Applicant:
(31) international classification	9/02	1) VELS INSTITUTE OF SCIENCE, TECHNOLOGY &
(31) Priority Document No	:NA	ADVANCED STUDIES (VISTAS)
(32) Priority Date	:NA	Address of Applicant :VELS INSTITUTE OF SCIENCE,
(33) Name of priority country	:NA	TECHNOLOGY & ADVANCED STUDIES (VISTAS) VELAN
(86) International Application No	:NA	NAGAR, P.V. VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date	:NA	CHENNAI, TAMIL NADU, INDIA 600117 Tamil Nadu India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)MRS.P. INDRA PRIYATHARESINI
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Nanotechnology deals with the invention and practice of material in the nanoscale measurement. Nanoscale dimension provides the nanoparticles of large surface area to volume ratio and thus posses specific properties. The large bandwidth and high exiciton binding results in peculiar potential applications like antibacterial, anti-inflammatory, antioxidant property. In recent studies Zinc oxide nanoparticles (ZnO NPs) had been synthesized frequently for the antibacterial, antifungal studies. Since the physical and chemical production of these nano particals, from the plants extract is economic and ecofriendly, the environment is protected from the usage of toxic chemicals. Thus the current study is the synthesis and characterization methods to ZnO nano particals using different biological sources. The objective of this study is to evaluate the potential of cocos nucifera male flowers extracts for the synthesis of zinc oxide nanoparticles and their antimicrobial properties. Nanoparticles were extracted with the help of aqueous and ethanolic solutions of cocos nucifera extracts. Since higher yields of nanoparticles were observed using aqueous extract therefore these were used in further experiments. The synthesized ZnO NPs were characterised by UV-visible spectroscopy (UV-vis), infra-red spectroscopy (FTIR), scanning electron microscopy (SEM) and X-ray diffraction study (XRD).

No. of Pages: 10 No. of Claims: 3

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: SMART VEHICLE TRACKING AND ACCIDENT DETECTION SYSTEM

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li><li>(33) Name of priority country</li></ul>	:G08G 1/00 :NA :NA :NA	(71)Name of Applicant:  1)VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)  Address of Applicant: VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS) VELAN
(86) International Application No	:NA	NAGAR, P.V. VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date	:NA	CHENNAI, TAMIL NADU, INDIA 600117 Tamil Nadu India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)MS. JAYA T
Filing Date	:NA	2)MR.ARAVINDH S
(62) Divisional to Application Number	:NA	3)MR.NAGARAJ K
Filing Date	:NA	

### (57) Abstract:

The Vehicle tracking system is a total security protection and fleet management solution. By using the latest GSM & GPS technology to protect and monitor our car, truck and any other moveable object virtually anywhere and then locate it within a few meters. This project presents an automatic Smart vehicle tracking and accident detection system using GPS and GSM modems which can detect the accident when ever any vehicle or object collides with the vehicle. The system can be mounted with the control system of the car and aware the owner about the location of accident on his PC using GPS and GSM. The system gives the location of the vehicle upon sending a message in case it has been theft. This system also provides an accident prevention using sensors which upon detection of any obstacle can reduce the speed of the vehicle and prevent the accident. The proposed design demonstrates the feasibility of real time tracking of vehicles and enhanced customizability, global accessibility and economical in contrast with exising designs.

No. of Pages: 9 No. of Claims: 6

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : TREATMENT OF LAKE WATER BASED ON BIOCHAR AND ACTIVATED CARBON FILTER SYSTEM

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> </ul>	1/28 :NA :NA :NA	(71)Name of Applicant: 1)VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS) Address of Applicant: VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS) VELAN
(86) International Application No	:NA	NAGAR, P.V. VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date (87) International Publication No	:NA : NA	CHENNAI, TAMIL NADU, INDIA 600117 Tamil Nadu India (72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)DR.P.BRINDHA DEVI
Filing Date	:NA	2)S.IVO ROMAULD
(62) Divisional to Application Number	:NA	3)K.SWETHA
Filing Date	:NA	

#### (57) Abstract:

Water pollution sounds more due to increment in urbanization and industrialization, there is necessary to treat the water for safe drinking purpose, which survives as a common asset for sustainability of life. So, this contribution aims to demonstrate the biochar and activated carbon filtration system to the low community people for safe and pure drinking water. Thus, biochar and activated carbon filtration systems has been constructed using biochar and activated carbon - a carbonaceous substance as a key factor. In this research, home based biochar will be obtained under slow pyrolysis of neem and jack fruit trees and the activated carbon will be obtained from slow pyrolysis of fruit peels, which holds a commonly porous and stable carbon rich compounds which has the ability in water treatment. Hence, the circumambient products- biochar and activated carbon filtration systems serve as a basic compatible tool in removal of various organic and inorganic pollutants in lake water.

No. of Pages: 10 No. of Claims: 7

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: FINGER VEIN AUTHENTICATION USING LDC BASED ON K-MEANS CLASSIFICATION

	:G06K	(71)Name of Applicant :
(51) International classification	9/00	1)VELS INSTITUTE OF SCIENCE, TECHNOLOGY &
(31) Priority Document No	:NA	ADVANCED STUDIES (VISTAS)
(32) Priority Date	:NA	Address of Applicant :VELS INSTITUTE OF SCIENCE,
(33) Name of priority country	:NA	TECHNOLOGY & ADVANCED STUDIES (VISTAS) VELAN
(86) International Application No	:NA	NAGAR, P.V. VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date	:NA	CHENNAI, TAMIL NADU, INDIA 600117 Tamil Nadu India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)MS. JAYA T
Filing Date	:NA	2)MR. S. DHARSAN
(62) Divisional to Application Number	:NA	3)MS. S. HEMAPRIYA
Filing Date	:NA	

## (57) Abstract:

Finger vein authentication is one of the most secure and efficient forms of biometric recognition in security platforms. This biometric authentication method is more trustworthy than token-based authenticate methods and knowledge-based methods succeed in achieving more quality and offering a satisfactory user experience. The recognition of finger vein makes use of the vein images acquired which undergoes segmentation. The faulty segmentation may result in demean of the recognition exactitude. The proposed system is finger vein recognition system-based K-mean segmentation technique along with a direction based local descriptor called Local Directional Code (LDC). The proposed system is to improve the recognition accuracy and efficiency in the finger vein recognition system.

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

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A PROCESS FOR BIODIESEL CONVERSION FROM WASTE CHICKEN FAT OIL VIA TRANSESTERIFICATION REACTION

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(51) International classification		(71)Name of Applicant:
	67/03	1) VELS INSTITUTE OF SCIENCE, TECHNOLOGY &
(31) Priority Document No	:NA	ADVANCED STUDIES (VISTAS)
(32) Priority Date	:NA	Address of Applicant :VELS INSTITUTE OF SCIENCE,
(33) Name of priority country	:NA	TECHNOLOGY & ADVANCED STUDIES (VISTAS) VELAN
(86) International Application No	:NA	NAGAR PV VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date	:NA	CHENNAI, TAMIL NADU, INDIA 600117 Tamil Nadu India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)MR. SOMANATHAN T
Filing Date	:NA	2)MR. SHANMUGAM M
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Biodiesel is a renewable, clean-burning petroleum diesel replacement that enhances independence from imported petroleum, reduces greenhouse gas emissions, supports agriculture and rural economies, and creates jobs. Biodiesel is produced from transesterification process with waste chicken fat oil and methanol as reactants, Mg-KJT-6 catalyst and without co-solvent. For high conversion of biodiesel, the influence of parameters was .optimized by varying the reaction temperature and time. Proton nuclear magnetic resonance (H NMR) confirmed the existence of fatty acid methyl ester (FAME) with distinct peaks equivalent to hydrogen singlet from the methyl ester methoxy group at 3.67 ppm and from methylenic hydrogen at 2.31 ppm. Further, l3C-NMR also proved the formation of FAME from Waste (Chicken fat) oil with maximum conversion (96%).. This research focuses on producing of biodiesel from waste chicken fat via transesterification process using ecofriendly catalyst.

No. of Pages: 23 No. of Claims: 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041025459 A

(19) INDIA

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : SYNTHESIS, CHARACTERIZATION AND BIOLOGICAL EVALUATION OF SOME NEW QUINOLINYL CHALCONE DERIVATIVES

(51) International classification		(71)Name of Applicant:
(C1) momentum characteristics	215/12	1) Vels Institute of Science, Technology & Advanced Studies
(31) Priority Document No	:NA	(VISTAS)
(32) Priority Date	:NA	Address of Applicant : Vels Institute of Science, Technology &
(33) Name of priority country	:NA	Advanced Studies (VISTAS) Velan Nagar, PV Vaithiyalingam
(86) International Application No	:NA	Rd, Pallavaram, Chennai, Tamil Nadu, India-600117 Tamil Nadu
Filing Date	:NA	India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)Mrs.Afroz Patan
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

In the present study synthesis of different Quinolinyl pyrazolines is done by synthesizing quinoline moiety by Friedlander synthesis, then it is condensed with different Aromatic aldehydes by acid or base catalysed aldol condensation to form new Quinolinyl Chalcones derivatives by using appropriate purifying techniques like recrystalization and column chromatography. The formed Quinolinyl Chalcones are condensed with Phenyl hydrazines to form Quinolinyl Pyrazolines which are Characterized by Physical & Spectral analysis and subjected to Biological Evaluation.

No. of Pages: 8 No. of Claims: 3

(51) International classification

(31) Priority Document No

(33) Name of priority country

(86) International Application No

(87) International Publication No

(62) Divisional to Application Number

(61) Patent of Addition to Application Number

(32) Priority Date

Filing Date

Filing Date

Filing Date

(22) Date of filing of Application: 17/06/2020 (43) Publication Date: 03/07/2020

# (54) Title of the invention : DEVELOPMENT OF SOLAR BASED COMPOUND PARABOLIC COLLECTOR FOR AGRICULTURE FIELDS

:F21V

15/01

:NA

:NA

:NA

:NA

:NA

: NA

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12)Prof.Raghavendrarao B Kulkarni

13)Mr. A. Gokul Karthik

14)Dr.M.R.Meera

15)Dr.Ananad Mohan

16)T.Vignesh

#### (57) Abstract:

Solar energy which is abundant in nature is absorbed by using various methods like pv modules and solar thermal collectors. The keen interest of harvesting solar energy is increasing because of its clean, green and cheap nature. The pv modules collect the energy from the sun and produce electricity. The solar thermal collectors collect the solar energy in the form of heat. Compound parabolic concentrator is a type of solar thermal collector which has a combined parabolic structure concentrating the solar radiation on a single line focus where the receiver tube is placed. The performance can be further increased by placing the evacuated tube which traps the heat. The heat is efficiently conducted by using the heat pipe. The design of the experimental setup is designed with the help of MATLAB and SOLIDWORKS modelling software and the fabrication work is carried out. The experimental study is carried out to find out the performance characteristics. The results according to the various parameters such as mass flow rate, tilting angles were plotted to find the better performance. The result shows that the maximum efficiency of the CPC is achieved between 12.00hrs and 15.00hrs. The intensity of radiation during maximum efficiency also varies from 1300 W/m2 to 1500 W/m2.

No. of Pages: 50 No. of Claims: 3

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: INTEGRATION OF DIGITAL TDS METER IN DOMESTIC RO WATER PURIFIER

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li><li>(33) Name of priority country</li></ul>	:G10L 15/18 :NA :NA :NA	(71)Name of Applicant: 1)Vels Institute of Science, Technology & Advanced Studies (VISTAS) Address of Applicant: Vels Institute of Science, Technology & Advanced Studies (VISTAS) Velan Nagar, PV Vaithiyalingam
(86) International Application No	:NA	Rd, Pallavaram, Chennai, Tamil Nadu, India-600117 Tamil Nadu
Filing Date	:NA	India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)Dr.Usharani B
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The domestic reverse osmosis (RO) water purifier unit generally consists of sand filter, activated carbon filter, membrane and micron/nano filters through which water undergoes purification. In the existing system the consumers are not aware of the total dissolved solids (TDS) in the drinking water. Monitoring TDS is an important criteria as it determines the quality of water. The invention uses Gravity TDS Sensor, Arduino UNO Board, 16x2 cm LCD Display, 10K Potentiometer and Connecting Probe to display the TDS in drinking water digitally and compared with standard chart. Integration of digital TDS display meter in the existing RO purifier will indicate the level of TDS in the water we consume. Consumers will be aware of the TDS in the water they consume thus ensuring the quality of drinking water. In this scheme, TDS Gravity meter and Arduino UNO circuit device can be connected through potentiometer probe in the passage of outlet water in existing system. The LCD screen will display the TDS in water. It not only helps in monitoring the quality of water but also alarm the consumers to change the filters at the right time.

No. of Pages: 6 No. of Claims: 2

(22) Date of filing of Application: 17/06/2020 (43) Publication Date: 03/07/2020

# (54) Title of the invention : UNFOLDING TYPE OF GASTRO RETENTIVE FILM OF ANTI-EPILEPTIC AGENT: FORMULATION AND OPTIMIZATION

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li><li>(33) Name of priority country</li><li>(86) International Application No</li></ul>	:A61F 13/56 :NA :NA :NA :NA	(71)Name of Applicant:  1)VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES(VISTAS)  Address of Applicant: VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES(VISTAS), VELAN NAGAR, P V VAITHIYALINGAM ROAD, PALLAVARAM,
Filing Date (87) International Publication No	:NA : NA	CHENNAI, TAMILNADU-600117, INDIA. Tamil Nadu India
(61) Patent of Addition to Application Number Filing Date	:NA :NA :NA	(72)Name of Inventor: 1)DR.KARTHIKEYAN E 2)MRS. SIVANESWARI S
(62) Divisional to Application Number Filing Date	:NA :NA	

#### (57) Abstract:

The fashionable study aimed to develop and characterize a unique expandable gastro retentive dosage form(GRDF), supported the unfolding mechanism. The dosage form consists of a drug-loaded polymeric patch, folded into a tough gelatin capsule. Gastro retention obtained from unfolding and swelling of the patch and its adhesion to the gastric mucosa. In this work, the gastro retentive patch of the anti-epileptic drug was developed by the simple lattice design accepting the concentration of Carbopol, Hydroxy Propyl Methyl Cellulose, and Xanthan gum as independent variables. A response surface plot and multivariate analysis equations were wont to evaluate the effect of independent variables on dependent variables like mucoadhesive strength(gm/cm2) and t9o(hrs). The designed patches were evaluated by weight variation, mechanical characters, in-vitro drug release, and unfolding behavior. The absence of drug-polymer interaction and uniform drug dispersion within the polymeric patches was revealed by FT-IR, DSC, XRD, and SEM. The results claim, the GRDF unfolding mechanism is used to prepare novel mucoadhesive formulations, which might provide sustained release for 12hrs.

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

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : SYSTEM FOR SOLAR POWERED AUTOMATED MULTITASKING ROBOT FOR AGRICULTURAL APPLICATIONS

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:B25J 9/00 :NA :NA :NA :NA :NA :NA :NA	9)Dr.V.Priya 10)Dr.B.Gunapriya 11)Mrs.S.Suganya 12)Mr.R.Rajarajan 13)Mr.G.L.Abishek 14)Mr.M.Karthik 15)Dr.Hitesh Panchal (72)Name of Inventor: 1)Mr.M.Suresh 2)S.M.Vikaash Kumar 3)Dr.K.Sathiyasekar 4)Dr.M.Lakshmanan 5)Mrs.M.V.Rajee 6)Ms.I.Jayagayathri 7)Dr.Sita Devi Bharatula 8)Mr.A.Nandhakumar 9)Dr.V.Priya 10)Dr.B.Gunapriya 11)Mrs.S.Suganya 12)Mr.R.Rajarajan 13)Mr.G.L.Abishek 14)Mr.M.Karthik
<ul> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number</li> </ul>	9/00 :NA :NA :NA :NA :NA :NA :NA	4)Dr.M.Lakshmanan 5)Mrs.M.V.Rajee 6)Ms.I.Jayagayathri 7)Dr.Sita Devi Bharatula 8)Mr.A.Nandhakumar 9)Dr.V.Priya 10)Dr.B.Gunapriya 11)Mrs.S.Suganya 12)Mr.R.Rajarajan 13)Mr.G.L.Abishek 14)Mr.M.Karthik 15)Dr.Hitesh Panchal (72)Name of Inventor: 1)Mr.M.Suresh 2)S.M.Vikaash Kumar 3)Dr.K.Sathiyasekar 4)Dr.M.Lakshmanan 5)Mrs.M.V.Rajee 6)Ms.I.Jayagayathri 7)Dr.Sita Devi Bharatula 8)Mr.A.Nandhakumar 9)Dr.V.Priya 10)Dr.B.Gunapriya 11)Mrs.S.Suganya 12)Mr.R.Rajarajan 13)Mr.G.L.Abishek

# (57) Abstract:

The present invention is related to a system of solar powered automated multitasking robot for agricultural applications. The objective of the present invention is to solve the problems in the prior art related to adequacies in techniques and technologies for design robot in automatically agriculture operation with considering all the necessary parameters of agriculture field.

No. of Pages: 21 No. of Claims: 6

(22) Date of filing of Application :17/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: EMOTION ANALYSIS BASED ASSESSMENT SYSTEM

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:H04W 52/24 :NA :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant:  1)Dr. VEMPATI KRISHNA Address of Applicant:11-6-188 Pochamma Bagh Colony,Saroornagar RangaReddy District, Hyderabad Telangana INDIA 500035. Telangana India 2)Dr. K.V. MURALI MOHAN 3)Dr. CH. V RAGHAVENDRAN 4)E. LAKSHMI PRASANNA 5)P. RAJYALAKSHMI (72)Name of Inventor: 1)Dr. VEMPATI KRISHNA 2)Dr. K.V. MURALI MOHAN 3)Dr. CH. V RAGHAVENDRAN 4)E. LAKSHMI PRASANNA 5)P. RAJYALAKSHMI
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## (57) Abstract:

The present invention relates to an intelligent emotion analysis-based teaching-learning-participation assessment system, more particularly facial and behavior of each participant is captured while attending an online class and/or meeting which then processed to evaluate the effectiveness in real time, comprising: an imaging sensor, said sensor is interfaced with a digital image processing module; and a remote server wirelessly coupled to the central processing module configured to receive the captured facial and also behavioral information from the imaging sensor, and process the facial and also behavioral emotional analysis of a student and/or a participant is displayed in a mobile phone device. The system, with an advent of machine learning, chooses an appropriate facial expression recognition technique on the basis of captured information of the participant. Also, the evaluation also will be performed by analyzing the feedback and other related forms submitted by the participant.

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

7)GOWRAVARAM RASHMI (ASSISTANT PROFESSOR)

(71)Name of Applicant:

(19) INDIA

(22) Date of filing of Application: 18/06/2020 (43) Publication Date: 03/07/2020

# (54) Title of the invention : ADML-COVID19 PROTECTED ROOM: AUTOMATIC DISINFECTING ROOM AIR USING MACHINE LEARNING SYSTEM

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		Address of Applicant :(DEPARTMENT OF COMPUTER
		SCIENCE AND ENGINEERING), Address: BHARAT
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		MANGALPALLY (VILLAGE), IBRAHIMPATNAM
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	COCN	TELANGANA-501510, INDIA. E-mail: rmmnaidu@gmail.com
(51) International classification	:G06N	Telangana India
(21) D. ' '. D N.	20/00	2)MANOHAR GOSUL (ASSISTANT PROFESSOR)
(31) Priority Document No	:NA	3)SUDHESHNA VEMPATI (ASSISTANT PROFESSOR)
(32) Priority Date	:NA	4)Dr. K. THIRUPAL REDDY (ASSISTANT PROFESSOR)
(33) Name of priority country	:NA	5)MUNIDHANALAKSHMI KUMBAKONAM
(86) International Application No	:NA	(ASSISTANT PROFESSOR)
Filing Date	:NA	6)YERRAMANENI SOWJANYA (ASSISTANT
(87) International Publication No	: NA	PROFESSOR)
(61) Patent of Addition to Application Number	:NA	7)GOWRAVARAM RASHMI (ASSISTANT PROFESSOR)
Filing Date	:NA	(72)Name of Inventor:
(62) Divisional to Application Number	:NA	1)Dr. R. MADANA MOHANA (PROFESSOR)
Filing Date	:NA	2)MANOHAR GOSUL (ASSISTANT PROFESSOR)
		3)SUDHESHNA VEMPATI (ASSISTANT PROFESSOR)
		4)Dr. K. THIRUPAL REDDY (ASSISTANT PROFESSOR)
		5)MUNIDHANALAKSHMI KUMBAKONAM
		(ASSISTANT PROFESSOR)
		6)YERRAMANENI SOWJANYA (ASSISTANT
		PROFESSOR)
		I RUI ESSUR)

## (57) Abstract:

Patent Title: ADML-Covid19 Protected Room: AUTOMATIC DISINFECTING ROOM AIR USING MACHINE LEARNING SYSTEM ABSTRACT My Invention ADML-Covid19 Protected Room • is a apparatus for disinfecting and sterilizing all types of room, surfaces contaminated with microorganisms and toxic substances to render both inactive. The apparatus for disinfecting and sterilizing breathable air and then using this air to protect a confined space from external contamination. The invention consists of a ultra-violet (NU-V) source that is more effective than high intensity mercury based 257 nm light for destroying DNA of covid19, virus, bacteria, spores and cysts. It is most effective in breaking chemical bonds in toxic gases and Biotoxins that are useful to terrorists. An air disinfection unit is passed through a housing from an air inlet to an air outlet opening at a predetermined air flow rate under substantially uniform cross-sectional air flow conditions across closely spaced UV-C irradiation lamps located at a distance of between 2 to 4 inches O. C. with the lamps being positioned directly in the air stream so that all air flows passed the bulbs at a distance of not more than 2.2-3.1 inches. The bulbs produce UV-C irradiation at a wave length of about 254 nm and have an intensity of about  $142~\mu$ W/cm2. The housing has a predetermined volume selected such that airborne bacteria remain in the enclosure for a residence time of between 0.54 and 1.9 seconds. The Air flows between the exterior and interior of the enclosure through the second, third air inlet passes through a Coronavirus killer filter assembly. The invention also includes an air dispersion outlet having a fan that draws air into the invention through the first, second air inlets and forces air out of the invention.

No. of Pages: 25 No. of Claims: 10

(22) Date of filing of Application: 18/06/2020 (43) Publication Date: 03/07/2020

# (54) Title of the invention : METHOD AND COMPOSITION FOR REDUCING EMISSIONS FROM A COMPRESSION IGNITION ENGINE AND ENHANCING PERFORMANCE

		(TIN)
		(71)Name of Applicant:
		1)DR.R.T.SARATHBABU
		Address of Applicant :Associate Professor, Department of
		Mechanical Engineering, KG Reddy College of Engineering and
(51) International classification		Technology, Hyderabad, Telangana India Pin 500075 Telangana
(51) International classification	41/00	India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)DR.R.T.SARATHBABU
(33) Name of priority country	:NA	2)DR.M.KANNAN
(86) International Application No	:NA	3)DR.S.SANTHANA KRISHNAN
Filing Date	:NA	4)Dr. V. V. PRATHIBHA BHARATHI
(87) International Publication No	: NA	5)V.V.NAGA DEEPTHI
(61) Patent of Addition to Application Number	:NA	6)Ms. NILESHA UMRAO PATIL
Filing Date	:NA	7)NILESH VIJAY SABNIS
(62) Divisional to Application Number	:NA	8)KONDRAGUNTA KOTESWARARAO
Filing Date	:NA	9)DR. KUNDAN KUMAR. D
8		10)RADHA KRISHNAN P
		11)DR. MUKESH R
		12)DR. K. KANTHA RAO
		13)AKULA DHANA RAJ
		13)AKULA DITANA KAJ

#### (57) Abstract:

The invention involves a method and composition for reducing emissions from a compression ignition engine and enhancing performance. The method includes the step of a) conducting a first phase performance, combustion and emission tests with diesel oil and mahua biodiesel oil in the compression-ignition (CI) engine to obtain first values indicating 20% mahua biodiesel oil by volume and 80% diesel oil (a B20 blend) presents an optimum mixture. The method includes the step of b) conducting a second phase performance, combustion and emission tests with a low heat rejection (LHR) modified engine and comparison is performed to obtain second values indicating the performance of a coated engine with B20 blend presents the optimum mixture. The method includes the step of c) in a third phase, implementing a low-temperature combustion (LTC) by an exhaust gas recirculation (EGR) at a ratio of about 5% to about 20% to reduce the NOx emission and results into increased emissions of the carbon monoxide (CO), and hydrocarbons (HC) in 15% ratio. The method includes the step of d) in a fourth phase, combining the low heat rejection (LHR) modified engine and the EGR and used in a diesel engine fuelled with the B20 blend and 5% ethanol is added as a blend to increase efficiency with low emissions and enhanced combustion. The most illustrative drawing: FIG. 2.

No. of Pages: 27 No. of Claims: 10

(22) Date of filing of Application :18/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : MODULAR FIXTURE FOR SPACECRAFT MOUNTING, ASSEMBLY & INTEGRATION WITH THREE DEGREES OF FREEDOM

	·F21V	(71)Name of Applicant:
(51) International classification	29/00	1)Indian Space Research Organization
(31) Priority Document No	:NA	Address of Applicant :Department of Space, Antariksh
(32) Priority Date	:NA	Bhavan, New BEL Road, Bangalore 560 231, India Karnataka
(33) Name of priority country	:NA	India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Atul Nigotia
(87) International Publication No	: NA	2)P Shravan Kumar
(61) Patent of Addition to Application Number	:NA	3)Rajasekaran D
Filing Date	:NA	4)Mohammed Ali A
(62) Divisional to Application Number	:NA	5)Sekar A
Filing Date	:NA	6)Shanmuga Sundaram N

#### (57) Abstract:

The fixture 100 for assembly, integration and testing of a spacecraft 123 in accordance with the present invention comprises a base frame assembly 101, a vertical column 105 mounted on said base frame assembly 101, an L shaped structure 109 having a vertical frame 110 and a horizontal frame 111. The fixture 100 further comprises a first drive assembly 116 capable of rotating the L-shaped structure 109 along a first longitudinal axis L1 and a second drive assembly 117 capable of rotating the spacecraft 123 along a second longitudinal axis L2. The fixture 100 further comprises a third drive assembly 119 for linear movement of the L shaped structure 109 along the vertical column 110 in any angular orientation. Figure 1

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

(22) Date of filing of Application :18/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: NON INVASIVE, NOVEL POLY HERBAL FORMULATION FOR THE PREVENTION AND MANAGEMENT OF GASTRIC CANCER, ITS PREPARATION AND USES THEREOF.

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li><li>(33) Name of priority country</li></ul>	:A61K 9/00 :NA :NA :NA	(71)Name of Applicant:  1)Walters Siddha Research Pvt. Ltd. Address of Applicant:10/1, Indian Bank Upstairs, Kamarajar Salai, Tirunelveli. Tamil Nadu India (72)Name of Inventor:
(86) International Application No	:NA	1)Dr. M. Thomas Walter
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 Novel, Poly herbal synergistic compound having 09 herbal ingredients for the effective prevention and management of Gastric Cancer and Colon cancer, to be given in oral dosage form possessing Anti-cancer, Anti-proliferative / Cytotoxic properties as substantiated by Invitro HCT 116 MTT assay with an IC 50 (an Inhibitory Concentration) value of 178.89µg.

No. of Pages: 27 No. of Claims: 9

(22) Date of filing of Application :18/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: REPEATED PATTERN FINDING USING FIRST BASE FIRST RUNNER CLUSTER SEQUENCE FINDER ALGORITHM AND PROTEIN STRUCTURE PREDICTION ON ENVIRONMENTAL SAMPLES

(51) International classification		(71)Name of Applicant:
(31) International classification	88/02	1)Vellore Institute of Technology
(31) Priority Document No	:NA	Address of Applicant :Vellore Institute of Technology,
(32) Priority Date	:NA	Vandalur -Kelambakkam Rd, Chennai-600127, Tamil Nadu,
(33) Name of priority country	:NA	India. Tamil Nadu India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)U. Vignesh
(87) International Publication No	: NA	2)Dr. R. Parvathi
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

No. of Pages: 10 No. of Claims: 6

^{7.} ABSTRACT OF THE INVENTION [006]The study provides an insight into the bacillus cereus structural, functional aspects and the similarity pattern it embeds into food items suggested through FBFRCSF algorithm. Predicting the protein structure of identified microorganism which is present in all of the collected environmental real time environmental food samples or majority presence in the samples compare to other organisms. To suggest food items present in the samples after culture identification through already proven experiments such as pathogen characterization, host characterization, etc. To identify similar pattern of found microorganism. (e.g. Bacillus cereus) to the suggested food items (e.g. Milk, Egg, Cashew, Badam, etc.) using a newly proposed algorithm FBFRCSF (First Base First Runner Cluster Sequence Finder) by proving its advantages as better time complexity, efficiency in matching, accuracy, etc. The outcome of this works can be used for the drug discovery process. In future, this work can be applied to targeted environmental food wastes for recycling methodologies.

(22) Date of filing of Application :18/06/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: LOOK AHEAD BUS ARCHITECTURE (LABARCH) FOR FPGA EMBEDDED SYSTEM

(51) Intermedianal algorification	:H03K	(71)Name of Applicant:
(51) International classification	19/177	1)Vellore Institute of Technology
(31) Priority Document No	:NA	Address of Applicant :Vellore Institute of Technology,
(32) Priority Date	:NA	Vandalur -Kelambakkam Rd, Chennai-600127, Tamil Nadu,
(33) Name of priority country	:NA	India. Tamil Nadu India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Dr.S.Harini
(87) International Publication No	: NA	2)Dr.V. Pattabiraman
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

No. of Pages: 9 No. of Claims: 6

^{7.} ABSTRACT OF THE INVENTION Look Ahead Bus Architecture for FPGA embedded system is innovative bus architecture to minimize the communication overhead between FPGA and the system it is part of. Here the system can be ASIC, SoC, CPU or GPU. Look Ahead Bus Architecture improves the communication latency between the FPGA and its connected system by masking the communication delay. The communication delay is masked by a set of registers provided at either end of the bus. To enable die LaBarch, a driver software is written in such a way that it detects the pipeline parallelism available in the workload that has to be offloaded to the FPGA. Once this is identified, the tasks are pipelined and given to the FPGA. FPGA configurator software works in unison with the driver software to enable pipelining of tasks on the FPGA. Every workload in LaBarch will get executed as a pipelined task. The registers, drivers and FPGA configurator holistically work together to mask communication latency and thus provides faster access to the FPGA. Prototype of LaBarch has been developed using FPGA embedded in an ASIC system.

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041025657 A

(19) INDIA

(22) Date of filing of Application :18/06/2020 (43) Publication Date : 03/07/2020

(54) Title of the invention: MULTI-LINGUAL FARMING BOT

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:G06F 16/33 :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant:  1)Vellore Institute of Technology Address of Applicant: Vellore Institute of Technology, Vandalur - Kelambakkam Rd, Chennai-600127, Tamil Nadu, India. Tamil Nadu India (72)Name of Inventor: 1)Dr.Kanimozhi G 2)Mr.Devesh Kumar 3)Dr.Umamaheswari.E
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#### (57) Abstract:

No. of Pages: 9 No. of Claims: 5

^{7.} ABSTRACT OF THE INVENTION Agriculture is a major source of revenue for Indias largest population and a major contributor to the Indian economy. It is observed that in the agricultural sector there is not much crop production in the past decade. Food prices continue to rise as crop yields have decreased due to facts like water waste, low soil fertility, fertilizer abuse, climate change or diseases and labour. This work aims at developing an entirely automated plant/crop watering system. The main motivation behind this system is to reduce human labour, effort and errors due to human negligence. A smart farming based technology which can be controlled by android app is developed. The proposed device takes the user input in voice format and then it adapts the speech recognition technology to understand and interpret a voice query. And it is sent to microcontroller in its readable format. The autonomous robot has been designed in a user-compatible way as it works on the commands of the farmer. It is a voice controlled robot which recognizes the voice of the farmer and his commands. Since our project focuses on different region, our robot is programmed to recognize different regional languages i.e Tamil, Hindi, English. As the farmers are not well educated or literate enough to give commands, an option is provided for them to select their native language.

(22) Date of filing of Application :18/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : KEEN MECHANICAL ARM FOR ADEQUATE COMPOSITION OF DRUG IN PHARMACEUTICAL INDUSTRY

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li></ul>	:A61K 9/20 :NA :NA	(71)Name of Applicant:  1)Vellore Institute of Technology Address of Applicant: Vellore Institute of Technology, Vandalur - Kelambakkam Rd, Chennai-600127, Tamil Nadu,
(33) Name of priority country (86) International Application No	:NA :NA	India. Tamil Nadu India (72)Name of Inventor:
Filing Date (87) International Publication No	:NA : NA	1)Dr.Kanimozhi G 2)Mr. Abhinav Mishra
(61) Patent of Addition to Application Number Filing Date	:NA :NA	3)Mr. Hetu Saini 4)Mr. Rishabh Rohilla
(62) Divisional to Application Number Filing Date	:NA :NA	5)Mr. Preetam Singh Chauhan 6)Mr. Sindhujyoti Dutta

#### (57) Abstract:

Increasing fatalities due to medical errors have posed a great threat around people across the globe. One of the main reasons of deaths due to medical errors is because of improper composition of elements in a drug. Monitoring the task of adequate composition of medicine, for color identification at inflection point during the stoichiometric titration of chemical components in medicines. In response to the booming world of industrial automation, robotic arms have gained popularity in recent times. Robotics system is being used as high sorting accuracy has so far been observed. Increase in efficiency is also observed. The main focus of this project is to design and develop a robotic arm capable of sorting objects. This robot is equipped with color sensor, power unit, actuators (DC servo motors), end-effector (impactive gripper) and Raspberry-Pi (to control DC servo motors and color sensor). Color sensor (that was integrated) performs the task of color identification at inflection point during the stoichiometric titration of chemical components in medicines The designed robotic arm has four degrees of freedom which allows it to access objects in front of it in the polar co¬ordinates. The developed robotic arm can be used to lift small scale objects with its claws. A bot is also made to make the robotic arm movable. The four degrees of freedom has been achieved through the use servo motors and Raspberry-Pi, an open-sourced computer hardware and software that is being used to drive these motors. Additional sensors have been provided to detect the object in 3D space and also to detect human intervention for safety purposes.

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

(22) Date of filing of Application :18/06/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: SMART ATTENDANCE MARKING SYSTEM (SAMS) USING COMPUTER VISION

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No</li> </ul>	:G06K 9/00 :NA :NA :NA	(71)Name of Applicant:  1)VELLORE INSTITUTE OF TECHNOLGY Address of Applicant: VELLORE INSTITUTE OF TECHNOLGY, VANDALUR-KELAMBAKKAM RD, CHENNAI, TAMIL NADU, INDIA - 600 127. Tamil Nadu India (72)Name of Inventor:
Filing Date  (87) International Publication No  (61) Patent of Addition to Application Number  Filing Date  (62) Divisional to Application Number  Filing Date	:NA :NA :NA :NA :NA :NA	1)DR.BALASUNDARAM A 2)DR.MANAS RANJAN PRUSTY 3)DR.M.A.INAYATHULLAH 4)DR.OSWALD C

#### (57) Abstract:

Attendance marking in classes across different universities is mostly carried out as a manual task. This conventional approach is time consuming and is prone to human error. There are also some instances where attendance marking is automated through biometric access. However, the limitation in biometric access is that, the student should never fail to imprint his biometric identity while attending class. The proposed computer vision based Smart Attendance Marking System (SAMS) focusses towards mitigating the above limitations and provide an attendance marking system without any human intervention. SAMS gets input from the video footages of CCTV cameras deployed across the classroom. This invention uses several vision and image processing techniques such as background subtraction, foreground extraction, object detection, segmentation, object recognition and pattern matching techniques to accomplish the system objective. This will be a completely automated system without any human intervention with an eye towards reducing time consumption and increasing the accuracy.

No. of Pages: 8 No. of Claims: 6

(22) Date of filing of Application :18/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A NEW DESIGN OF HYDRO-ELECTRICITY PRODUCING SYSTEM THAT REUSES THE WATER THAT IS USED, WITH A POTENT

	:H03L	(71)Name of Applicant :
(51) International classification	7/09	1)VELLORE INSTITUTE OF TECHNOLGY
(31) Priority Document No	:NA	Address of Applicant :VELLORE INSTITUTE OF
(32) Priority Date	:NA	TECHNOLGY, VANDALUR-KELAMBAKKAM RD,
(33) Name of priority country	:NA	CHENNAI, TAMIL NADU, INDIA - 600 127. Tamil Nadu India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)MR.PUNITHAVELAN N
(87) International Publication No	: NA	2)MR.JAGANATHAN B
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Electric power generation through Hydro power is very cheap since it uses the mechanical stored in the water stored in water storage bodies In this invention ah innovative hydro pumping method is developed to reuse the water that is used for hydroelectric power generation. This is achieved through connecting the power generators (or pumps) in parallel through a water flow line. The water is made to flow through the water flow line by using an external electric motor pump that uses a very negligible amount of electric power (while comparing to the electric power generate using this system). As much as possible number of electric generators (or pumps) are running in parallel by harnessing the complete energy stored in water of the water storage bodies, (both at a certain height and/or at a certain depth from the surface of the earth) to recirculate the water. This new hydro pumping method will be very much useful to avoid sudden water floods due to heavy continuous rains, since the electricity production also can be carried out while pumping out the water from the places affected by floods.

No. of Pages: 7 No. of Claims: 3

(22) Date of filing of Application :18/06/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: AN ADVANCED TECHNIQUE TO GENERATE HTTP REQUESTS FROM WEB LOGS

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li><li>(33) Name of priority country</li></ul>	:H04L 29/08 :NA :NA :NA	(71)Name of Applicant:  1)VELLORE INSTITUTE OF TECHNOLOGY Address of Applicant: VELLORE INSTITUTE OF TECHNOLOGY VANDALUR-KELAMBAKKAM ROAD, CHENNAI, TAMIL NADU, INDIA 600127 Tamil Nadu India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)MR. DHANAPAL ANGAMUTHU
(87) International Publication No	: NA	2)DR. P. NITHYANANDAN
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The application data sets available to the public for research purpose are always stored in shortened/processed format. The reason for this is to protect the confidential information available in the original datas/requests. The confidential informations are encoded into with some attribute and those attributes are exposed along with data set. For example, FIFA worldcup98 data sets are available in public for research activities. This data set consists of HTTP requests received by the webserver during world cup match. This data set contains the HTTP requests in processed web log format. The originator of the request, destination of the request, etc., are encoded with unique numbers to represent the unique client. If we need to use this data set for any research work, it needs to be converted into a proper HTTP requests with valid client details. Currently, there is no such well-defined procedure or method available for doing so. This invention proposed an advanced technique to generate valid requests from web logs. The process involves multiple phases. The first phase is to filter the required data from the complete web logs. The second phase involves mapping the encoded client into appropriate value in the requests. The next phase is to process the output details received from step 2 into formatting the valid requests. The final phase is to choose the intended out going interface selection to send out the formatted requests.

No. of Pages: 6 No. of Claims: 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041025668 A

(19) INDIA

(22) Date of filing of Application :18/06/2020 (43) Publication Date : 03/07/2020

## (54) Title of the invention: AFFORDABLE SMART WATERBOTTLE

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No</li> </ul>	:A61K 35/17 :NA :NA :NA	(71)Name of Applicant:  1)VELLORE INSTITUTE OF TECHNOLOGY Address of Applicant: VELLORE INSTITUTE OF TECHNOLOGY, VANDALUR-KELAMBAKKAM RD, CHENNAI, TAMIL NADU, INDIA - 600 127. Tamil Nadu India (72)Name of Inventor:
Filing Date  (87) International Publication No  (61) Patent of Addition to Application Number  Filing Date	:NA :NA :NA :NA	1)Dr. E. UMAMAHESWARI 2)Dr. KARMAEL A 3)Dr. DAVID MAXIM GURURAJ 4)Mr. MOHAMMAD HISHAM JAFFAR
(62) Divisional to Application Number Filing Date	:NA :NA	

#### (57) Abstract:

Due to the daily hectic hassle of this fast-paced, technologically subsumed world that we live in now, we have developed a need for various technological solutions to help us carry out our daily necessities, even basic habits such as drinking water. Even as our world is diving deeper into new fields of technologies and making breakthroughs at an impeccable rate, all of this ultimately comes at a cost of losing track of certain luxuries such as time and health and this is where we have come up with a solution encompassing the modern trends of carriable microchips installed into day-to-day items. We have proposed an affordable smart water bottle that is capable of tracking the users periodic water consumption, remind the user to consume water at specified intervals using public friendly and aesthetic reminds, set daily goals for the user using personal data and possess the functionality for the user to set their own goal.

No. of Pages: 6 No. of Claims: 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041025669 A

(19) INDIA

(22) Date of filing of Application :18/06/2020 (43) Publication Date : 03/07/2020

## (54) Title of the invention: INTEGRATED LC3-VALLEY FILL PASSIVE LED DRIVER

<ul><li>(51) International classification</li><li>(31) Priority Document No</li></ul>	:H05B 33/08 :NA	(71)Name of Applicant:  1)Mrs. DEVI VENKATESH  Address of Applicant: VELLORE INSTITUTE OF
(32) Priority Date	:NA	TECHNOLOGY, VANDALUR-KELAMBAKKAM RD,
(33) Name of priority country	:NA	CHENNAI, TAMIL NADU, INDIA - 600 127. Gujarat India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Mrs. DEVI VENKATESH
(87) International Publication No	: NA	2)Dr. SREEDEVI VELLITHIRUTHY THAZHATHU
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

High Brightness Light Emitting Diodes (HBLEDs) replace conventional lamps due to energy savings. The integrated LC3 -valley fill passive LED driver achieves high input power factor, low THD with reduced ripple in the output voltage. The invention uses valley fill approach to reduce the output voltage ripple in association with LC3- parallel resonance principle which helps to reduce the THD. The integrated passive LED driver consists of inductors, capacitors and diodes only without using any semiconductor-based switching devices and any complex control circuitry. A 70 W prototype using single-phase, 230 V, 50 Hz, ac supply is fabricated. The driver is suitable for outdoor applications where extreme weather conditions and maintenance issues hinder its performance.

No. of Pages: 8 No. of Claims: 3

(22) Date of filing of Application: 18/06/2020 (43) Publication Date: 03/07/2020

# (54) Title of the invention : AN ADVANCED LOGISTIC REGRESSION BASED MULTI-ZONE CLASSIFICATION MECHANISM TO DETECT SLOW HTTP DDoS ATTACKS IN THE CLOUD ENVIRONMENT

	110 411	
(51) International classification		(71)Name of Applicant :
()	4/021	1)Vellore Institute of Technology
(31) Priority Document No	:NA	Address of Applicant :Vellore Institute of Technology,
(32) Priority Date	:NA	Vandalur-Kelambakkam Rd, Chennai, Tamil Nadu, India-600127
(33) Name of priority country	:NA	Tamil Nadu India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Mr. Dhanapal Angamuthu
(87) International Publication No	: NA	2)Dr. P. Nithyanandan
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

[006] The slow HTTP DDoS attack detection is complicated as it imitates the slow network behaviour. This is even difficult in the cloud due to its complexities and characteristics nature of the Cloud Environment. The failure to detect such DDoS attack not only impact the availability of the cloud application, but it also affects the cloud resources thereby impacting the rest of the customers too. The proposed system involves an effective technique to detect such slow HTTP DDoS attacks in the cloud. This proposed method is integrated into the cloud ecosystem to safeguard the targeted cloud application along with complete cloud environment. This proposed mechanism comprises an advanced logistic regression based multizone classification protection method. This advanced multizone classification model helps to automatically detect slow HTTP DDoS attacks in the cloud and takes appropriate actions to safeguard the cloud application as well as cloud resources. The first zone is the Monitoring Zone (MZ), where the incoming HTTP requests are monitored to classify the clients based on their Behaviour. If the requests from the specific client are identified as normal, he is classified as a legitimate and moved into Green Zonal (GZ), the requests are forwarded to the application for further processing. In the case, requests from a client are suspicious to mimic slow HTTP DDoS attacks, they are classified into Orange Zone (OZ), where clients are further scrutinized. This OZ helps to identify intermittent issues of the slow network. If the clients in OZ consistently exhibits slow DDoS symptoms, then they are classified into Red Zone (RZ) and declared as a slow HTTP DDoS attack to cloud administrator. In the case of clients with legitimate intermittent slow network issue and classified into OZ, later behaving in a good manner are moved into GZ to get the continuous services. The clients in any of GZ/OZ/RZ with no activity for a longer period time as per user configuration, they are released into MZ.

No. of Pages: 8 No. of Claims: 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041025809 A

(19) INDIA

(22) Date of filing of Application :18/06/2020 (43) Publication Date : 03/07/2020

## (54) Title of the invention: AN ELECTRONIC DATA INPUT DEVICE

(51) International classification		(71)Name of Applicant:
(31) Priority Document No	3/03 :NA	1)RAJANA LAHARI Address of Applicant :6-25, KUMARAPURAM VILLAGE,
(32) Priority Date	:NA	DUPPITURU(POST), ATCHUTHAPURAM(MDL),
(33) Name of priority country	:NA	VISAKHAPATNAM Andhra Pradesh India
(86) International Application No	:NA	2)KUMARESWAR
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)KUMARESWAR
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT The present disclosure relates to a mouse which communicates to the computer by wireless medium. This wireless mouse is able to communicate with many computers by changing the switches provided on it, but only one computer selected by the user. This mouse can communicate with more no of computers based on the number of buttons provided on it. Increasing the number of buttons increases the range of computers it can operate. Figs. 1 and 2 are representative figures.

No. of Pages: 10 No. of Claims: 5

(22) Date of filing of Application :19/06/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: FAULT DETECTION BY VIBRATION SIGNAL ANALYSIS USING INTELLIGENT IOT SYSTEM

(51) International classification  (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date  (88) International Publication Number Filing Date (89) International Publication Number Filing Date (10) International Publication Number Filing Date (11) International Classification Number Filing Date (12) International Classification Number Filing Date (13) International Classification Number Filing Date (14) International Classification Number Filing Date (15) International Classification Number Filing Date (16) International Classification Number Filing Date (17) International Classification Number Filing Date (17) International Classification Number Filing Date (18) International Classification Number Filing Date	(71)Name of Applicant:  1)E. Fantin Irudaya Raj Address of Applicant: Assistant Professor, Department of Electrical and Electronics Engineering, Dr. Sivanthi Aditanar College of Engineering, Tiruchendur 628 215 Tamil Nadu India 2)Dr. A. Beno 3)D. Thiyaharajan 4)E. Francy Irudaya Rani 5)Dr. T. Lurthu Pushparaj 6)Mrs.V.Anbazhagu 7)Dr.M.Selvaraj 8)Mr. NITESH CHOUHAN (72)Name of Inventor: 1)E. Fantin Irudaya Raj 2)Dr. A. Beno 3)D. Thiyaharajan 4)E. Francy Irudaya Rani 5)Dr. T. Lurthu Pushparaj 6)Mrs.V.Anbazhagu 7)Dr.M.Selvaraj 8)Mr. NITESH CHOUHAN
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#### (57) Abstract:

In industries, Internet of Things (IoT) is a new industrial revolution technology for improving the manufacturing process. Recently, Fault diagnostic techniques for machines have been the considerable subjects for condition-based maintenance system due to the potential merits such as reducing downtime, decreasing maintenance costs, and increasing machine availability. This invention presents a novel fault diagnosis method called Intelligent IoT which curtails the faults due to vibrations in machines by utilizing the frequency information of the vibration signals. The intelligent system integrated in machine reduces the need of complex computations in monitoring and control stations. In recent years, the convolutional neural network proved as one of the best automated feature extraction and classification tool. This invention incorporates 1-D convolutional neural network for diagnosing and predicting the faults by exploiting the frequency characteristics of the vibration signal. The detected faults are stored in cloud server and accessed by machine operators via user interface simultaneously. This invention predicts potential damages in machines, produces healthy machine by forecasting the damages due to vibrations which results in better performance with high accuracy.

No. of Pages: 13 No. of Claims: 6

(22) Date of filing of Application :19/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : DESIGN OFAUTONOMOUS ROBOTS USED TO DISINFECT HOSPITAL ROOMS WITH CONCENTRATED UV LIGHT

(51) International classification  (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Sina Filing Date (NA Filing Date Sina Filing Date	(71)Name of Applicant: 1)Dr .M.S .Godwin Premi Address of Applicant:Sathyabama Institute of Science and Technology Professor, Chennai Tamil Nadu India 2)Mr.M.Vasanthakumar 3)Mr.M.Gunasekaran 4)Ms.Geetha Rani 5)Mrs.R.Nagalakshmi 6)Mrs.K.Nandini 7)Mrs. Johnsi j 8)Mr.T.Surendran 9)Mrs.M.Suganya 10)Mr.S.Sankarananth (72)Name of Inventor: 1)Dr .M.S .Godwin Premi 2)Mrs.R.Nagalakshmi 3)Mrs.R.Nagalakshmi 3)Mrs.K.Nandini 4)Mrs. Johnsi J 5)Mr.T.Surendran 6)Mrs.M.Suganya 7)Mr.M.Vasanthakumar 8)Mr.M.Gunasekaran 9)Ms.Geetha Rani 10)Dr N Partheeban 11)Mr.S.Sankarananth
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### (57) Abstract:

ABSTRACT Sterilization is significant to have safe zone to stay in such as hospitals or clinics where regularly patients affected by various diseases visit. Microorganisms have the ability to stick to the surface hence regular sterilization is required. These microbes even found suspended in air. In this invention, robotic device is proposed which sterilizes object and space using ultra violet radiation. Human cannot operate such devices as continuous exposure to UV light causes harmful effects to mankind. Hence such applications operated by robots without any human intervention gives best results. The robotic device has lamp unit for generation of UV light which is guided in required direction based on the reflector such that emission of UV light is unidirectional. This device also has a supporting part which is rotatable that is not exposed to ultraviolet radiation. It moves in vertical direction for concentrating the UV light in multi direction capable of higher effect of intensity sterilization. The lamp unit is positioned radially which is of quasi cylindrical shape. Efficient sterilization of air and objects is done based on UV radiation.

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

(22) Date of filing of Application: 19/06/2020 (43) Publication Date: 03/07/2020

# (54) Title of the invention : MACHINE LEARNING BASED METHOD FOR EFFICIENT CLASSIFICATION OF BIOLOGICAL SEQUENCES

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:G06N 20/00 :NA :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant:  1)Dr. Sunil Kumar Dhal Address of Applicant: Professor, Faculty of Management Studies SRI SRI UNIVERSITY, Cuttack, Odisha-754006, India Orissa India 2)Dr.Sudhir Kumar Mohapatra 3)Dr.Srinivas Prasad 4)Dr.Haritha Donavalli 5)Dr.S.Balamurugan (72)Name of Inventor: 1)Dr. Sunil Kumar Dhal 2)Dr.Sudhir Kumar Mohapatra 3)Dr.Srinivas Prasad 4)Dr.Haritha Donavalli 5)Dr.S.Balamurugan
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#### (57) Abstract:

The invention disclosure presents a computer implemented method of Biological Sequences prediction using a large dataset of the customer, wherein the computer implemented method is processed by at least one processor of the at least one computing device, the computer implemented method comprising Preprocessing of an input data set; Performing a missing Value Treatment of the input data set using a missing data algorithm processed by at least one processor of the computing device; Performing a variable transformation to convert the a categorical dataset of the input data set into a numeric data; Analyzing the outliers points in the input datasets with an estimating center value of the input data set wherein this estimated center could be either a mean, or a median, or a percentile of the input data set; Selecting the feature of the input dataset according to the parameters of the output of analyzing the outliers points those are associated with the Biological Sequences prediction of the input data set; Sampling of the outcome based on a Biological Sequences classification. Additionally, the invention also exposs to identify the functions of the related patterns between interacting positions. The invention may be used for any biological sequence classification.

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

(22) Date of filing of Application :19/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : AN EFFICIENT DIGITATE LEAF SHAPED MICROSTRIP PATCH ANTENNA FOR WEARABLE APPLICATIONS

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:H01Q 9/00 :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant:  1)Dr. R. Jothi Chitra Address of Applicant: W/o. A. Suresh, Professor, Department of ECE, Velammal Institute of Technology, Panchetti, Chennai - 600066, Tamilnadu, India Tamil Nadu India  2)S. Manju  3)D. Jeyamani Latha  4)S. Anusooya  5)Jean Shilpa V  6)R Anitha  (72)Name of Inventor:  1)Dr. R. Jothi Chitra  2)S. Manju  3)D. Jeyamani Latha  4)S. Anusooya  5)Jean Shilpa V  6)R Anitha  7)G. Pooja Bharghavi  8)N. Jeevitha  9)V.S. Hemavathi  10)A. Priyadharshini
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#### (57) Abstract:

The present invention, an efficient digitate leaf shaped micrstrap patch anrenna for wearable devices comprise of at least one digitate leaf-shaped patch 101 with wash cotton substrate of dielectric constant 1.4 and substrate thickness 1.6mm. The present radiator 101 is fed by microstrip feed Line technique. The antenna parameters such as VSWR, Return Loss, Radiation pattern and gain are simulated using AnSoft HFSS software. The main advantage of the present invention is that it resonates for multiband frequency. The radiation pattern is nearly omnidirectional for all the frequency range and also exhibits a reasonable H-plane Omni-directional radiation and doughnut-shaped radiation in E-plane.

No. of Pages: 16 No. of Claims: 7

(22) Date of filing of Application :19/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A SYSTEM FOR MONITORING EXHAUST OF THE VEHICLE BASED ON IOT AND A METHOD THEREOF

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:F01N 11/00 :NA :NA :NA :NA	(71)Name of Applicant:  1)ANNA UNIVERSITY, CHENNAI Address of Applicant: THE DIRECTOR, CENTRE FOR INTELLECTUAL PROPERTY RIGHTS, CPDE BUILDING, COLLEGE OF ENGINEERING, GUINDY, ANNA UNIVERSITY, CHENNAI-600 025, SARDAR PATEL ROAD, TAMIL NADU, INDIA Tamil Nadu India (72)Name of Inventor:  1)M. KANTHABABU 2)K PRADEEPA BARKAVE 3)G SWARNA LATHA 4)R KAUSHIK 5)JOELKEN NITHILAN BASKAR
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### (57) Abstract:

A system for monitoring exhaust of the vehicle based on IoT and a method thereof are disclosed. The system for monitoring exhaust of the vehicle based on IoT of the present invention comprises of a gas sensor and a LoRa microcontroller to detect the excess exhaust gas emission level to determine the condition of the engine. The system comprises of transmitter module (100) positioned in the vehicle of the user, and a receiver module (200) positioned at the monitoring centre. The transmitter module (100) and said receiver module (200) are communicated using LoRa communication implemented through LoRa gateway (400) linked to cloud (300) for monitoring and reporting to authorities via centralised server (500) the excessive exhaust emission of carbon monoxide in the vehicle for appropriate action.

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

(22) Date of filing of Application: 19/06/2020 (43) Publication Date: 03/07/2020

# (54) Title of the invention : A VEHICLE SPEED MONITORING SYSTEM USING GEOFENCING TECHNOLOGY AND A METHOD THEREOF

(51) International classification	:H04W	(71)Name of Applicant:
(31) International classification	4/02	1)ANNA UNIVERSITY, CHENNAI
(31) Priority Document No	:NA	Address of Applicant :The Director, Centre for Intellectual
(32) Priority Date	:NA	Property Rights, CPDE Building, College of Engineering Guindy,
(33) Name of priority country	:NA	Anna University, Sardar Patel Road, Chennai-600025, Tamilnadu,
(86) International Application No	:NA	India. Tamil Nadu India
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)M. Kanthababu
(61) Patent of Addition to Application Number	:NA	2)S. Ganeshmani
Filing Date	:NA	3)A. Jeeva
(62) Divisional to Application Number	:NA	4)S. Kathiresan
Filing Date	:NA	5)M. Sabarinath

#### (57) Abstract:

Title: A vehicle monitoring system using geofencing technology and a method thereof. A vehicle monitoring system using geofencing technology and a method thereof are disclosed. The system comprising of a speed sensor (10), a global positioning system (GPS) module (20) which collects location information of the vehicle and a web server (30), which stores the safety speed limit using geofencing area mapping technique. The main control board (50) process the speed of the vehicle, compares the sensor signal values with that of predefined threshold speed limit value, determines whether the vehicle exceeds its speed limit, and transmits the status of the vehicle information by an LED indication module, LCD display unit (70), an alarm module (80) and a cloud based loT platform (40). The loT platform (40) communicates the speed of the vehicle to the remote user including speed regulation control authorities and owner of the vehicle, through SMS and email.

No. of Pages: 17 No. of Claims: 2

(22) Date of filing of Application :19/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A SYSTEM FOR AUTOMATIC DETECTION OF VEHICULAR ACCIDENTS AND A METHOD THEREOF

(51) International classification	:G07C	(71)Name of Applicant:
(31) international classification	5/08	1)ANNA UNIVERSITY, CHENNAI
(31) Priority Document No	:NA	Address of Applicant :THE DIRECTOR,CENTRE FOR
(32) Priority Date	:NA	INTELLECTUAL PROPERTY RIGHTS, CPDE BUILDING,
(33) Name of priority country	:NA	COLLEGE OF ENGINEERING GUINDY, ANNA
(86) International Application No	:NA	UNIVERSITY, CHENNAI - 600 025, SARDAR PATEL ROAD,
Filing Date	:NA	GUINDY Tamil Nadu India
(87) International Publication No	: NA	(72)Name of Inventor :
(61) Patent of Addition to Application Number	:NA	1)M. KANTHABABU
Filing Date	:NA	2)A. AGNES MERITTA STEFFY
(62) Divisional to Application Number	:NA	3)G. PRAVEEN KUMAR
Filing Date	:NA	4)R.S. SUBASHINI

#### (57) Abstract:

A system for automatic detection of vehicular accidents and a method thereof. A system for automatic detection of vehicular accidents and a method thereof are disclosed. The system comprises of an automobile module (100) comprising: a vibration sensor (101), which detects vibration sensor signals acquired due to airbag inflation during accidents, a LoRa microcontroller (102) which processes vibration sensor signals and detects accident occurrence if the condition determines that sensor signal values crosses pre-defined threshold value. Accident location coordinates are displayed on said mobile device using built-in GPS module. The LoRa microcontroller (202) processes received signal containing data including accident information comprising of vehicle registration number, vehicle contact number, i emergency contact number and location coordinates, from said automobile module (100) and transmits accident information to a cloud based platform which in turn communicates accident information and sending alert message to the emergency contact number.

No. of Pages: 22 No. of Claims: 2

(22) Date of filing of Application :19/06/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: SECURED PROTECTION DEVICE FOR SAFETY DURING OVERLOAD CONDITIONS

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:H02H	(71)Name of Applicant: 1)DR. S. SNAKAR Address of Applicant: AMET UNIVERSITY 135, EAST COAST ROAD, CHENNAI, TAMIL NADU, INDIA 603112. Tamil Nadu India 2)DR.M.N. SARAVANA KUMAR 3)DR. S. SANGEETHA 4)DR. P. PRABHU 5)MR. P. SURES KUMAR (72)Name of Inventor: 1)DR. S. SNAKAR 2)DR.M.N. SARAVANA KUMAR 3)DR. S. SANGEETHA 4)DR. P. PRABHU 5)MR. P. PRABHU 5)MR. P. SURES KUMAR
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#### (57) Abstract:

A sophisticated switch / safe protection device (SPD) is described for use in an electricity distribution system. The sophisticated circuit breaker / safe protection device (SPD) comprises a switch disconnection unit connected in series with a safety protection device, a sensor, and a drive circuit and an intelligent controller. When the detection and conduction circuit detects an imminent fault or an extremely high and unacceptable overvoltage condition in the SPD charging circuit, the detection and conduction circuit generates an activation signal which quickly switches off the protected protection device. Meanwhile, the intelligent controller generates a trip pulse for the switch trip unit which responses by forming an air gap in the charging circuit. Together, the blocked protective device and the air gap protect the load and the associated load circuit from damage and also serve to physically and electrically isolate the source of the fault or the overload condition from the rest of the electricity distribution system. The advantage of using the protected protection device is that imminent faults can react within microseconds. The air gap formed by the disconnection unit of the circuit-breaker isolates the fault even if the insured protection device does not turn off or does not work correctly, ensuring that the SPD complies with the electrical codes, regulations, and certification requirements.

No. of Pages: 27 No. of Claims: 7

(22) Date of filing of Application :19/06/2020 (43) Publication Date: 03/07/2020

### (54) Title of the invention: WATER IMPURITY DETECTION USING INTERNET OF THINGS (IOT) FOR SMART CITY

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> <li>(57) Abstract :</li> </ul>	:G01N 33/00 :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant: 1)Dr.A.Clementking Address of Applicant: Director, Integrated Intelligent Research(IIR), No 29, Sarojammal Complex, 1st Floor, Keelkattalai, Chennai 600117 Tamil Nadu India 2)Ms.S.Rani 3)Mr. Neeraj Chandnani 4)Mr.Yogesh Kumar Agarwal 5)Dr.Kudaravalli Sai Manoj 6)Dr Chiranjeevi Paritala 7)Dr. Shaik Khaleel Ahamed 8)Dr S.V.N. Sreenivasu 9)Mr.ANANTHNATH G.V. S (72)Name of Inventor: 1)Dr.A.Clementking 2)Ms.S.Rani 3)Mr. Neeraj Chandnani 4)Mr.Yogesh Kumar Agarwal 5)Dr.Kudaravalli Sai Manoj 6)Dr Chiranjeevi Paritala 7)Dr. Shaik Khaleel Ahamed 8)Dr S.V.N. Sreenivasu 9)Mr.ANANTHNATH G.V. S
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This invention provides an in-pipe water impurity detection system using IoT for smart city. With the new improvement in communication technologies, this real-time in-pipe water impurity detection is getting more extra attention. This invention is to develop an IoT based method that can examine and identify the impurities and unwanted particles present in the water. The system will be located at the origin point of every society/colony. The system can determine the hardness, alkalinity, and turbidity of the water. The system tests the water at frequent periods provided for pipelines to the customers/citizens. The real-time pieces of information are analyzed using fuzzy artificial evaluation also uploaded over the cloud. When an impurity is disclosed in the water, the system transmits an alert to the customers about the water impurity parameters. It prevents the additional flow of water in the contaminated zone in the pipe utilizing a solenoid valve. Some other area which provides quality water to the customers in the water delivery network continues flowing. The outcomes show that this invention can examine the characteristic water parameters in realtime and can successfully treat, forward data to the cloud, and suggest the consumers about the contamination in the zone.

No. of Pages: 12 No. of Claims: 9

(22) Date of filing of Application :19/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A NOVEL DEEP MEMORY NET MODEL FOR CROP PROTECTION THROUGH MULTI-CLASS DATA ANALYTICS

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(31) Priority Document No	:NA	Address of Applicant :2/61 A, South Street, Sembarampattu,
(32) Priority Date	:NA	Poottai-post, Sankarapuram-Taluk, Villupuram-District, PIN
(33) Name of priority country	:NA	Code: 606401 Tamil Nadu India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Dr. K. Dhanasekaran
(87) International Publication No	: NA	2)Dr. S. Kannimuthu
(61) Patent of Addition to Application Number	:NA	3)Dr. Manikandan Ramasamy
Filing Date	:NA	4)H. Muthukrishnan
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The invention relates to a Deep memory network method for handling crop disorders is to be designed to learn long sequences based on robust supervised deep learning. In this method, a goal-directed supervised deep learning method will be calculating the best-teacher influences from the text data distribution relevant to critical factors for crop disorders such as bacterial leaf-wilt, dark spots, soil status, usage of pesticides and fertilizers, effect of nutrients, and climate conditions. Finally, the method will evaluate sequential patterns to decide what category of information will be useful for protecting vegetables balancing nutrients, chemical compounds, water, and organic matters. The prediction of crop disorders for consecutive period will be improved through effective utilization of past and present knowledge. The errors in the model interpretation will be minimized to provide sequence-attention data update of vegetable crops. Figure 1 (for Publication)

No. of Pages: 27 No. of Claims: 10

(22) Date of filing of Application :19/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : SECURE CODE EXCHANGE METHOD FOR GROUP KEY MANAGEMENT PROTOCOL IN WIRELESS BODY AREA NETWORKS (WBAN)

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		Electronics and Communication Engineering, Nalla Malla Reddy
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(51) International classification		
(21) P. L. D	9/00	Ghatkesar (Mandal), Medchal Malkajgiri (Dt). Telangana India
(31) Priority Document No	:NA	2)DR. AMANDEEP KAUR
(32) Priority Date	:NA	3)Mr. NITESH CHOUHAN
(33) Name of priority country	:NA	4)Dr. Meenu Khurana
(86) International Application No	:NA	5)Ms. Meenakshi Shunmugam
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		6)Dr.A.Clementking
		7)Dr. M. Senthil Kumar
(55) A1		1

#### (57) Abstract:

The emerging wireless body area networks (WBANs) have extraordinary potential for the advancement and development of future pervasive healthcare systems. Wearable and implantable sensors are used for gathering the physiological information to accomplish persistently monitoring of an individuals physical conditions. Several various tiny wireless sensors deliberately positioned on the human body create a WBAN that can screen different vital signs, providing continuous feedback to the user and clinical workforce. However, due to the use of unreliable wireless media, WBANs are exposed to an assortment of assaults. Thus, critical security devices are required to allow a guarded WBAN. Regarding the above issues, in this invention, the new working WBAN system model with group message broadcasting is assembled. In this manner, a protected and expert group key management protocol with a cooperative sensor assistance is recommended. In the proposed protocol, the Chinese remainder theorem (CRT) is operated for group key management among the personal controller (PC) and Healthcare centre (HC), which further supports batch key updating. The recommended sensor affiliation plot is propelled by a coded cooperative data exchange (CCDE).

No. of Pages: 13 No. of Claims: 6

(22) Date of filing of Application :20/06/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: DESIGN FOR AUTOMATIC SANITIZER SPRAY MACHINE FOR CURRENCY

		(71)Name of Applicant:
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(51) International classification	:B05B	11 11 13 13 13 13 13 13 13 13 13 13 13 1
		Chennai, Tamil Nadu, India 602105 Tamil Nadu India
(31) Priority Document No	:NA	2)Dr. Sanjay Kumar Suman
(32) Priority Date	:NA	3)Dr. S. Mohanalakshmi
(33) Name of priority country	:NA	4)Dr. Satyanand Singh
(86) International Application No	:NA	5)Mrs. S. Gnanapriya
Filing Date	:NA	6)D. Gururaj
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)Dr. L. Bhagyalakshmi
Filing Date	:NA	2)Dr. Sanjay Kumar Suman
(62) Divisional to Application Number	:NA	3)Dr. S. Mohanalakshmi
Filing Date	:NA	4)Dr. Satyanand Singh
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		6)D. Gururaj

#### (57) Abstract:

Disinfecting paper based items is the need of the hour as microbes can spread through the daily paper work. This invention focuses on paper disinfector which is developed for disinfecting paper of size A4 and lesser than that. It is not possible to sanitize currency notes which is paper based item using gel or liquid disinfector. Hence usage of UV rays can be utilized for disinfecting currency notes which is exposed to UV lamps placed in a sanitization box. These lamps produce ozone which is able to disinfect even the unexposed area of the currency notes. Various paper based items that enters the establishment can be exposed to ozone for disinfecting them. The device is operated by human intervention, where the operator opens the upper lid requesting the visitor to place the currency notes on the lower lid. Nichrome wire is used for heating purpose with proper selection of resistivity placed in sleeve of mica, further wrapped in conductive cloth for the heat to be retended. Upper lid is closed as the power is switched on, the currency notes are exposed to UV rays or Ozone thereby disinfecting the currency notes. Safety is provided by limited power supplied to the device based on the timer control.

No. of Pages: 13 No. of Claims: 6

(22) Date of filing of Application :20/06/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: SUPPORT VECTOR MACHINE FOR SPEECH RECOGNITION

### (57) Abstract:

Exemplary embodiments of the present disclosure are directed towards a support vector machine for speech recognition with recordings obtained by a group of words spoken out by a speaker where Artificial neural networks are utilized to train and validate the data and the tool boxes are used to predict the performance of a speaker recognition system, and the input for the Artificial neural networks are the records obtained from the Wavelet analysis where the features extracted as a result of wavelet analysis are considered as input for evaluating the support vector machine and finally detecting the speaker where a commanding discriminative classifier is implemented in the detection of the speaker. FIG 1 and 2A-2B

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

(22) Date of filing of Application :20/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : SYSTEM AND METHOD TO PREDICT PRODUCT™S FRESHNESS STATUS AND MANAGE ITS DELIVERY

		(71)Name of Applicant:
		1)Dr. K. Hemalatha
(51) International classification	:G06Q	Address of Applicant :Department of Mathematics,
(31) International Classification	10/10	V.R.Siddhartha Engineering College (Autonomous), Kanuru,
(31) Priority Document No	:NA	Vijayawada, Krishna District, Andhra Pradesh, India, 520007
(32) Priority Date	:NA	Andhra Pradesh India
(33) Name of priority country	:NA	2)Dr. J. Siva Ram Prasad
(86) International Application No	:NA	3)M.V.D.N.S Madhavi
Filing Date	:NA	4)D. Rajani
(87) International Publication No	: NA	5)Dr. BDCN Prasad
(61) Patent of Addition to Application Number	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Dr. K. Hemalatha
(62) Divisional to Application Number	:NA	2)Dr. J. Siva Ram Prasad
Filing Date	:NA	3)M.V.D.N.S Madhavi
		4)D. Rajani
		5)Dr. BDCN Prasad

#### (57) Abstract:

Title: System and Method to Predict Product™s Freshness Status and Manage its Delivery The present disclosure proposes a system and method to predict product™s freshness status and accordingly manage its delivery. The system predicts the freshness status of perishable product and segregate the perishable products to be delivered in accordance with the destination end parameters of the order delivery. The system aids to manage delivery of perishable products to customers before they get fully ripen or rotten. The system segregates the perishable products in accordance with their freshness and delivery destination details in order to maintain the quality at the time of delivery. The freshness status of the perishable products is analysed at the production house with the help of multiple sensor inputs. The system for managing perishable products delivery based on their freshness 100, comprises of an order reception module 101, a multiple sensor input module 102, a product freshness analysing module 103, a destination parameter prediction module 104, and a product segregation module 105. Thus, use of chemicals which are sprayed on the products is reduced and delivery of natural and hygienic products is facilitated to the end customer.

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

(22) Date of filing of Application :20/06/2020 (43) Publication Date : 03/07/2020

## (54) Title of the invention: ALCOHOL FREE SANITIZER BASED ON HERBAL EXTRACTS

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li></ul>	8/06 :NA :NA	(71)Name of Applicant:  1)Prof. K. Raghu Babu Address of Applicant:Registrar, Dr. B.R. Ambedkar University, Srikakulam, Andhra Pradesh, India, 532410 Andhra
(33) Name of priority country	:NA	Pradesh India
(86) International Application No Filing Date	:NA :NA	2)Dr. Aruna Kumari Nakkella 3)Dr. Murapana Anuradha
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)Prof. K. Raghu Babu
Filing Date	:NA	2)Dr. Aruna Kumari Nakkella
(62) Divisional to Application Number	:NA	3)Dr. Murapana Anuradha
Filing Date	:NA	

#### (57) Abstract:

The present disclosure proposes an alcohol-free sanitizer based on herbal extracts with incorporation and utilization of herbs in an alcohol-free hand sanitizer that aids to prevent and control infectious diseases. The natural resources are utilized which possess antifungal and anti-microbial activities with health benefits in the preparation of hand sanitizers. The alcohol-free sanitizer based on herbal extracts is environmentally benign and easily available. An alcohol-free sanitizer based on herbal extracts comprises of 50 percent of component A, with polyphonic compounds and 50 percent of component B. In specific, the component A include leaf extracts of psidium guajava tree. The alcohol-free sanitizer based on herbal extracts is an eco-friendly hand sanitizer and is cost effective.

No. of Pages: 10 No. of Claims: 6

(22) Date of filing of Application :21/06/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: A NEW AND USEFUL GIFT RESERVING E-COMMERCE SYSTEM •

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li></ul>	:G06Q 30/06 :NA :NA	(71)Name of Applicant:  1)Supraj Kumar Nayanapalli Address of Applicant: D-705, Sowparnika Swastika, Phase II, Birdaraguppe, Attibele - 562107. Karnataka Urban (Dist),
(33) Name of priority country	:NA	Bengaluru, Karnataka, India. Karnataka India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Supraj Kumar Nayanapalli
(87) 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:

TITLE: A NEW AND USEFUL GIFT RESERVING E-COMMERCE SYSTEM • 7. ABSTRACT This invention relates generally to the field of e-commerce, and more particularly to a new and useful system for enabling a gift transaction via e-commerce. The gift reserving e-commerce system comprises of an e-commerce platform (102a) that consists of at least one of a web and mobile interfaces. The e-commerce platform (102a) provides a 3D/360-degree view of the products to a user through the e-commerce API (104a). The e-commerce system is further connected to a central database (112a), and the central database in turn connected to a vendor order management system (114a), and a vendor stock management system (116a). The central database (112a) receives information from the users (i.e., purchasers (122a), recipients (124a), and the vendors (126a). The e-commerce system (100a) communicates with the central database (112a) in conjunction with the API (104a) to provide the users perform selling and buying of the products (130a). The e-commerce system (100a) comprises a biometric based login module, which is configured to receive at least one biometric input from the user, for authenticating the user. Figures associated with Abstract is Fig. 1a

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

(22) Date of filing of Application :22/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A METHOD OF AN ARTIFICIALLY INTELLIGENT BUILD REPOSITORY MANAGEMENT SYSTEM

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	1)S.4 Add ASSIS DEEM TAMI 8/00 :NA	ame of Applicant: GOKULAKRISHNAN Idress of Applicant: S/o. N. SIVANANDHAM, TANT PROFESSOR / CSE DEPARTMENT, SCSVMV IED TO BE UNIVERSITY, KANCHIPURAM, LNADU - 631561 Tamil Nadu India HUPAKULA BHASKAR VENGATESAN ANESH BHIVSEN GADEKAR NAGENDRA PANINI CHALLA PRABHAKARAN THIRUNAVUKKARASU R. SUBBA RAO Ame of Inventor: GOKULAKRISHNAN HUPAKULA BHASKAR VENGATESAN ANESH BHIVSEN GADEKAR VENGATESAN ANESH BHIVSEN GADEKAR VENGATESAN ANESH BHIVSEN GADEKAR R. NAGENDRA PANINI CHALLA PRABHAKARAN
	,	THIRUNAVUKKARASU : R. SUBBA RAO

#### (57) Abstract:

The present invention relates to a kind of library management, including intelligent bookshelf, Robot body, intelligent reading-desk, Cloud library management system. The Intelligent bookshelf includes wireless single chip, Books place position, First positioning device, Lighting system, the books place position bottom surface and are equipped with luminance sensor, the robot body includes the first RFID scanner, GPS navigation system, Information processing system, Drive system, Lending system, give back system, First ID Card recognition System. The intelligence reading-desk includes decibel detection device, second touch screen, books recycle window, second ID Card Recognition System, second RFID scanner, calling device, prompt system, Information flag system is additionally provided with inside the decibel detection device, when second identifying system detects the identity card of user, second touch screen shows that the history of user reads performance situation.

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

(22) Date of filing of Application :22/06/2020

(43) Publication Date: 03/07/2020

# (54) Title of the invention : SYSTEM AND METHOD OF CLOUD COMPUTING BASED INTEGRATED CONTROL FOR GREEN HOUSES

#### (57) Abstract:

The present invention discloses an integrated, intelligent control system for greenhouses comprising: a cloud server 107, greenhouse intelligent control module 101; remote control system 106 accessing the server and control module through a network 104; greenhouse environmental parameter detection system and transmission module. The said system 100 is capable of controlling a plurality of greenhouses at different locations at any point of time from a remote location that are connected to a network and to each other; and the respective control modules 101 of any said greenhouse house shall also be controlled by the user through a computing platform such as IOT / Android / Microsoft. Any actions to be performed by way of management and control is capable of being performed from remote locations and by way of user advise system controlled through a cloud server 107 and a central control system 106 using the interconnected internet / intranet communication module 104.

No. of Pages: 13 No. of Claims: 6

(22) Date of filing of Application :22/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: METHOD AND SYSTEM FOR REMOVING NOISES IN DIGITAL IMAGES

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li></ul>	5/00 :NA :NA	(71)Name of Applicant: 1)Dr. D. DEVASENA Address of Applicant: Assistant Professor (Sl.G.)/EIE, SRI RAMAKRISHNA ENGINEERING COLLEGE,
(33) Name of priority country (86) International Application No	:NA :NA	VATTAMALAIPALAYAM, COIMBATORE 641022, TAMIL NADU, INDIA Tamil Nadu India
Filing Date	:NA	2)Dr. M. JAGADEESWARI
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA :NA	1)Dr. D. DEVASENA
Filing Date (62) Divisional to Application Number	:NA :NA	2)Dr. M. JAGADEESWARI
Filing Date	:NA	

#### (57) Abstract:

A system for removing noises in digital images (100) is disclosed. Said system (100) comprises a processor configured to execute instructions stored in a computer-readable medium. Said non-transitory computer-readable medium comprises an impulse noise removal unit (110) that facilitates to detect and suppress the RVIN in digital images, a multiplicative noise removal unit (115) that facilitates to remove the speckle noise in the digital images, and an optimizer unit (120) that facilitates to get an improve quality noise free output images. The method of operation of the system (100) is also disclosed. Figure to be included is Figure 1

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

(22) Date of filing of Application :22/06/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: AN APPARATUS AND METHODS FOR THERMOMECHANICAL TESTING

<ul><li>(51) International classification</li><li>(31) Priority Document No</li><li>(32) Priority Date</li><li>(33) Name of priority country</li></ul>	:B21B 45/00 :NA :NA :NA	(71)Name of Applicant:  1)SRM Institute of Science and Technology Address of Applicant: Kattankulathur, Chennai-603203, Tamil Nadu, India Tamil Nadu India (72)Name of Inventor:
(86) International Application No Filing Date	:NA :NA	1)P. KARTHIKEYAN 2)SUMIT PRAMANIK
<ul><li>(87) International Publication No</li><li>(61) Patent of Addition to Application Number</li><li>Filing Date</li></ul>	: NA :NA :NA	
(62) Divisional to Application Number Filing Date	:NA :NA	

#### (57) Abstract:

ABSTRACT AN APPARATUS AND METHODS FOR THERMOMECHANICAL TESTING The present disclosure relates to the field of thermal fatigue testing systems. Envisaged is an apparatus (100) and methods for thermomechanical testing of a specimen (5). The apparatus (100) can perform thermal shock fatigue cyclic testing, isothermal testing or isothermal creep testing. The apparatus (100) comprises a furnace (10) for heating through convective heating, a specimen temperature sensor (40), a furnace temperature sensor and a furnace temperature control unit (45) for controlling power supplied to the heating element of the furnace (10). The apparatus (100) comprises a specimen displacement mechanism (20) for inserting handling the specimen (5), a specimen holder (22) that is adapted to be loaded with a variable load (25) for exerting mechanical stress on the specimen and a furnace lid displacement mechanism (30) for handling a lid (12). The apparatus provides flexibility, is simple in construction and allows carrying out a very large number of cycles.

No. of Pages: 37 No. of Claims: 10

(22) Date of filing of Application :22/06/2020 (43) Publication Date : 03/07/2020

## (54) Title of the invention: SONIFICATION FOR DATABASE ADMINISTRATORS (SONIDBA)

(51) International classification  (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date :N Filing Date :N  (62) Divisional to Application Number Filing Date :N	10H 00 A A A A A IA A A	(71)Name of Applicant:  1)Dr. A. CHANDRASHEKHAR  Address of Applicant: Assistant Professor, Department of Computer Science and Engineering, ICFAI Foundation for Higher Education, Faculty of Science & Technology, Donthanapally, Shankarapalli, Road, Hyderabad-501203, Telangana, India Telangana India  2)Dr.G. RAMESH  3)B. MUNI LAVANYA  4)Dr. P. PAVAN KUMAR  5)Dr. P. DHANALAKSHMI  6)P. GOPALA KRISHNA  7)Dr. P. DILEEP KUMAR REDDY  (72)Name of Inventor:  1)Dr. A. CHANDRASHEKHAR  2)Dr.G. RAMESH  3)B. MUNI LAVANYA  4)Dr. P. PAVAN KUMAR  5)Dr. P. DHANALAKSHMI  6)P. GOPALA KRISHNA  7)Dr. P. DHANALAKSHMI  6)P. GOPALA KRISHNA  7)Dr. P. DILEEP KUMAR REDDY
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#### (57) Abstract:

The present invention named SoniDBA • is the software product that renders sonification service to DBA. In other words, SoniDBA converts most recent database alerts into non-verbal sounds that are DBA-understandable. Thus SoniDBA helps database administrators to have real time monitoring of availability and performance of databases. The invention is cloud based which reaps benefits of cloud such as scalability, availability, fault tolerance, elasticity and eliminates time and geographical restrictions. The invention specifically targets DBAs with its sonification service that saves time and effort of DBAs. Traditional database alert messages take more time to comprehend than non-verbal sounds produced by SoniDBA. Thus it renders invaluable service to DBAs. Moreover, it can also help DBAs who are visually impaired.

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

(22) Date of filing of Application :22/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : CLASSIFICATION OF BLOOD CELL USING MULTI AND HYPER SPECTRAL IMAGES USING CONVOLUTIONAL NEURAL NETWORKS

(51) International classification  (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date :NA Filing Date :NA Filing Date :NA	(71)Name of Applicant: 1)Dr.K.Balasubadra Address of Applicant: Professor, Dept of IT, R.M.D Engineering College, R.S.M Nagar, Kavaraipettai, Tiruvallur Dist, Tamilnadu, India-601206. Tamil Nadu India 2)Dr.R.Sasikumar 3)Dr.V.Prasanna Srinivasan 4)Mr.K.Balachander 5)Mr.K.Saravanan 6)Mr.K.Mohana Sundaram 7)Mr. Umamageswaran J 8)Ms.Badi Alekhya (72)Name of Inventor: 1)Dr.K.Balasubadra 2)Dr.R.Sasikumar 3)Dr.V.Prasanna Srinivasan 4)Mr.K.Balachander 5)Mr.K.Saravanan 6)Mr.K.Mohana Sundaram 7)Mr. Umamageswaran J 8)Ms.Badi Alekhya
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#### (57) Abstract:

In the field of biomedical, RBCs, WBCs, and platelets are the blood cell classification where they must be analyzed to predict the diseases in patients and make them undergo appropriate treatment. By using sensors, multi spectral images are obtained. But for detailed analysis, the image pixel captured is broken into N number of pixels called hyperspectral images, based on different required classification. To receive the desired result with the detailed feature, convolution neural networks are adopted in the process. For computer vision, it extracts the desired feature images by applying max polling in CNN. Then, it was fine-tuned by activation function to get the desired result.

No. of Pages: 11 No. of Claims: 4

(22) Date of filing of Application :23/06/2020 (43) Publication Date : 03/07/2020

### (54) Title of the invention: SMART FACE SHIELD

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:A42B 3/22 :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant:  1)Mr K.NITALAKSHESWARA RAO Address of Applicant: Associate Professor Department of CSE, Narasaraopeta Engineering College Narasaraopet Guntur Dt AP 522601, India Andhra Pradesh India 2)Dr Ch. SATYANANDA REDDY 3)Mr SRIRAM PARABRAHMA CHARI 4)Mr N. SRINIVASA RAO 5)Mr D.V.SRINIVASA RAO 6)Mrs. SHAZIYA SULTANA 7)Mr. SYED MUJTABA MAHDI MUDASSIR 8)Mr. ARSHAD MOHAMMED (72)Name of Inventor: 1)Mr K.NITALAKSHESWARA RAO 2)Dr Ch. SATYANANDA REDDY 3)Mr SRIRAM PARABRAHMA CHARI 4)Mr N. SRINIVASA RAO 5)Mr D.V.SRINIVASA RAO 6)Mrs. SHAZIYA SULTANA 7)Mr. SYED MUJTABA MAHDI MUDASSIR 8)Mr. ARSHAD MOHAMMED
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#### (57) Abstract:

Exemplary aspects of the present disclosure are directed towards the SMART FACE SHIELD consists a holder 101 and a PVC transparent sheet 102. The holder 101 comprises of Solar-Cell 101a, Battery 101b, ESP32-microcontroller 101c, UV-LEDs 101d, Micro-Fan 101e, HEPA-filter 101f, Motion Sensor 101g, Air quality Sensor 101h, Ultrasonic Sensor 101i, NTC-Temperature sensor 101j, Heartrate sensor 101k, camera 101m and Buzzer 101n. Ultrasonic Sensor101i and Camera 101m alerts the wearer about social distancing through the buzzer 101n. While UV-LEDs 101d illuminate and disinfect the shield 102 if no human presence is detected by motion sensor101g. Micro-Fan 101e sucks air through HEPA-filter 101f, and circulates on to the face. Heartrate sensor 101k monitor wearers heart rate, and NTC-Temperature sensor 101j monitor the temperature. Social distancing, Disinfecting status, wearer heart rate, and temperature along with air quality parameters communicated to the user interface 103 by ESP32-microcontroller 101c through LoRa enabled WiFi/RF/ Bluetooth 104.

No. of Pages: 21 No. of Claims: 8

(22) Date of filing of Application :23/06/2020

(43) Publication Date: 03/07/2020

# (54) Title of the invention : MECHANISM FOR DETECTION AND PREVENTION OF WATER AND MUD INRUSH IN UNDERGROUND CONSTRUCTION USING SPATIAL ANALYSIS

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:G06Q 50/00 :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant:  1)Dr.S.KRISHNA MOHAN Address of Applicant: Professor, Mechanical Engineering, EGS Pillay Engineering College, Old Nagoor Road, Thetthi village, Nagapattinam- 611002 Tamil Nadu India 2)Dr. BARMAVATU PRAVEEN 3)MR.YOGESH KUMAR AGARWAL 4)MR. GOURAV KALRA 5)Dr LALIT GARG 6)Dr. K. SATYA NARAYANA 7)Dr RAHUL DEV GUPTA 8)Dr. GANUGAPENTA RAMESH (72)Name of Inventor: 1)Dr.S.KRISHNA MOHAN 2)Dr. BARMAVATU PRAVEEN 3)MR.YOGESH KUMAR AGARWAL 4)MR. GOURAV KALRA 5)Dr LALIT GARG 6)Dr. K. SATYA NARAYANA 7)Dr RAHUL DEV GUPTA 8)Dr. GANUGAPENTA RAMESH
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#### (57) Abstract:

Ground stabilization and development play an essential role in the successful construction of some of the existing underground facilities. This role becomes indispensable, primarily when subsurface natural soil and groundwater levels represent an alarming factor that reflects the expected risks during the design and construction of such new developments. Water and Mud rushes are sudden surpluses of fine wet ore in underground mines. They can damage people and equipment as well as cause delays in production. Block and panel spelunking mines are vulnerable to mud rushes in production levels. In this proposal, the underground images are captured by using remote sensors, CCD cameras, and GPS receivers. The advanced preprocessing techniques such as FLAASH reduce the effect created by the atmosphere and change spectral radiance to water-surface reflectance. This invention presents the combination of convolutional neural network models such as VGG-16 as a feature extractor to extract feature maps and Inception V4 for classification. Grouting is a primary technique used to limit water and mud inrush in mines and underground engineering. This proposal facilitates effective grouting in tunnels with the help of the latest scientific methodologies to ensure the safety of personals working in the tunnel.

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

(22) Date of filing of Application :23/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : PRELIMINARY PHYTOCHEMICAL INVESTIGATION AND EVALUATION OF CARDIOPROTECTIVE STUDIES OF WITHANIA SOMNIFERA

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:A61K 36/81 :NA :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant:  1)Kanakam Vijayabhaskar Address of Applicant: Assistant professor, St.Peter's Institute of Pharmaceutical Sciences, 2, 4-1211, Vidya Nagar, Hanamkonda, Telangana 506001 Telangana India  2)M. Akhila 3)T. Shivani 4)M. Aruna Devi 5)P. Srinivasarao (72)Name of Inventor: 1)Kanakam Vijayabhaskar 2)M. Akhila 3)T. Shivani 4)M. Aruna Devi 5)P. Srinivasarao
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#### (57) Abstract:

The aim of the present study was to investigate the antimicrobial and preliminary phytochemical properties of WITHANIA SOMNIFERA Roxb. The aqueous and organic solvent (ethyl acetate and methanol) extracts from the leaves of WITHANIA SOMNIFERA(Verbenaceae) were tested against Staphylococcus aureus, Bacillus subtilis, Steptococcus pyrogens, Escherichia coli, Proteus vulgaris, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhi, Aspergillus niger and Candida albicans by agar well diffusion method. The results showed promising antibacterial activity against the tested bacteria. Among these, methanol and aqueous extracts were found to possess a more potent inhibitory effect when compared to the ethyl acetate extract. Preliminary phytochemical analysis of extracts revealed the presence of antimicrobial compounds such as carbohydrates, proteins, tannins and flavonoidal glycosides. The result of this study validates the use of methanol and aqueous extract of this species in ethnomedicine, favouring the isolation of antibacterial agents from the leaf extract.

No. of Pages: 10 No. of Claims: 1

(22) Date of filing of Application :23/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : SECURE REMOTE HEALTH MONITORING FRAMEWORK USING INTERNET OF THINGS WITH EDGE COMPUTING

(31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number	:H04L 29/08 :NA	
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### (57) Abstract:

The present invention named SRHMF • is the technology rich solution for remote health monitoring. It involves a mobile application or web based application that provides dashboard to doctor / physician who can monitor vital signs of patients live. Thus the invention helps to have real time treatment to patients. It has capabilities to reduce death of patients by eliminating delay in diagnosis and treatment. The solution is optimized with end to end security protocol, efficient channel assignment algorithm and edge gateway integration algorithm. When compared with traditional healthcare units, this technology driven solution makes the healthcare units to provide high quality services. It makes the dream of remote patient health monitoring a reality with 24/7 availability, scalability and fault tolerance.

No. of Pages: 12 No. of Claims: 8

(22) Date of filing of Application :23/06/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : DEVELOPMENT OF ADVANCED WIRE CUT EDM WITH MULTI PROGRAMMING DISPLAY AND COMPUTER CONTROL MEDIUM

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:B60K 1/04 :NA :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant:  1)Dr. Mallikarjun Ch Address of Applicant: A M REDDY College of Engineering and Technology, Petlurivaripalem, NarsaraoPet, Andhra Pradesh, India- 522601 Andhra Pradesh India  2)Nagendra Akula  3)K Ashok Kumar  4)B Subba Reddy  5)K L N Mutrthy  6)K.Vijaya Kumar  (72)Name of Inventor:  1)Dr. Mallikarjun Ch  2)Nagendra Akula  3)K Ashok Kumar  4)B Subba Reddy  5)K L N Mutrthy  6)K.Vijaya Kumar
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#### (57) Abstract:

A method for electrical discharge machining a workpiece includes the steps of: presenting an high strength and elongate electrode to the workpiece with a spark gap therebetween; flowing a dielectric fluid in the gap; eroding the workpiece by electrical discharge between the tip of the electrode and the workpiece; displacing the electrode in a direction aligned with the long axis of the electrode to maintain the gap as the electrode wears and the workpiece is eroded; and simultaneously with the displacement, producing vibratory movement of the electrode, the vibratory movement being aligned with the long axis of the electrode. A wire guide directs a wire electrode from a refeed mechanism in an electrical discharge machine EDM to a workpiece. The primary concept of this work is that when graphic information is selected, program creating unit receives machining shape data from graphic information analysis unit and pivot axis information from rotation center storage unit. Based on the received data, the program creating unit generates a new amount of movement of a wire electrode relative to a workpiece and the amounts of rotation of pivots, used to machine the workpiece with the wire electrode held vertical. Abrasive Jet Machining (AJM) is the process of material removal from a work piece by the application of a high speed stream of abrasive particles suspended in a gas medium from a nozzle. The material removal process is mainly caused by brittle fracture by impingement and then by erosion. The AJM will chiefly be used to cut shapes, drill holes and de-burr in hard and brittle materials like glass, ceramics etc. The aim of this work is to cut the hard metals automatically by using CNC programming. Care has been taken to use less fabricated components, because, the lack of accuracy in fabricated components would lead to a reduced performance of the machine. The machine was be automated to have 3 axes travel using microcontroller and driver arrangement along with stepper motor. The different functional components of AJM are the machining chamber, work holding device, abrasive drainage system, compressor, air filter and regulator, abrasive nozzle, and mixing chamber with cam motor arrangement. The different components are selected after appropriate design calculations.

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

(22) Date of filing of Application :23/06/2020 (43) Publication Date : 03/07/2020

## (54) Title of the invention: DEVELOPMENT OF "STREE SWACHTHATM-SANITARY NAPKIN VENDING MACHINE

(51) International classification (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date (83) Name of priority country NA (84) International Publication No NA (85) International Publication No NA (86) Patent of Addition to Application Number NA (87) International Publication Number NA (88) International Publication Number NA (89) International Publication Number NA (80) Divisional to Application Number NA (81) Name of priority country NA (82) Divisional to Application Number NA (83) Name of priority country NA (84) International Publication No NA (85) International Publication No NA (86) International Publication No NA (87) International Publication No NA (88) International Publication No NA (89) International Publication No NA (80) International Publication No NA (81) Name of priority country NA (81) Name of priority country NA (82) International Publication No NA (81) Name of priority country NA (82) International Publication No NA (83) Name of priority country NA (84) International Publication No NA (85) International Publication No NA (86) Name of priority country NA (87) International Publication No NA (87) International Publication No NA (88) Name of priority country NA (88) Name of priority country NA (89) International Publication No NA (80) Name of priority country NA (80) Name o	(71)Name of Applicant:  1)Dr. D.V. Sreekanth, Professor/ MECH Address of Applicant:ST.MARTIN TM S ENGINEERING COLLEGE, Dhulapally, Kompally, Secenderabad, Telangana, India-500100 Telangana India 2)Dr. P. Santosh Kumar Patra Principal & Professor / CSE 3)T.Paramesh, Associate Professor/ MECH 4)B. Hymavathi, Student/ MECH 5)Dr.B. Srinivasulu, Associate Professor/ MECH 6)B.Taraji Naik, Associate Professor 7)Dr. Ravinaik Banoth, Professor/ MECH 8)Chandrasekhar Yadav. Y Assistant Professor / MECH (72)Name of Inventor: 1)Dr. D.V. Sreekanth, Professor/ MECH 2)Dr. P. Santosh Kumar Patra, Principal & Professor / CSE 3)T.Paramesh, Associate Professor/ MECH 4)B. Hymavathi, Student/ MECH 5)Dr.B. Srinivasulu, Associate Professor/ MECH 6)B.Taraji Naik, Associate Professor 7)Dr. Ravinaik Banoth, Professor/ MECH 8)Chandrasekhar Yadav. Y, Assistant Professor / MECH
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#### (57) Abstract:

Starting off as a "MOVEMENT OF HYGIENETM in the rural areas, TMSTREE SWACHTHATM is a fully automatic sanitary vending machine. Our machine consists of a high solid-state Electronic technology with mechanical advancements. It is a self-dispensing machine, which can be accessed by the women at cost of just in R5. In this mode, coin mechanism is programmable for various denominations. The units also provided with automatic power backup in case of power failure. The vending machine is provided with a physical inspection window for checking the availability of napkins. The unit can be wall mounted. The machine has a storage capacity of 25 pads. It mainly consists of a column of horizontal spring which can load the napkins. This machine is very cost efficient in nature and coming to its mechanism, it can be operated any time of the day with its simple "drop and collect" system.

No. of Pages: 6 No. of Claims: 5

(22) Date of filing of Application :26/06/2020 (43) Publication Date : 03/07/2020

## (54) Title of the invention: LIFE SAVVY: WEARABLE FLU SENSE DEVICE

		(71)Name of Applicant :
(51) International classification	:H01L 29/78	
(31) Priority Document No	:NA	Address of Applicant : Adi Shankara Institute of Engineering
(32) Priority Date	:NA	and Technology, Kalady, Ernakulam, Kerala Kerala India
(33) Name of priority country	:NA	2)APJ Abdul Kalam Technological University - CERD,
(86) International Application No	:NA	Trivandrum, Kerala
Filing Date	:NA	3)Dr. Ragesh G K
(87) International Publication No	: NA	4)Er. Anuroop K B
(61) Patent of Addition to Application Number	:NA	5)Mr. Gokul Krishnan S
Filing Date	:NA	(72)Name of Inventor:
(62) Divisional to Application Number	:NA	1)Dr. Ragesh G K
Filing Date	:NA	2)Er. Anuroop K B
-		3)Mr. Gokul Krishnan S

## (57) Abstract:

Internet of Things (IoT) is a new technological paradigm that can connect things from various fields through the internet. For the IoT connected healthcare applications, the wireless body area network (WBAN) is gaining popularity as wearable devices spring into the market. This project Titled LIFE SAVVY proposes a portable life-saving wearable device in the form of a neckband consisting of surface electrodes, contactless neck photoplethysmogram (PPG), temperature sensor, GPS, etc. to obtain various health-related data. The device can be connected to a smartphone through Bluetooth (BLE), and a corresponding health app is synced to it. The data collected is temporarily stored in the device, and when the Bluetooth is turned on, the tool syncs the data with the app. Other personal details like name, age, height, weight, etc. can be given in-app. The user can monitor his health conditions locally in the app. When a risk factor is found, the data from the app is automatically sent to a cloud that is accessible only to the government health departmentthis way, the privacy of the user is maintained. The surface electrodes provided in the band helps in detecting the heart rate, coughs, and respiratory rates of the user. Contactless Neck PPG monitors the SPO2 levels. And the temperature is kept in a check with the help of a temperature sensor. LIFE SAVVY device not only detects pandemic diseases but also can be used for a person who suffers from cardiac arrest, heart attack, or any other complexities through an emergency alert by analyzing the sensor acquired data or by pressing the emergency button in the neckband. By including available biocompatible sensors, BLE, and Lipo battery with charge controller, the LIFE SAVVY device will be charge efficient and cost-effective.

No. of Pages: 10 No. of Claims: 8

# **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.201717003780 A

(19) INDIA

(22) Date of filing of Application :01/02/2017

(43) Publication Date: 03/07/2020

#### (54) Title of the invention: INTELLIGENT TV CONTROL SYSTEM AND IMPLEMENTATION METHOD THEREOF

Filing Date :0	PC1/CN2016/070273 )6/01/2016 WO/2017/088287	SHENZHEN, GUANGDONG 518052, CHINA China (72)Name of Inventor:  1)YAN, GE
(87) International Publication No (61) Patent of Addition to Application Number :N	WO/2017/088287 NA	
Filing Date (62) Divisional to Application Number :N	NA NA NA	

#### (57) Abstract:

Provided in the present invention are a control system for a smart television and an implementation method for the system: pressure data and vital signs data of multiple parts of the body of a user are collected via grouped pressure sensors; the pressure data and the vital signs data are transmitted to a smart television side, the pressure data and the vital signs data received from the pressure sensors side are analyzed and processed by the smart television to produce sitting posture information and mental state information of the user, and a corresponding sitting posture adjustment recommendation is transmitted or a change in a playing state of the television is controlled on the basis of the sitting posture information and the metal state information. The system and the implementation method therefor of the present invention, by acquiring state information of the user and automatically controlling the television in adjusting parameters on the basis of the state information of the user, increase the smartness of the smart television, thus providing the user with convenience in using the smart television.

No. of Pages: 28 No. of Claims: 15

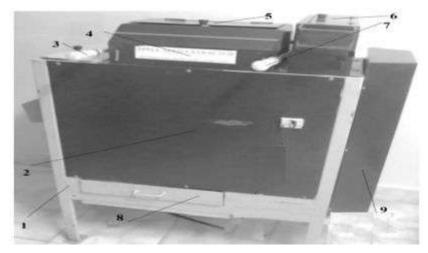
(22) Date of filing of Application :13/07/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: APPLE SEED EXTRACTOR

(51) International classification	:A23N0004000000, A23N0004140000, A23N0004120000, C11B0001060000, B22F0009040000	(71)Name of Applicant:  1)DEVINA VAIDYA  Address of Applicant: Principal Scientist, Department of Food Science & Technology, Y S Parmar University of Horticulture and Forestry, Nauni, Solan, Himachal Pradesh- 173230, Email id:
(31) Priority Document No	:NA	devinavaidya@yahoo.com Phone no: 9418061045 Himachal
(32) Priority Date	:NA	Pradesh India
(33) Name of priority country	:NA	2)MANISHA KAUSHAL
(86) International Application No	:NA	3)ANIL GUPTA
Filing Date	:NA	4)ANIL KR. VERMA
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number Filing Date	:NA :NA	1)DEVINA VAIDYA 2)MANISHA KAUSHAL 3)ANIL GUPTA
(62) Divisional to Application Number	:NA	4)ANIL KR. VERMA
Filing Date	:NA	

## (57) Abstract:

The present invention discloses an apple seed extractor which processes large quantity of apples by removing their cores and thereafter separating the seeds from the cores using a combination of milling, water jets and centrifugation. As a result the seeds suffer minimal damage as evident from germination efficiency of > 85%. The extractor is having two chambers- milling chamber and seed extraction chamber. In the milling chamber, apple cores containing seeds are milled by plurality of knives and shafts. The milled mass is then automatically shifted to seed extraction chamber (Fig.2) provided with water jets arrangements which helps in separation of the seeds from the milled mass followed by sieving through a mesh due to centrifugation and collection of the seeds in a seed tray.



No. of Pages: 19 No. of Claims: 7

(22) Date of filing of Application :26/07/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : IOT BASED SHUTTER LOCKING SYSTEM FOR REALTIME MONITORING AND NOTIFICATION AND METHOD OF USE

(51) International classification	:A61B0005000000, G08B0025010000, G01N0033497000,	
(51) International classification	,	JAIL ROAD, ALIGARH, PINCODE-202001, UTTAR
	G09B0019000000	PRADESH, INDIA CONTACT NO.: 9897020842 EMAIL ID:
(31) Priority Document No	:NA	info@homedecorexports.com Uttar Pradesh India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)GUPTA MAYANK
(86) International Application No	:NA	2)KUMAR PUNEET
Filing Date	:NA	3)KUMAR SUNIT
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	per:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Present invention discloses an IOT based lock (13) attached with the door/shutter body and consisting of a lock latch (7) with keyhole (9), IOT module (2),GSM/GPRS Module (3), SIM (4), Radio Frequency Module (6), controller (1), Real time clock (RCT), limit switch (5), and an inertial measurement unit/gyroscope sensor (10) placed within the lock (13) along with the vertical/ horizontal orientation data of the door/shutter. Limit switch (5) is fitted at one end of Lock-latch (7) and operates when the shutter lock is opened/closed using key in the keyhole (9). Abnormal change in the vertical/ horizontal orientation of the door/shutter body is sensed and Controller (1) generates a signal comprising ID and lock operating time & date and also activates connected wired / wireless alarm. Information is transmitted to cloud server database and message (SMS) through Smartphone mobile Application to the defined user.



No. of Pages: 34 No. of Claims: 17

(22) Date of filing of Application :27/07/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: SYSTEM FOR FRESH AIR CIRCULATION IN AIR CONDITIONED ROOM

(51) International classification	:F24F0011000000, F24F0011300000, F24F0007013000, F02B0037000000, F24F0012000000	(71)Name of Applicant:  1)CGC TECHNICAL CAMPUS Address of Applicant: CGC TECHNICAL CAMPUS, JHANJERI, MOHALI-140307, PUNJAB, INDIA. MOBILE: 08872048019. EMAIL: principaljhanjeri@cgc.ac.in Punjab India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)DR. AKHAI SHALOM
(33) Name of priority country	:NA	2)DR. JOHN SIBY
(86) International Application No	:NA	3)DR. SINGH V.P.
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) 11	·	

#### (57) Abstract:

The invention discloses a fresh air regulation system for continuously regulating fresh air in window/split air-conditioned rooms. The fresh air regulation system comprising an integrated system having a mounting pipes (4) connected directly to the evaporator (6) of air-conditioner (7) via filter (5), a first fan (3) connected at the other end of the mounting pipe (4) for injecting fresh air from outside and a controller (9) to operate first fan (3) and a CO2 regulation system comprising a CO2 sensor (8) and a second fan (10) for air ejection which are interfaced with the said controller (9). During use, as per predefined CO2 level, controller initiate/stop both fans (3,10) together so that the CO2 level is controlled by ejecting inside air out while simultaneously injecting fresh air through evaporator (6) of air-conditioner thereby continuously regulating temperature of fresh air in room with equal ejection and injection of air.



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

(22) Date of filing of Application :30/07/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : SMART SYSTEM FOR CONTINUOUS TRAPPING, STORING AND EXTERMINATION OF MULTIPLE NUMBER OF MOUSE

(51) International classification	A01M0023200000, A01M0001020000,	'
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)GURPREET SINGH
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The trapping and storing unit consists of an Electronic and electrical panel (16) mounted on cage chassis (1), storage chamber (15) with a shifting panel (13), Tunnel (21) with an opening hole (24), sensors (6,7) configured to operate doors (2, 3, 4, 4A), bait boxes (5, 25), Tubes (22) of different sizes, Fragrance Blower (14), Servo motors (17, 20) configured to operate with a lever (18). The extermination unit consists of hollow killing panel (8) which is angular in shape and fitted with a third IR sensor (9), external killing chamber (10) and a weight sensitive platform (12) and the other end has a shutter door (11). Notification system consists of GSM/GPRS system, user interface with a specially designed software application for providing message and notification along with sound alert and a cloud based database with Unique ID of each cage/trap, details such as Cage/trap name and location of installation.



No. of Pages: 28 No. of Claims: 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201811030639 A

(19) INDIA

(22) Date of filing of Application :16/08/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: CEPHALOMETRIC GRID

(51) International classification	G06T0007600000, H03K0019177000,	(71)Name of Applicant:  1)Swami Vivekanand Subharti University Address of Applicant: NH 58, Delhi-Haridwar Bypass Road, Meerut- 250005 Uttar Pradesh India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Dr Munish Reddy
(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	er :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present subject matter relates to providing a grid (100) and a headband (106) coupled with laser pointer (109) for the purposes of obtaining accurate head positions during a cephalogram. The grid (100) comprises a plurality of horizontal and vertical lines (101, 102) with multiple colours which are divided vertically into two equal halves by a purple line, wherein distance between red horizontal lines and grey vertical lines is at range of 0.5cm to 2.0cm, and distance between green vertical lines and horizontal lines is at the range of 0.5mm to 1.5cm.



No. of Pages: 25 No. of Claims: 10

(22) Date of filing of Application :20/08/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A METHOD FOR SYNTHESIS OF NITROGEN-DOPED REDUCED GRAPHENE OXIDE (N-RGO) FOR HIGH PERFORMANCE SUPERCAPACITOR

(51) International classification		(71)Name of Applicant:
	11/00	1)INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE
(31) Priority Document No	:NA	Address of Applicant :ROORKEE UTTARAKHAND-
(32) Priority Date	:NA	247667, INDIA Uttarakhand India
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)ANIL KUMAR
Filing Date	:NA	2)SAHIL THAREJA
(87) 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 provides a method for greener wet synthesis of nitrogen-doped reduced graphene oxide (N-rGO) exhibiting . high performance supercapacitor features employing environment friendly electrolytic components. The invention provides one step, cost effective protocol for the synthesis of N-doped reduced graphene oxide (N-rGO) using nitrogen containing aliphatic biomolecules, specifically amino acid(s) for the reduction of functional groups on graphene oxide (GO) as well as incorporation of nitrogen.

No. of Pages: 21 No. of Claims: 10

(22) Date of filing of Application :24/08/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: BIOREACTOR AND A METHOD FOR MASS PROPOGATION OF PLANT CELL AGGREGATES

(51) International classification	:C12M0001000000, C12M0001120000, A01G0031020000, A01G0024000000, A01H0004000000	(71)Name of Applicant: 1)INDIAN INSTITUTE OF TECHNOLOGY DELHI Address of Applicant: Hauz Khas, New Delhi 110016 Delhi India (72)Name of Inventor:
(31) Priority Document No	:NA	1)SRIVASTAVA, Ashok Kumar
(32) Priority Date	:NA	2)RAJ, Archit
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present invention relates to a bioreactor (9) and a method for addition of nutrients and growth factors in the form of mist for the cultivation of plant cell aggregates comprising: an airtight chamber having a lid covering comprising a main chamber (18) being used as a growth chamber having carefully selected inert porous solid support (15) for absorbing nutrients and making it available to the growing plant cell aggregates; a venturi pump (14) for dispersal of nutrients installed on each side, the outlet of said venturi pump (14) being inserted in to said chamber through at least one of the top hole; a plurality of media reservoirs (10, 11) being in fluid communication with one of the free ends; a media recycling system (12, 13); a controller for automatically sprinkling the sterilized media at pre-defined time intervals; and an air filter at the air outlet on both sides of said chamber for ensuring supply of sterilized air.



No. of Pages: 38 No. of Claims: 30

(22) Date of filing of Application :30/08/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : NANO BIOSENSOR BASED HANDHELD DEVICE FOR DETECTION OF GENTIOPICROSIDE AND METHOD THEREOF

(51) International classification	G01N0033543000,	(71)Name of Applicant: 1)SHOOLINI UNIVERSITY OF BIOTECHNOLOGY AND MANAGEMENT SCIENCES Address of Applicant: Post Office Box No. 9, Head Post Office, The mall, Solan-173212, Himachal Pradesh, INDIA
(31) Priority Document No	:NA	Landline Ph. No.: 01792-308000 Email:
(32) Priority Date	:NA	registrar@shooliniuniversity.com Himachal Pradesh India
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)ATTRI CHANDRIKA
Filing Date	:NA	2)KAUSHAL ANKUR
(87) International Publication No	: NA	3)SETH AMIT
(61) Patent of Addition to Application Numb	er:NA	4)GUPTA SHAGUN
Filing Date	:NA	5)DHASMANA VIDUSHI
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Disclosed is a nano biosensor based handheld device for quick diagnosis of gentiopicroside using plant samples of gentiopicroside producing plants. The detection takes less than 5-10 minutes, optimally 10 minutes. The biosensor consists of gold multi-walled carbon nanotube electrode on which a layer of different elicitors (pectin, chitosan, methyl j asmonate, salicylic acid) with 1 mM [K3Fe(CN)6J in the ratio of 1:4 is coated for detection of gentiopicroside. It can efficiently detect gentiopicroside in response to reduction of the electron mobility of 1 mM [K3Fe(CN)6J due to antioxidant property of gentiopicroside present in the plant extract of gentiopicroside producing plants (5-6 ul). It can be used in pharmaceutical industries where sophisticated instruments are not available.



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

(22) Date of filing of Application :03/09/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : PROCESS FOR HPLC STRATEGIC DEVELOPMENT BY EZCHROM SOFTWARE IN KETOCONAZOLE TABLETS

(51) International classification	:G01N0030340000, G01N0030020000, G01N0030320000, G01N0030880000, G01N0030060000	(71)Name of Applicant:  1)Swami Vivekanand Subharti University Address of Applicant: Subhartipuram, NH-58, Delhi- Haridwar, Meerut Bypass Road Meerut Uttar Pradesh India 250005 Uttar Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Dr. Vikrant Verma
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention in general relates to the process of High Performance Liquid Chromatography (HPLC) and its subsequent development and validation by EZChrom software in ketoconazole tablets. The HPLC method developed herein is innovative in the sense that it requires dosage in solid form tablets which require very less amount of time and solvent. Also, the subsequent method that is developed is validated by using different mobile phase combinations, thereby developing a method that is easy, reproducible and that which requires less time and amount of solvent, compared to other HPLC methods. The present method is developed with a unique strategy which is implemented later. The present developed method is developed with due diligence circumlocute all the complex technique used in some methods today. There is a lot of concern regarding the quality of drugs today, in India also there are new generic drugs flooded in the market in the present scenario and hence quality evaluation is an important parameter today. Present few developed methods require huge solvent amount for HPLC method to be developed and are expensive in nature and even the validation parameters are not executed to full extent.

No. of Pages: 30 No. of Claims: 10

(22) Date of filing of Application :11/09/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : SURFACE MODIFICATION OF NOVEL CELLULOSIC FABRICS BY DIELECTRIC BARRIER DISCHARGE PLASMA TECHNIQUE

(51) International classification	:H05H0001240000, B29C0059140000, B64C0023000000, D06P0005220000, H01J0065040000	(71)Name of Applicant:  1)Manipal University Jaipur Address of Applicant: Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza Jaipur Rajasthan India303007 Uttar Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Dr. Lalita Ledwani
(33) Name of priority country	:NA	2)Ms. Mumal Singh
(86) International Application No	:NA	3)Ms. Mona Vajpayee
Filing Date	:NA	
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(57) A1		•

#### (57) Abstract:

The present invention relates to the surface modification of four novel cellulosic fabrics namely Lotus, Rose, Corn, Aloe Verausing low temperature Dielectric Barrier Discharge (DBD) plasma surface modification at atmospheric pressure to enhance fabric properties such as dye uptake, antimicrobial, tensile properties etc. Dielectric Barrier Discharge (DBD) plasma surface modification is employed on the four cellulosic fabrics, separately without effecting their bulk properties, to enhance wettability, dye uptake, antimicrobial and tensile properties. The method obviates the need of using any solvents and generates no chemical waste.

No. of Pages: 29 No. of Claims: 9

(22) Date of filing of Application :20/09/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: MULTILAYER FOLDABLE WATER BAG

	:E04B0001760000,	(71)Name of Applicant:
	H04N0005225000,	l '
(51) International classification	F28D0021000000,	Address of Applicant :Subhartipuram, NH-58, Delhi-
	B60R0016023000,	Haridwar, Meerut Bypass Road Meerut Uttar Pradesh India
	B32B0001000000	250005 Uttar Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Dr. Bhawesh Chandra Dubey
(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	r:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention relates to a multilayer liquid carrying apparatus 1, comprising a casing, consisting: a first layer 2 installed in the casing that helps in reserving old liquid inside the casing for certain amount of time, a second layer 3 mounted on the first layer that minimizes the outside air and heat coming inside the first layer, a third layer 4 mounted on the second layer that prevents the second layer from the outside air and liquid and further restricts the entry of the liquid inside the casing, a fourth layer 5 mounted on the third layer that helps in keeping the apparatus soft and friendly with outside environment, a cap 6 attached at the first portion of the casing that enters the liquid inside of the apparatus, and a tap 7 attached to the casing that helps in the removal of cold water from the apparatus.



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

(22) Date of filing of Application :25/10/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : DOUBLE-GATE FINFET DEVICE USING 3T DRAM AND AVL TECHNIQUE AND FABRICATING METHOD THEREOF

(51) Intermedianal alassification	H01L0029660000,	(71)Name of Applicant:  1)Swami Vivekanand Subharti University
(51) International classification	H01L0027108000, C09D0004060000,	Address of Applicant :Subhartipuram, NH-58, Delhi- Haridwar, Meerut Bypass Road Meerut Uttar Pradesh India
	H01L0029786000	250005 Uttar Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Divya Mishra
(33) Name of priority country	:NA	2)Neha Verma
(86) International Application No	:NA	3)Vishwas Mishra
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention is relates to a double-gate FinFET device using 3T DRAM and AVL technique and fabricating method thereof. The double-gate FinFET device using 3T DRAM and AVL technique and fabricating method thereof comprising of at least one AVL circuit, at least one capacitor and plurality of FinFET. The AVL circuit further comprise of at least one pull up network, at least one pull down network. The pull up network comprising of at least two NMOS transistor and at least one PMOS transistor. One terminal of pull up network is connected with the VDD and other terminal is connected to the FinFET circuit. The pull down network comprising of at least one NMOS transistor and at least two PMOS transistor. One terminal of the pull down network is connected to the Vss and other terminal is connected to the capacitor and the FinFET circuit.

No. of Pages: 20 No. of Claims: 7

(22) Date of filing of Application :02/11/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : DESIGN AND SIMULATION OF RECTANGULAR SLOTTED E-SHAPED MICROSTRIP PATCH ANTENNA FOR TRIPLE BAND APPLICATIONS

H01Q0021060000, H01Q0025000000,	Address of Applicant :Subhartipuram, NH-58, Delhi-
B29C0039020000	Pradesh India
:NA	(72)Name of Inventor:
:NA	1)Dharti Raj Shah
:NA	2)Amit Kumar
:NA	
:NA	
: NA	
:NA :NA	
:NA	
:NA	
	H01Q0021060000, H01Q0025000000, H01Q0001400000, B29C0039020000 :NA :NA :NA :NA :NA :NA :NA :NA

#### (57) Abstract:

The present subject matter relates to design and simulate a rectangular slotted E-shaped microstrip patch antenna for triple band applications. The antenna comprises two parallel rectangular slots for triple band applications, such as radar system in C-band at 6.5 GHz, International Telecommunication Union (ITU) in X-band at 8.8 GHz and satellite communication system in Ku-band at 14.8 GHz. The antenna is fed by coaxial feeding in which two cylinders are used such that radius of outer cylinder is 2.35 mm and that of inner cylinder is 0.65 mm, respectively. Therefore, the present invention provides the better performance of return loss < - lOdB.



No. of Pages: 21 No. of Claims: 8

(22) Date of filing of Application :05/11/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : IMPROVED SYSTEM AND METHOD FOR HYDROGEN FUEL PRODUCTION FOR COMBUSTION ENGINE

(51) International classification	F02M0025120000, F02B0043100000, C01B0003380000,	Address of Applicant :CGC Technical Campus, Jhanjeri, Mohali-140307, Punjab. Landline No.: 0160-3045304 Email:
(31) Priority Document No	C01B0003060000 :NA	principaljhanjeri@cgc.ac.in Punjab India (72)Name of Inventor:
(32) Priority Date	:NA	1)DHULL PARMOD
(33) Name of priority country	:NA	2)DHULL PARMINDER
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	oer:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention discloses a system and method for hydrogen fuel production for combustion engines. This processenables consistent production of hydrogen gas and working of combustion engines over a period of time. Reactor Cell (1), Heating coil (2), Electrolysis chamber (3), Anode (4), Oxygen gas outlet (5), Exhaust pipe 1 (6), Water Tank (7), Cathode (8), Water Pipe (9), Stabilizer (10), Engine (11), Hydrogen pipe (12), Exhaust pipe 2(13) and separator (14). Calcium reacts with water to produce hydrogen and calcium hydroxide. Hydrogen enters engine and calcium hydroxide electrolyzes to produce calcium. Oxygen is released as byproduct which enters environment and steam produced as a byproduct is collected back in water tank for further use. Hydrogen production is not affected by seasonal or temperature variations. Overall, the present system, process and materials used are simple, readily available, eco-friendly, economic and renewable.



No. of Pages: 15 No. of Claims: 2

(22) Date of filing of Application :16/11/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: A PEDAL POWERED ZEOLITE COOLING SYSTEM AND METHODS THEREOF

(51) International classification	:F16K0031620000, B62M0003000000, F25B0017080000, B01J0020180000, B01J0029080000	(71)Name of Applicant:  1)Shobhit University  Address of Applicant:Shobhit University, Babu Vijendra Marg, Gangoh, Sahranpur, Uttar Pradesh Uttar Pradesh India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Shoyab hussan
(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	r:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present invention relates to a pedal powered zeolite cooling system and methods thereof. The pedal powered zeolite cooling system and methods thereof comprises a pedal power arrangement, at least one air compressor, at least one evaporation tank, cold chamber, a zeolite unit, plurality of valve, at least one solar heating apparatus. The pedal power arrangement further comprise of a pedal, a ring, a motor, a chain and at least two gear. The plurality valve is further comprise of valve 1 and valve 2. The zeolite unit further comprise of zeolite tank and zeolite component.



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

(22) Date of filing of Application :17/11/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: IMPROVED WOUND HEALING TOPICAL COMPOSITION OF THYMOQUINONE

	*	(71)Name of Applicant:
(51) International classification	A61K0047340000,	1
<ul> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application</li> </ul>	C12N0015880000 :NA :NA :NA :NA :NA :NA	Office, The mall, Solan-173212, Himachal Pradesh, INDIA Landline Ph. No.: 01792-308000 Email: registrar@shooliniuniversity.com Himachal Pradesh India (72)Name of Inventor: 1)DR. NEGI POONAM 2)SHARMA GULSHAN 3)VERMA CHETNA 4)DR. LAL UMA RANJAN
Number Filing Date (62) Divisional to Application Number Filing Date	:NA :NA :NA :NA	

## (57) Abstract:

The present invention discloses an improved wound healing topical composition consisting of TQ loaded polymeric micelles of chitosan and soy lecithin for the effective treatment of wound injury. The amphiphilicity of the nanoparticles is enhanced by simple conjugation of chitosan with soy lecithin. The high wound closure rate is due to synergistic effect of thymoquinone and chitosan that is used in preparation of copolymer for polymeric micelles. The CMC value of miceller copolymer is 6.5ug/ml. The resulting TQ-loaded polymeric micelles have small particle size (< 100 nm), are very stable, have polydispersity index (PDI) close to zero, high drug loading capacity ranging from 32% to 33% and entrapment efficiency between 97% to 98%.



No. of Pages: 29 No. of Claims: 2

(22) Date of filing of Application :19/11/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: COMPACT WANG-SHAPED MICROSTRIP PATCH ANTENNA FOR C-BAND APPLICATION

(51) International classification	:H01Q0009040000, H01Q0001380000, H01Q0021060000, H01Q0001400000, H01Q0023000000	(71)Name of Applicant:  1)Swami Vivekanand Subharti University Address of Applicant: Subhartipuram, NH-58, Delhi-Haridwar, Meerut Bypass Road Meerut Uttar Pradesh India Uttar Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Ritu Sharma
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present subject matter relates to design and construction of Wang-shaped microstrip patch antenna for C- band applications which is designed by combination of two identical E-shaped patch antenna where one E-shaped patch antenna is mirror to the other. The Wang-shaped microstrip patch antenna is applicable for a range 5.20 GHz - 5.48 GHz frequency band. The microstrip patch antenna is a low profile, light weight, compact in nature, cost effective Wang-shaped patch antenna for C- band application.



No. of Pages: 19 No. of Claims: 7

(22) Date of filing of Application :21/11/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: SMART ANTI-CANCER NANOGEL

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No</li> </ul>	:E01F 7/06 :NA :NA :NA :NA	(71)Name of Applicant: 1)SHOOLINI UNIVERSITY OF BIOTECHNOLOGY AND MANAGEMENT SCIENCES Address of Applicant: POST OFFICE BOX NO. 9, HEAD POST OFFICE, THE MALL, SOLAN-173212, HIMACHAL PRADESH, INDIA. Landline: 01792-308000 Email:
Filing Date	:NA	registrar@shooliniuniversity.com Himachal Pradesh India
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)VERMA CHETNA
Filing Date	:NA	2)DR. NEGI POONAM
(62) Divisional to Application Number	:NA	3)DR. PATHANIA DEEPAK
Filing Date	:NA	

#### (57) Abstract:

The present invention discloses a smart anti-cancer nano gel which is pH responsive. It is based on the observation that there is a difference in pH of normal cells (>7.4) and that of tumors (pH 6-7). Accordingly, the gel detects pH changes around the cells and releases anti-cancer drug, as per tumor growth and associated pH change. Thus, the tumor gets a 'sustained release' of drug in case it grows, otherwise the drug is not released, if no tumor growth and hence no pH change is there. The gel consists of Functionalized Tragacanth Gum (FTG) based nanoparticles with a bio-coating of lipid structured lecithin and the anti-cancer drug e.g. cisplatin is entrapped within the nanoparticles. The smart gel system is thus a nano-within-nano system in which TG-lecithin nanoparticles are the nano carriers for the anticancer drug e.g. cisplatin.



No. of Pages: 26 No. of Claims: 6

(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : NANOSIZE MULTI-FERROIC COMPOSITE MATERIAL AND METHOD OF PREPARING THE SAME

	:B01J0023000000,	(71)Name of Applicant:
	C04B0035010000,	1)Shoolini University of Biotechnology and Management
(51) International classification	H01F0001400000,	Sciences
	H01L0041187000,	Address of Applicant :Village-Bhajol, P.O. Sultanpur, Solan,
	B01J0023889000	173229, Himachal Pradesh, India Himachal Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Rajesh Kumar
(33) Name of priority country	:NA	2)Mamta Shandilya
(86) International Application No	:NA	3)Ritesh Verma
Filing Date	:NA	4)Pankaj Raizada
(87) 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 relates to multiferroic material having chemical composition (1-x)(Ba0.96Ca0.04TiO3)-x(NiFe2O4), (BCT-NF) for x=0.1, x=0.2, x=0.3, x=0.4 with both magnetic as well as ferroelectric phase and process for preparing the same. (1-x)(Ba0.96Ca0.04TiO3)-x(NiFe2O4), (BCT-NF) multi-ferroic material for x=0.1, 0.2, 0.3, 0.4, is fabricated by a hydrothermal method. X-ray diffraction patterns for Perovskite-type structure and spinel structure were observed for all the compositions. Perovskite phase and spinel phase were observed in the same composite. The average crystalline size of the material (1-x)(Ba0.96Ca0.04TiO3)-x(NiFe2O4), is 67.92 nm, 57.21 nm, 70.34 nm, 82.45 nm for x=0.1, 0.2, 0.3, 0.4 respectively. With increase in concentration of NiFe2O4 (Nickel Ferrite-NF) in the composite material of the present invention, curie temperature(Tc) shifts toward the higher temperature and with increase in concentration of NiFe2O4 (Nickel Ferrite-NF), saturation magnetization and rententivity increases (1-x)(Ba0.96Ca0.04TiO3)-x(NiFe2O4) (BCT-NF) for x=0.1, x=0.2, x=0.3, x=0.4



No. of Pages: 25 No. of Claims: 11

(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: COPPER NANOPARTICLES(CUNPS) AND METHOD OF PRODUCING THE SAME

	:B22F0001000000,	(71)Name of Applicant:
	B82Y0030000000,	1)Shoolini University of Biotechnology and Management
(51) International classification	B22F0009240000,	Sciences
	B82Y0040000000,	Address of Applicant :Village-Bhajol, P.O. Sultanpur, Solan,
	B01J0023720000	173229, Himachal Pradesh, India Himachal Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Rajesh Kumar
(33) Name of priority country	:NA	2)Sapna Thakur
(86) International Application No	:NA	3)Mamta Shandilya
Filing Date	:NA	4)Shweta Thakur
(87) International Publication No	: NA	5)Ankush Chauhan
(61) Patent of Addition to Application Number	r :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present invention relates to a copper nanoparticle and a method of producing of the said copper nanoparticles and specifically to the copper nanoparticles synthesized using root and leaf extract of Asparagus adscendens. The method of producing copper nanoparticles is performed at room temperature under controlled pH to get maximum yield of nanoparticles using bio-synthesis. The method comprises preparing the extract of plant Asparagus adscendens; drop wise adding 100 ml of 1 mM CuSO4.5H2O in 10 ml extract of Asparagus adscendens; maintaining the pH of solution using NaOH; incubating the reaction mixture at a room temperature under static condition; separating-out impurities from the reaction mixture using sonication; and collecting the nanoparticles separated from the reaction mixture. Copper nanoparticles synthesized from Asparagus adscendens possess good antimicrobial activity against the numerous pathogenic bacteria.



No. of Pages: 25 No. of Claims: 10

(22) Date of filing of Application :26/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: NANOFERRITES FOR MEMORY STORAGE

	:B01J0023000000, C04B0035300000.	(71)Name of Applicant: 1)Shoolini University of Biotechnology and Management
(51) International classification	A01N0059160000,	
	C01G0051000000,	Address of Applicant :Village-Bhajol, P.O. Sultanpur, Solan,
	H01F0001055000	173229, Himachal Pradesh, India Himachal Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Rajesh Kumar
(33) Name of priority country	:NA	2)Rohit Jasrotia
(86) International Application No	:NA	3)Virender Pratap Singh
Filing Date	:NA	4)Mahavir Singh
(87) 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 relates to a nanocrystalline materials of silver, manganese and chromium substituted nickel zinc cobalt copper magnesium having chemical composition (Ni0.4Zn0.2Co0.2Cu0.1Mg0.1) (Ag0.4xMn0.3xCr0.3x) Fe2-xO4 (x = 0.0, 0.05, 0.10, 0.15) and the method for preparing the same by sol-gel auto-combustion method. The XRD patterns confirmed the formation of pure spinel cubic structure without any impurity phase and also, crystallite size was found to be in the range of 48-55 nm. FTIR analysis shows that the peak formation is at around418-593 cm-1, which also confirmed the formation of pure spinel cubic nanoferrite. (Ni0.4Zn0.2Co0.2Cu0.1Mg0.1) (Ag0.4xMn0.3xCr0.3x) Fe2-xO4 (x = 0.0, 0.05, 0.10, 0.15)



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

(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : IN CORPORATION OF DESIGN MODIFICATION IN CABLE NO 8 OF T-90 TANK THROUGH IN PROCESS IMPROVEMENT.

(51) International classification	:H04N0007180000, H04M0003420000, G02F0001133900, G06K0009000000, C08K0003360000	(71)Name of Applicant:  1)ORDNANCE CABLE FACTORY, CHANDIGARH Address of Applicant: PLOT NO. 183, Industrial Area, Phase 1, Chandigarh Chandigarh India (72)Name of Inventor:
(31) Priority Document No	:NA	1)ORDNANCE CABLE FACTORY, CHANDIGARH
(32) Priority Date	:NA	1/0121/11/02 011222111010111, 01111/21011111
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(55) 11		·

⁽⁵⁷⁾ Abstract:

The present process identifies the exact connectors not mention in the drawings. This simplifies the manufacturing of Cable No. 8.



No. of Pages: 22 No. of Claims: 2

(21) Application No.201811049056 A

(19) INDIA

(22) Date of filing of Application :26/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: PROCESS FOR THE PREPARATION OF EMPAGLIFLOZIN

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application</li> <li>Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:NA	(71)Name of Applicant:  1)JUBILANT GENERICS LIMITED  Address of Applicant: PLOT 1A SECTOR 16A NOIDA  UTTAR PRADESH-201301, INDIA Uttar Pradesh India  (72)Name of Inventor:  1)BANSAL, VIKAS  2)CHAKRAVARTY, ROHIT  3)SHARMA, RAJU  4)KUMAR, MOHIT  5)KULKARNI, SHANTANU GANESH  6)KUMAR, ROHIT  7)KUMAR, SUMIT  8)VIR, DHARAM
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# (57) Abstract:

The present invention provides an improved and industrially feasible and cost effective process for the preparation of Empagliflozin having Formula X.

No. of Pages: 30 No. of Claims: 10

(22) Date of filing of Application :26/12/2018 (43) Publication Date : 03/07/2020

### (54) Title of the invention: OBA DOUBLE STROKE COOLER

(51) International classification	F24F0011000000, F24F0007007000, A45C0007000000,	(71)Name of Applicant:  1)OBA DIGITAL AUTOMATION PVT. LTD  Address of Applicant: 72-CITI GARDAN COLONY  MEERUT U.P-250002, INDIA Uttar Pradesh India  (72)Name of Inventor:
(31) Priority Document No	:NA	1)ER. MOHD ASHIF
(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	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The double stroke desert cooler is known as double window cooler .it is the based on simple principle work as desert cooler. But this cooler have two type windows, one separate window is able to sucking the humid air from room and downfall out from room with help of duct pipe or plastic pipe in back side. And second (front) window is able to fresh air circulate into the room, this cooler is define the two types of stroke air fellow or process, parts no (4) the front blower one stroke air flow from front by the cooler as horizontally fellow air and use this blower with separate motor at 1400 rpm. Parts no (7) exhaust blower(window) adjust or attached on top inside the cooler with separate motor at 1400 rpm for resulting the amount of suffocation from room sucking from front of the cooler and discharge air to the back side by uses like exhaust fan. The exhaust fan use first time in this cooler itself in the cooler, therefore resulting the room temperature below down. They are consisting of part no (8) and part ho (5) are Side panel or back side panel keep the wet surface continues during water circular by the centrifugal pump. The other part no (2) is the volt meter to maintain voltage. Part no (1) sucking suffocation box (window). The part no (6) is the 50 liter water box in bottom side.



No. of Pages: 8 No. of Claims: 7

(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: ARM PROTECTOR

(51) International classification	A41D0013060000,	(71)Name of Applicant: 1)Chairman, Defence Research And Development Organisation (DRDO) Address of Applicant: MINISTRY OF DEFENCE, GOVT. OF INDIA, ROOM NO 348, B WING, DRDO BHAWAN, RAJAJI
(31) Priority Document No	:NA	MARG NEW DELHI 110011, INDIA Delhi India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)RAWAT, Shweta
(86) International Application No	:NA	2)VARTE, Lalhmunlien Robert
Filing Date	:NA	3)SINGH, Inderjeet
(87) International Publication No	: NA	4)CHAUDHARY, Yashmita
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	5)KAKKAR, Deepika 6)PANJWANI, Usha 7)KUMAR, Bhuvnesh
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

An arm protector (100) includes a first part (102) and a second part (104) adapted to be removably coupled with the first part (102). The first part (102) is adapted to cover an upper arm region of a user. The first part (102) includes a first foam padding (202) facing the arm, and a pair of first shielding plates (204) attached to the foam padding. The pair of first shielding plates (204) is embossed and has a variable thickness. The second part (104) is adapted to cover a lower arm region. The second part (104) includes a dorsal protector (402) facing outside, and is formed by a second foam padding (408) and at least one second shielding plate (410) attached to the second foam padding (408). The second part (104) further includes a ventral protector (404) facing towards the arm and attached to the dorsal protector (402). The ventral protector (404) is formed of a third foam padding (412) and a third shielding plate (414) attached to the third foam padding (412).



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

(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : NANOEMULSIFIED TOPICAL FORMULATION WITH ENHANCED WOUND HEALING EFFICACY

(51) International classification	:A61K0009000000, A61K0047100000, A61K0031120000, A61K0047140000, A61K0009107000	(71)Name of Applicant:  1)ALAM, Sanjar  Address of Applicant: C/o R.V. Northland Institute, GT Rd, Chithera, Dadri, Greater Noida-203207, Uttar Pradesh, India Uttar Pradesh India
(31) Priority Document No	:NA	2)KUMAR, Sokindra
(32) Priority Date	:NA	3)SHARMA, Pradeep Kumar
(33) Name of priority country	:NA	4)ARORA, Mahek
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)ALAM, Sanjar
(87) International Publication No	: NA	2)KUMAR, Sokindra
(61) Patent of Addition to Application Number Filing Date	:NA :NA	3)SHARMA, Pradeep Kumar
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present invention provides a nanoemulsified topical formulation comprising of herbal drug curcumin, surfactant, co-surfactant, gelling agent and distilled water with enhanced wound healing activity, cellular permeability and better stability. Preferably, the nanoemulsified topical formulation is in the form of a gel and is having average droplet size of about 46.249 nm to 94.032 nm. The nanoemulsified topical formulation (in gel form) of the present invention is stored in a refrigerator and away from sunlight in a closed amber colored container.



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

(22) Date of filing of Application :26/12/2018 (43) Publication Date : 03/07/2020

(54) Title of the invention: MINI TRACTOR •

(51) International classification	:B62D0033060000, F16D0013380000, C40B0040020000, E03F0009000000, F04C0015060000	(71)Name of Applicant:  1)M/S. SUKOON SOLUTIONS PRIVATE LIMITED  Address of Applicant: B 29, SITE 4, INDUSTRIAL AREA SAHIBABAD, GHAZIABAD, UTTAR PRADESH- 201010, INDIAN. Uttar Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)AMOD KUMAR
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

MINI TRACTOR • is a mini tractor with uniquely designed frame, works on the principle electric motor (14) operation driven by plurality of batteries that produces high torque and capable of operating in the mud form soil. The said uniquely designed frame mounted on three wheeled structure. The complete system eco-friendly and lesser cost compared to the available miniature tractors.



No. of Pages: 11 No. of Claims: 10

(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : PROCESS FOR PREPARATION OF LOW DENSITY ABLATIVE COMPOSITION AND APPLICATION THEREOF

	:B64G0001580000,	(71)Name of Applicant:
	C08L0083040000,	1)Chairman, Defence Research and Development
(51) International classification	C04B0035800000,	Organisation
	A61B0018000000,	Address of Applicant :Ministry of Defence, Govt. of India,
	C08K0003220000	Room No. 348, B Wing, DRDO Bhawan, Rajaji Marg, New
(31) Priority Document No	:NA	Delhi- 110011 Delhi India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)Mokhasunavisu Raghavendra Rao
(86) International Application No	:NA	2)Senapathi Krishnamachary
Filing Date	:NA	3)Srinivasulu Reddy Krishna Mohan
(87) International Publication No	: NA	4)Tanu Srivastava
(61) Patent of Addition to Application Numb	oer:NA	5)Rolex Ranjith Alex
Filing Date	:NA	6)Desingou Jayaraman
(62) Divisional to Application Number	:NA	7)Chowdam Ramakrishna
Filing Date	:NA	

## (57) Abstract:

Provided herein is an ablator compositions and more particularly a low density highly durable ablator material composition and methods for preparing the ablative material compositions and forming ablative thermal protection system wherein the low density ablative material is having properties such as high temperature stability, high abrasion resistance properties, low thermal conductivity, well-adhering, substantially crack-free char.



No. of Pages: 38 No. of Claims: 10

(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention: A DENTAL RESTORATIVE COMPOSITE AND A PROCESS FOR PREPARING THE SAME

(51) International classification	:A61K0006083000, A61K00060000000, A61L0027460000, C08L00630000000, C08K0009060000	(71)Name of Applicant: 1)Chairman, Defence Research And Development Organisation (DRDO) Address of Applicant: Ministry Of Defence, Govt. of India, Room No. 348, B- Wing, DRDO Bhawan, Rajaji Marg, New
(31) Priority Document No	:NA	Delhi-110011, India Delhi India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)KRISHNAN, Manu
(86) International Application No	:NA	2)PP, Lizymol
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present disclosure relates to a dental restorative composite and a process for preparing the same. The composite comprises an inorganic-organic hybrid resin comprising an inorganic component comprising copper and zirconium and an organic component comprising an alkoxysilane dimethacrylate wherein the inorganic component and the organic component are linked through (Si-O-Si) bonds and a combination of fillers consisting of a silanated quartz, a fumed nanosilica, a silanated nano hydroxyapatite, and a glass.



No. of Pages: 57 No. of Claims: 10

(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

### (54) Title of the invention: PRESENCE ENHANCEMENT OF A PRODUCT IN MEDIA CONTENT

(51) International classification	:H04N0021442000, H04N0021466000, C08F0265060000, H04N0007173000, H04N0021478400	(71)Name of Applicant:  1)Samsung Electronics Co., Ltd.  Address of Applicant: 416 Maetan-Dong, Yeongtong-GU, Suwon-SI, Gyeonggi-do 442-742, Republic of Korea Republic of Korea
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)DUBEY, Gourav Kumar
(33) Name of priority country	:NA	2)KUMAR, Vijayanand
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A method (400, 500, 600, 700, and 800) and a system (100) of enhancing presence of a product in a media content are disclosed. The method (400) includes extracting metadata indicative of a profile and a position of the product present in the media content being played. A user profile indicative of personal information and purchasing history of a user of the media content is retrieved. Based on the metadata and the user profile, at least one presence parameter of the product to be controlled may be determined. The at least one presence parameter includes brightness, contrast, colour, hue, zoom, edge sharpness, a font, a pitch, a frequency, and a volume associated with the product. Based on the determination, the presence parameter is controlled to enhance the presence of the product during the playing of the media content.



No. of Pages: 31 No. of Claims: 10

(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

### (54) Title of the invention: COMPOSITE DISPLAY OF TRACKS OF HETEROGENEOUS MOVING TARGETS

(51) International classification	G06T0007194000,	(71)Name of Applicant: 1)Chairman, Defence Research & Development Organisation (DRDO) Address of Applicant: Ministry of Defence, Govt. of India, Room No. 348, B Wing, DRDO Bhawan, Rajaji Marg, New
(31) Priority Document No	:NA	Delhi- 110011, Delhi India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)Narayan Panigrahi
(86) International Application No	:NA	2)Rajesh Maniyamkallel Ayyappan
Filing Date	:NA	3)Shibumon Alampatta
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A method for rendering a composite display of a track of a atleast one moving target and a map background of a required field of view (FOV). The method includes obtaining and populating track data from the tracks of the atleast one moving target, indexing the populated track data using a tree data structure for accessing the tracks of the moving target, categorizing the indexed track data based on a required refresh rate corresponding to speed of the moving target, creating a transparent image from the categorized track data, creating threads corresponding to the required refresh rate of the moving object and the map background, rendering the transparent image and the map background by the corresponding threads for overlaying the transparent image over the map background, and rendering the composite display of the overlaid track of the moving target and the map background.



No. of Pages: 22 No. of Claims: 18

(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: MANAGING USER PRIVACY IN A ROBOTIC VISION SYSTEM

(51) International classification	:H04N0005235000, G06F0021620000, H04N0005225000, G10L0025570000, G11B0027036000	(71)Name of Applicant:  1)Samsung Electronics Co., Ltd. Address of Applicant: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 443-742, Republic of Korea Republic of Korea
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)RAJU, Bala Kama
(33) Name of priority country	:NA	2)VASUDEVALU, Pavani Ronur
(86) International Application No	:NA	3)JAISWAL, Ajay Kumar
Filing Date	:NA	4)UDUPI, Nagacharan
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present disclosure relates to a method and a system for managing user privacy in a robotic vision system. The method includes receiving a video feed from an image capturing device of the robotic vision system. The method includes identifying a portion to be masked in a video-frame of the video feed based on one or more parameters indicative of user-intent for managing user privacy. The method includes determining a masking layer corresponding to the portion. The method includes determining a masking layer corresponding to the portion based on the plurality of parameters. The method includes overlaying the masking layer onto the portion of the video-frame to generate a masked video-frame to be rendered as part of the video feed by a rendering device of the robotic vision system.



No. of Pages: 39 No. of Claims: 15

(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

### (54) Title of the invention: CONTROLLER AND CONTROL METHOD THEREOF

(51) International classification	:G06F0001260000, H01M0010052000, H01M0010480000, G01R0031389000, H02J0007340000	
(31) Priority Document No	:NA	3)HAO-CHE HSIEH
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)Liang-Tse Lin
(86) International Application No	:NA	2)HAO-CHE HSIEH
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A control device, comprising an environmental sensor, an electrical quantity sensor, a control operating unit, and a resistance output unit. The control operating unit connects to the environmental sensor, the electrical quantity sensor, and the resistance output unit. The resistance output unit additionally connects to a temperature controller to replace original resistive temperature sensor. The resistance output unit outputs a first resistance to the temperature controller so that a controlled device operates at a first power state. The resistance output unit also can output a second resistance to the temperature controller so that another controlled device operates at a second power state. When the control operating unit reads environmental information or time information, the resistance output unit outputs the first resistance or the second resistance after calculating by the control operating unit so that the controlled device operates at the first power state or the second power state.



No. of Pages: 25 No. of Claims: 14

(22) Date of filing of Application :27/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: SKEWED GRID FIN FOR AEROSPACE APPLICATIONS

	:F28D0009000000,	(71)Name of Applicant:
	G06K0009320000,	1)Chairman, Defence Research and Development
(51) International classification	H01L0029660000,	Organisation
	F28F0003040000,	Address of Applicant :Ministry of Defence, Govt. of India,
	H01M0008022800	Room No. 348, B Wing, DRDO Bhawan, Rajaji Marg, New
(31) Priority Document No	:NA	Delhi- 110011, Delhi India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)Manish Tripathi
(86) International Application No	:NA	2)Ajay Misra
Filing Date	:NA	3)Mahesh Manchakattil Sucheendran
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present invention relates to a skewed grid fin. The skewed grid fin includes a plurality of upper plates and a plurality of lower plates positioned in parallel configuration at upper and lower side of a middle plate. Each plate has a predefined distance (g) therebetween. A pair of end plate is attached at both side surfaces of the plates thereby forming a grid fin. The upper plates and the lower plates are linearly displaced (x) in a forward or a backward direction with respect to the middle plate. The angle between a line representing a leading edge of the middle plate and a line joining leading edges of the middle plate and the consecutive upper or lower plate is defined as a skew angle (d).



No. of Pages: 29 No. of Claims: 5

(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : IMPACT ABSORBING STRUCTURE OF KNOB IN HEATING VENTILATION, AND AIR CONDITIONING (HVAC) CONTROL UNIT

	:F24F0011300000, F24F0011620000,	(71)Name of Applicant: 1)MARUTI SUZUKI INDIA LIMITED
(51) International classification	F24F0011580000,	Address of Applicant: 1 Nelson Mandela Road, Vasant Kunj,
. ,	В60Н0001000000,	New Delhi-110070, India. Delhi India
	G05B0015020000	(72)Name of Inventor:
(31) Priority Document No	:NA	1)VENKATA KALESWARA DURGA PRASAD
(32) Priority Date	:NA	PEDAMALLU
(33) Name of priority country	:NA	2)VIJAY BHASKAR SONTI
(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:

The present subject matter disclosed herein relates to a heating, ventilation, and air conditioning (HVAC) control unit (100). The HVAC control unit (100) has a knob (101) which has front portion (102) protruding away from front surface (100a) of the HVAC control unit (100). Further, the knob (101) has a hollow cylinder shaft (103) that is coupled with a rotatory switch (104) through a spindle (105) to transfer rotatory motion of knob to the rotatory switch (104). Further, a spring (106) is provided in between the spindle (105) and the hollow cylinder shaft (103) to absorb impact energy on the knob (101).



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

(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: VACUUM SWITCH INTEGRATED WITH BRAKE FLUID RESERVOIR

(51) International classification	:B60T0011260000, B60T0013520000, B60T0013660000, B60T0017220000, B60T0011220000	(71)Name of Applicant:  1)MARUTI SUZUKI INDIA LIMITED  Address of Applicant: 1 Nelson Mandela Road, Vasant Kunj, New Delhi-110070, India. Delhi India (72)Name of Inventor:
(31) Priority Document No	:NA	1)ANUGULA SOMESHWAR
(32) Priority Date	:NA	2)TANMOY PAUL
(33) Name of priority country	:NA	3)PRATYUSH TIWARI
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present disclosure relates to a brake booster assembly (300) for assisting brakes in automobile. The brake booster assembly comprising a booster (301) having a vacuum chamber (302) and a variable pressure chamber. The brake booster assembly further includes a fluid reservoir (304) that is coupled with the tandem master cylinder (303) to supply brake fluid and a fluid level indicator switch (305) coupled with the fluid reservoir (304) to indicate level of brake fluid in the fluid reservoir (304). Further, an additional vacuum chamber is integrally provided with the fluid reservoir (304). The additional vacuum chamber (307) is coupled with the vacuum chamber (302) by a vacuum line (308). The additional vacuum chamber (307) is provided with a vacuum switch (309) to measure vacuum level in the additional vacuum chamber (307).



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

(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: SPLIT TYPE SPINDLE MOUNTING MECHANISM

(51) International classification	E05F0011480000, H02J0007000000, D01H0007100000,	(71)Name of Applicant:  1)MARUTI SUZUKI INDIA LIMITED  Address of Applicant: 1 Nelson Mandela Road, Vasant Kunj, New Delhi-110070, India. Delhi India (72)Name of Inventor:
(31) Priority Document No	:NA	1)SANDEEP RAINA
(32) Priority Date	:NA	2)SANJAY HALDAR
(33) Name of priority country	:NA	3)RAHUL SEMWAL
(86) International Application No	:NA	4)TARANDEEP SINGH
Filing Date	:NA	5)RAGHAVENDRA KATTI
(87) International Publication No	: NA	6)AMRINDER SINGH SIDHU
(61) Patent of Addition to Application Number	r :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Described herein is a split type spindle mounting mechanism for a window regulator. The split type spindle mounting mechanism includes a regulator mounting plate (102) having a regulator spindle (302) which is of half the size of a regular spindle; a locknut (206) mounted on the regulator spindle (302); a detachable spindle (204) mounted on the regulator spindle (302) against the locknut (206), wherein the detachable spindle (204) is subjected to a torque in a clockwise direction after mounted against the locknut (206) so as to lock the detachable spindle (204) movement against the locknut (206). And then, the locknut (206) is subjected to a further torque in anti-clockwise direction after mounting on the regulator spindle (302).



No. of Pages: 15 No. of Claims: 5

(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: AIR SUSPENSION SYSTEM FOR WASHING MACHINE

(51) International classification	:D06F0037240000, B60G0017052000, F16F0015040000, F04D0029660000, B60G0017015000	(71)Name of Applicant:  1)LG ELECTRONICS INC.  Address of Applicant: 20 Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721, Republic of Korea Republic of Korea (72)Name of Inventor:
(31) Priority Document No	:NA	1)MAGAR GOPAL
(32) Priority Date	:NA	2)KURHE NIKHIL
(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	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

An air suspension system (100) to reduce noise and vibrations in cabinet (204) of washing machine (200) in which the air suspension system (100) comprising :an air bellow (102), an air handling tube (104), an air-handling unit (106), an air pump(108) that are in mechanical contact with one other that provides variable stiffness under variable loading and reduce the unbalanced force transferred to the cabinet (204) by the outer tub (202) by controlling the loading and frequency of rotation of outer tub (202) of the washing machine (200).



No. of Pages: 23 No. of Claims: 28

(22) Date of filing of Application :27/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : AN ASSEMBLY TO REDUCE DRUM DIAMETER OF WASHING MACHINE AND METHOD THEREOF

	:D06F0037060000,	(71)Name of Applicant :
	D06F0037220000,	1)LG ELECTRONICS INC.
(51) International classification	D06F0037260000,	
	D06F0058040000,	Seoul 150-721, Republic of Korea Republic of Korea
	D06F0037080000	(72)Name of Inventor:
(31) Priority Document No	:NA	1)MAGAR GOPAL
(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 Numl	ber:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

An assembly (100) to reduce drum (102) diameter of washing machine. The assembly (100) comprises a drum (102), a plurality of baffles (104), and a plurality of sliding rails (106). The sliding rails (106) are provided to embrace each baffle (104) inside the drum (102). The plurality of baffles (104) are attached internally in the drum (102) to reduce the diameter of the drum (102) that reduces the capacity of drum (102) for clothes loading and has a better water-saving effect for less clothes and for larger clothes.



No. of Pages: 17 No. of Claims: 11

(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: AUTOMATIC INNER DRUM CLEANING SYSTEM

(51) International classification	:D06F0039020000, D06F0035000000, G02B0027000000, D06F0039080000, B08B0009093000	(71)Name of Applicant:  1)LG ELECTRONICS INC.  Address of Applicant: 20 Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721, Republic of Korea Republic of Korea (72)Name of Inventor:
(31) Priority Document No	:NA	1)KAUL ASHISH
(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	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

An automatic inner drum cleaning system (100) for automatically cleaning inner drum in washing machine (200), the automatic inner drum cleaning system (100) comprising a DT box (102), a plastic circular ring (104), a plastic water tube (106), a spray cavity (108); and a brush (110) mechanically connected to each other and form a structure and placed in between inner drum (202) and outer drum (204) so that the cleaning of inner drum (202) is performed in combination with the rotation of inner drum (202) during every wash cycle.



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

(22) Date of filing of Application :27/12/2018 (43)

(43) Publication Date: 03/07/2020

# (54) Title of the invention : MULTIPLE MODE OPERATIONAL REFRIGERATOR WITH SINGLE FAN AND DAMPER SYSTEM

:F25D0029000000,	(71)Name of Applicant:
F25D0011020000,	1)LG ELECTRONICS INC.
F25D0017060000,	Address of Applicant :20 Yeouido-dong, Yeongdeungpo-gu,
G01F0015040000,	Seoul 150-721, Republic of Korea Republic of Korea
F25D0017040000	(72)Name of Inventor:
:NA	1)BISEN SUDHIR
:NA	
:NA	
:NA	
:NA	
: NA	
er:NA	
:NA	
:NA	
:NA	
	F25D0011020000, F25D0017060000, G01F0015040000, F25D0017040000 :NA :NA :NA :NA :NA :NA :NA

#### (57) Abstract:

A system (200) for achieving eight different modes of operation in the frost free refrigerator (100) comprising: a compressor (202) for raising the temperature and pressure of the gaseous refrigerant; a condenser (204) for lowering down the temperature of gaseous refrigerant via heat exchange between ambient air and gaseous refrigerant; a capillary valve (208) for facilitating the drastic reduction in pressure and temperature of the liquid refrigerant; an evaporator coils (206) for facilitating the heat exchange; a sensor (216a) and 216(b) that senses the temperature inside the freezer (104) and refrigerator compartment (106);a control and display unit (218) that facilitates the user to select the mode; and a microcontroller (210) that controls the stepper motor (220) that rotates the damper (214) in different positions that facilitates the opening and closing of the air flow circuit inside the freezer (104) and refrigerator compartment (106) based on the mode selected by user.



No. of Pages: 22 No. of Claims: 18

(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: SYSTEM AND METHODS FOR CONTROLLING SAFETY OF BI-FUEL VEHICLES

	:F02D0019060000, B60R0021013200,	(71)Name of Applicant: 1)MARUTI SUZUKI INDIA LIMITED
(51) International classification	B60R0021010000,	Address of Applicant :1 Nelson Mandela Road, Vasant Kunj,
	B60R0021013000,	New Delhi-110070, India Delhi India
	F02D0041000000	(72)Name of Inventor:
(31) Priority Document No	:NA	1)RAJESH DHAUNDIYAL
(32) Priority Date	:NA	2)AKSHAY KUMAR BHYRI
(33) Name of priority country	:NA	3)ANIL KUMAR YADAV
(86) International Application No	:NA	4)SANDEEP MANDAL
Filing Date	:NA	5)TARUN AGGARWAL
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Described herein relates to system for controlling safety of a bi-fuel (BF) vehicle. The system includes impact sensors (202) to sense impact on the BF vehicle during collision of the vehicle; and a BF electronic control unit (ECU) (104) to receive impact signals from the impact sensors (202) when an impact above predetermined threshold is imparted to the BF vehicle during vehicle collision, transmit a first inhibition signal to injectors of a gas fuel source and a liquid fuel source of the BF vehicle, and simultaneously transmit a second inhibition signal to a tank shut-off valve and a regulator shut-off valve.



No. of Pages: 24 No. of Claims: 16

(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

### (54) Title of the invention: METHODS AND DEVICES FOR GENERATING CONTEXT BASED TAGS

(51) International classification	:G06F0003048400, H04W0068040000, G06F0008400000, G06F0016245700, H04W0076190000	(71)Name of Applicant:  1)Samsung Electronics Co., Ltd. Address of Applicant: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 443-742, Republic of Korea Republic of Korea
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)SHARMA, Harit
(33) Name of priority country	:NA	2)LOGANATHAN, Mohit
(86) International Application No	:NA	3)GUPTA, Priyanshu
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A method (900) and an electronic device (102) for generating context based tags are disclosed. The method (900) is executable by a controlling unit (204). The method (900) includes obtaining application data associated with an application. The application data comprises at least one of an application content and a user-interaction content. The method (900) further includes determining at least one tag based on at least one of the context and pre-stored tags. Further, the method (900) includes identifying at least one other electronic device (104) based on the context associated with the application data. The at least one other electronic device (104) is in communication with the electronic device (102). The method (900) includes providing the at least one tag for display to at least one of the electronic device (102) and the at least one other electronic device (104) based on the context.



No. of Pages: 35 No. of Claims: 14

(22) Date of filing of Application :27/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : A NOVEL NANO-BINDER IN CASTABLE REFRACTORY AND A METHOD OF PREPARATION THEREOF

(51) International classification	C04B0041500000,	HINDU UNIVERSITY), VARANASI
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)PRADIP KUMAR ROY
(33) Name of priority country	:NA	2)SK SADDAM HOSSAIN
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(55) A1		

#### (57) Abstract:

The present invention relates to a novel nano-binder in castable refractory and a method of preparation thereof. More particularly, the present invention relates to a nano-lakargiite which act as a nano-binder having general formula CaZrO3 in castable refractory using solid state reaction method by utilizing waste product from poultry industry and further shows low thermal expansion coefficient, high melting point, fire resistance, abrasion resistance, acid resistance excellent chemical resistance, sustainable and high strength, high refractoriness, bonding capability at high temperature having applications in ferrous, non-ferrous and cement industries.



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

(21) Application No.201811049452 A

(19) INDIA

(22) Date of filing of Application :27/12/2018

(43) Publication Date : 03/07/2020

#### (54) Title of the invention: COMPACT INTEGRATED PROTECTIVE GEAR FOR PROTECTING TORSO OF A WEARER

(51) International:A41D0013050000,F41H0001020000,A41D0013120000,A41D0013015000,A41D0013000000 classification (31) Priority Document:NA No (32) Priority:NA Date (33) Name of priority:NA country (86) International Application:NA No :NA Filing Date (87) International Publication No (61) Patent of Addition to:NA	(71)Name of Applicant : 1)Chairman, Defence Research And Development Organisation (DRDO) Address of Applicant :Ministry Of Defence, Govt. of India, Room No. 348, B- Wing, DRDO Bhawan, Rajaji Marg, New Delhi-110011, India Delhi India (72)Name of Inventor: 1)RAWAT, Shweta 2)VARTE, Lalhmunlien Robert 3)SINGH, Inderjeet 4)CHAUDHARY, Yashmita 5)KAKKAR, Deepika 6)PANJWANI, Usha
No	Yashmita
of Addition	Deepika
Application :NA Number Filing	O)r ANJ WANI, Usha
Date	
(62) Divisional to	
Application :NA	
Number :NA Filing Date	
Date	

## (57) Abstract:

The present invention discloses a compact integrated protective gear for protecting torso of a wearer. The compact integrated protective gear comprises a protective vest defining a neck opening, a first arm opening, and a second arm opening. The protective vest comprises a front panel and a rear panel integrated with the front panel to cover a front portion, a back portion and a substantial portion of shoulders of a wearer. Further, the protective vest comprises a first set of lower side panels, a second set of lower side panels, a front shield fixedly disposed the front panel, the front shield including an upper portion and a lower portion. Furthermore, the protective vest comprises a back shield, a first pair of side shields, a second pair of side shields, a first shoulder shield and a second shoulder shield.



No. of Pages: 28 No. of Claims: 8

(22) Date of filing of Application :27/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: CONTEXT-BASED ACTIONABLE RECOMMENDATIONS

(51) International classification	:H04L0029080000, G06F0009460000, G06F0016000000, G06F0003048200, H04N0019159000	(71)Name of Applicant:  1)Samsung Electronics Co., Ltd. Address of Applicant:129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742 (KR) Republic of Korea (72)Name of Inventor:
(31) Priority Document No	:NA	1)SUBRAMANI, Karthikeyan
(32) Priority Date	:NA	2)SAHOO, Kishore Chandra
(33) Name of priority country	:NA	3)MOHIDEEN, Kaja Sheik Mohammed
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Context-Based Actionable Recommendations A method (600) of generating context-based actionable recommendations is disclosed. The method (600) comprises determining, by a core engine (212), a plurality of contexts based on user interactions with content of a plurality of applications (206) residing on one or more electronic devices (102) connected through a network (100). The method (600) further comprises formulating, by the core engine (212), an aggregated context based on the plurality of contexts. Further the method (600) comprises generating, by a recommendation engine (214), one or more context-based actionable recommendations in respect of a further application (206) being accessed through an electronic device (102) from amongst the one or more electronic devices (102), where the one or more context-based actionable recommendations are based on the aggregated context.



No. of Pages: 35 No. of Claims: 16

(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: INTEGRATED SLIDER CHANNEL

(51) International classification	E05F0011380000, B60J0010790000, B60J0010265000, F16M0011240000	Address of Applicant :1 Nelson Mandela Road, Vasant Kunj, New Delhi-110070, India. Delhi India (72)Name of Inventor:
(31) Priority Document No	:NA	1)AMRINDER SINGH SIDHU
(32) Priority Date	:NA	2)TARANDEEP SINGH
(33) Name of priority country	:NA	3)RAHUL SEMWAL
(86) International Application No	:NA	4)RAGHAVENDRA KATTI
Filing Date	:NA	5)SANJAY HALDAR
(87) International Publication No	: NA	6)SANDEEP RAINA
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Described herein is an integrated slider channel (200) for assembly of a glass (114) in a window panel assembly. The integrated slider channel (200) includes a U-shaped glass channel (202) having a base (202-B) and a pair of arms (202-A) attached to the base (202-B); a C-type guiding bracket (204) fixed from its top (204-T) directly with the base (202-B) of the U-shaped glass channel (202) and fixed from its base (204-B) to one of the arms (202-A) of the U-shaped glass channel (202) through a supporting bracket (206); and a sliding channel (208) slidably mounted within the C-type guiding bracket (204).



No. of Pages: 25 No. of Claims: 10

(22) Date of filing of Application :27/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : NANOCOMPOSITE BASED PHOTOCATALYST FOR DEGRADATION OF POLLUTING MACHATITE GREEN DYE AND METHOD THEREOF

	:C02F0001320000, A62D0003170000,	(71)Name of Applicant: 1)SHOOLINI UNIVERSITY OF BIOTECHNOLOGY AND
(51) International classification	,	MANAGEMENT SCIENCES
	A01N0025280000,	Address of Applicant :POST OFFICE BOX NO. 9, HEAD
	F21S0011000000	POST OFFICE, THE MALL, SOLAN- 173212, HIMACHAL
(31) Priority Document No	:NA	PRADESH, INDIA. Landline: 01792-308000 Email:
(32) Priority Date	:NA	registrar@shooliniuniversity.com Himachal Pradesh India
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)Singh Pardeep
Filing Date	:NA	2)Dutta Vishal
(87) International Publication No	: NA	3)Sharma Sheetal
(61) Patent of Addition to Application Number	er :NA	4)Raizada Pankaj
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present invention discloses a nanocomposite for the photocatalytic degradation of malachite green dye. The same is ZnO/BiOI/Graphene nanocomposite. The nanocomposite is easy to synthesize as all raw materials are easily available and process is simple and easy. Further, the nanocomposite shows high efficiency in degrading malachite green within 2-3 hours, in presence of sunlight or even artificial light. About 85% of the dye gets degraded in one hour when exposed to sunlight in the presence of the nanocomposite present at very low concentration of just 0.1%.



No. of Pages: 18 No. of Claims: 2

(22) Date of filing of Application :28/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: GREEN SYNTHETIC METHOD FOR THE SYNTHESIS OF BIS(FLUOROALKYL) CARBONATE

(51) International classification	:C07C0001320000, C07C0017120000, B01J0027232000, C07C0315040000, C07C0029147000	(71)Name of Applicant:  1)CHAIRMAN, DEFENCE RESEARCH & DEVELOPMENT ORGANISATION Address of Applicant: Ministry of Defence, Govt of India, Room no. 348, B-wing, DRDO Bhawan Rajaji Marg, New Delhi
(31) Priority Document No	:NA	India 110011 Delhi India
(32) Priority Date	:NA	2)ACRHEM, HYDERABAD
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)BARAKAKATY, Balaka
Filing Date	:NA	2)DEY, Saheli
(87) International Publication No	: NA	3)SINGH, Nitesh
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present invention relates to a simple, safe, cost-effective and a non-phosgene based green method for synthesis of bis(fluoroalkyl) carbonate from a carbonyl source and heterogeneous catalyst. The present invention also discloses novel Bis(pentadeacafluorooctyl) carbonate and process for the preparation of Bis(pentadeacafluorooctyl) carbonate.

No. of Pages: 29 No. of Claims: 13

(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: APPARATUSES, SYSTEMS, AND METHODS FOR IMPROVED SENSOR WIRE RETENTION

(51) International classification	:G01K0001080000, G01K0013020000, H01R0013508000, B65D0071000000, A61B0005145000	(71)Name of Applicant:  1)HONEYWELL INTERNATIONAL, INC. Address of Applicant:115 Tabor Road, Morris Plains, NJ 07950, United States of America U.S.A. (72)Name of Inventor:
(31) Priority Document No	:NA	1)RAVIKUMAR Hemanth Hiriyur
(32) Priority Date	:NA	2)DANIELS Aaron
(33) Name of priority country	:NA	3)SAJJAN Murgesh R.
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Apparatuses, systems, and associated methods of assembly are described that provide for improved sensor wire retention. An example sensor wire retention device includes a bobbin tube that defines a hollow interior configured to receive a probe assembly inserted therein. The device includes one or more coil elements wrapped around at least a portion of the bobbin tube. One or more washers are attached around the bobbin tube, and each of the one or more washers defines one or more wire .notches. The device includes a wire harness of one or more wires, and each of the one or more wires of the wire harness are positioned within the one or more wire notches. The device further includes a return shield element disposed around the wires located within the wire notches of the one or more washers, and the return shield element compresses the one or more wires.



No. of Pages: 26 No. of Claims: 20

(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : SYSTEM, METHODS AND COMPUTER PROGRAM PRODUCTS FOR IDENTITY AUTHENTICATION FOR ELECTRONIC PAYMENT TRANSACTIONS

(51) International classification	:G06Q0020400000, G06Q0020340000, H04L0029060000, G06Q0020040000, G06K0019060000	Address of Applicant :2000 PURCHASE STREET,
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)GURUNATHAN, Arunmurthy
(33) Name of priority country	:NA	2)PAREEK, Ravi
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The invention comprises systems, methods and computer program products for identity authentication in connection with payment account information submitted for the purpose of network based electronic payment transaction(s). The invention comprises (i) receiving from a merchant server, (a) a name associated with a purchaser, and (b) a payment card number, (ii) retrieving a data record comprising a payment card holder name associated with the received payment card number, (iii) comparing the payment card holder name extracted from the retrieved data record with the name associated with the purchaser that has been received at the merchant server, and (d) responsive to a match between the payment card holder name extracted from the retrieved data record with the name associated with the purchaser that has been received at the merchant server, generating a positive identity authentication decision and transmit said identity authentication decision to the merchant server.



No. of Pages: 39 No. of Claims: 10

(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : A FAULT TOLERANT DIGITAL DATA ACQUISITION AND TELEMETRY SYSTEM FOR THIN LINE TOWED ARRAYS OVER SINGLE COAXIAL CABLE

(51) International classification	:G01V0001200000, B63B0021660000, H04H0040900000, B63G0008420000, A61B0005000000	(71)Name of Applicant: 1)Chairman, Defence Research and Development Organisation Address of Applicant: Ministry of Defence, Govt. of India, Room No. 348, B Wing, DRDO Bhawan, Rajaji Marg, New
(31) Priority Document No	:NA	Delhi- 110011, Delhi India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)Nirmal Mohan
(86) International Application No	:NA	2)Rajesh Kumar Chandrasekharan Sulochana
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(55) 41		

#### (57) Abstract:

The present invention mainly relates to the field of towed acoustic receiver array sonars. In one embodiment, the present invention relates to a fault tolerant multi-master digital data acquisition and telemetry system for thin line towed arrays over single coaxial cable, the system comprising: an onboard data receiver module having wideband filter, ADC and a digital filter, wherein the onboard data receiver module is positioned in a ship, a single coaxial tow cable connects the receiver module and a thin line towed array, wherein the single coaxial tow cable provides electrical connections to the thin line towed array from the ship and the thin line towed array comprises plurality of channels and a coaxial cable, wherein the plurality of channels coupled independently to the coaxial cable, where each channel is having at least one DAM node and at least one sensor with associated conditioning unit to detect submerged underwater objects and transfer digital data individually to the onboard data receiver module via single coaxial tow cable.



No. of Pages: 30 No. of Claims: 13

(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: PROCESS FOR PREPARING DE-LIGNIFIED MICRO-FIBRILLATED FIBRE

(51) International classification	:C12M0001000000, A61K0009510000, D21H0015040000, C08H0008000000, B01D0015320000	(71)Name of Applicant:  1)INDIAN INSTITUTE OF TECHNOLOGY DELHI Address of Applicant: Hauz Khas, New Delhi-110016, India Delhi India (72)Name of Inventor:
(31) Priority Document No	:NA	1)GHOSH, Anup Kumar
(32) Priority Date	:NA	2)SANKARPANDI, Sabapathy
(33) Name of priority country	:NA	3)QAYYUM, Bariya
(86) International Application No	:NA	4)BANERJEE, Debjyoti
Filing Date	:NA	5)MAHAJAN, Jignesh Shantaram
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present disclosure discloses a process for preparing de-lignified micro-fibrillated fibre, the process comprising: (a) contacting at least one lignocellulosic fibre with water to obtain a mixture; (b) contacting the mixture, and a supercritical fluid to obtain a solution; (c) processing the solution to obtain a first solution; (d) treating the first solution to obtain a second solution; and (e) drying the second solution to obtain de-lignified micro-fibrillated fibre. It also discloses bio-composite comprising the de-lignified micro-fibrillated fibre obtained by the process of the present disclosure.



No. of Pages: 25 No. of Claims: 12

(22) Date of filing of Application :28/12/2018

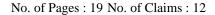
(43) Publication Date: 03/07/2020

## (54) Title of the invention: A DECONTAMINANT COMPOSITION AND APPLICATONS THEREOF

(51) International classification	B01J0023580000,	(71)Name of Applicant: 1)CHAIRMAN, DEFENCE RESEARCH & DEVELOPMENT ORGANISATION Address of Applicant: Ministry of Defence, Govt. of India, Room No 348, B-Wing, DRDO Bhawan, Rajaji Marg, New Delhi
(31) Priority Document No	:NA	110 011, India Delhi India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)GUTCH, Pranav Kumar
(86) International Application No	:NA	2)ACHARYA, Badri Narayan
Filing Date	:NA	3)DUBEY, Devendra Kumar
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present disclosure discloses a decontaminant composition comprising: (a) oxone; and (b) at least one base, wherein oxone to the at least one base has a weight ratio in a range of 0.10:1 to 7:1. It also discloses the process of preparation of the same, as well as the process for detoxifying the chemically toxic agents using the decontaminating composition of the present disclosure.



(22) Date of filing of Application :29/12/2018

(43) Publication Date: 03/07/2020

### (54) Title of the invention: METHODS AND SYSTEM FOR DETERMINING OCCUPANCY OF SEATS IN AROOM

		(71)Name of Applicant:
(51) International classification	H04S0007000000, G06T0007730000,	1)Praveen Kumar Address of Applicant :9/47, Indira Nagar, Lucknow, UP
	G06K0009200000,	226016 Uttar Pradesh India
	G06T0007000000	(72)Name of Inventor:
(31) Priority Document No	:NA	1)Praveen Kumar
(32) Priority Date	:NA	2)Rahul Khandelwal
(33) Name of priority country	:NA	3)Amit Tapas
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application	:NA	
Number Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(57) A1		

#### (57) Abstract:

The present invention relates to method and systems for computing an occupancy of a room is provided. The method includes the steps of: receiving via an image capturing device a video of an area corresponding to a seating arrangement within the room, wherein the seating arrangement comprises a plurality of seats and the image capturing device is configured to capture at least one type of view for each seat of the plurality of seats; processing at least one image frame of the video of the area to determine a region of interest, wherein the region of interest comprises a seat area found within coordinates of at least one seat; computing a motion count within the region of interest; determining a presence of at least one object based on the motion count; processing the at least one image frame of the video to classify the at least one object into at least one category; performing a pixel level segmentation of the at least one image frame to compute a first confidence score; and detecting the at least one object as an occupier using the computed motion count, at least one category and the first confidence score.



No. of Pages: 28 No. of Claims: 10

(22) Date of filing of Application :29/12/2018 (43) Publication Date : 03/07/2020

### (54) Title of the invention: FRET-BASED SENSOR TO MONITOR THE ARSENIC (AS3+) DYNAMICS IN SINGLE CELLS

nia lia

#### (57) Abstract:

The present disclosure provides a novel fluorescent tool for the real time ratiometric determination and measurement of arsenic (As3+) significantly within living cells. Arsenic is a highly reactive toxic pollutant that causes severe toxicological damages along with profound tumorigenic and carcinogenic effects. Therefore, a detailed knowledge of the concentrations and flux rates of arsenic is required to establish the carcinogenetic mechanism of this toxicant at real time. The lack of sufficiently sensitive sensing systems has hampered research in this area. Here we have invented a fluorescence resonance energy transfer (FRET)-based nanosensor SenALiB (Sensor for Arsenic Linked Blackfoot disease) which contains a metalloregulatory arsenic-binding protein (ArsR) obtained from E. coli as the As3+ sensing element and fluorophores ECFP (Enhanced Cyan Fluorescent Protein) and Venus as the FRET pair. SenALiB takes advantage of the ratiometic FRET readout, which measures arsenic with high specificity and is stable to pH changes within the physiological range in cell-based assays. In presence of As3+, the genetically encoded nanosensor offers rapid detection response and provides highly accurate, real-time optical readout in case of E. coli. SenALiB-14 is the most efficient mutant sensor created with a dissociation constant of approximately 14.48 µM and can be used as a versatile tool for dynamic measurement of arsenic concentration in eukaryotes non-invasively.



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

(22) Date of filing of Application :29/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: SYSTEM AND METHOD FOR IDENTIFYING PASSIVE OPTICAL IDENTIFIER TAGS

(51) International classification	:G06K0007100000, G02F0001133500, H01L0025000000, G06K0009460000, G06F0003030000	(71)Name of Applicant:  1)Indian Institute of Technology Delhi Address of Applicant: Hauz Khas, New Delhi-110016, Delhi India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Abhishek Dixit
(32) Priority Date	:NA	2)Rishu Raj
(33) Name of priority country	:NA	3)Karan Saxena
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

One or more systems and methods for identifying one or more passive optical identifier tag from a plurality of passive optical identifier tags is provided. The method includes emitting light from a light source device. Further, the method includes transmitting, by said plurality of passive optical identifier tags, reflected light to a receiver. The method further includes reflecting, by the plurality of passive optical identifier tags, the emitted light with its unique set of wavelengths, said set of wavelengths being inferred by the corresponding reflection sequence.



No. of Pages: 55 No. of Claims: 30

(22) Date of filing of Application :30/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention: ANTIFUNGAL COMPOSITION PREPARED FROM ESSENTIAL OIL OF LEAVES OF CITRUS PSEUDOLIMON AND BIOAVAILABILITY ENHANCER OF ANTIFUNGAL ANTIBIOTICS

(51) International classification	A01N0065000000,	(71)Name of Applicant: 1)SHOOLINI UNIVERSITY OF BIOTECHNOLOGY AND MANAGEMENT SCIENCES Address of Applicant:SHOOLINI UNIVERSITY OF BIOTECHNOLOGY AND MANAGEMENT SCIENCES POST
(31) Priority Document No	:NA	OFFICE BOX NO 9, HEAD POST OFFICE THE MALL,
(32) Priority Date	:NA	SOLAN-173212 HIMACHAL PRADESH, INDIA. Himachal
(33) Name of priority country	:NA	Pradesh India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)PRAKRITI NIDHI
(87) International Publication No	: NA	2)RUCHI KUMARI
(61) Patent of Addition to Application Number Filing Date	:NA :NA	3)PROF. KAMAL DEV 4)PROF. ANURADHA SOURIRAJAN
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

This invention relates to developing potent antifungal formulations based on essential oil of leaves of Citrus pseudolimon. The invention also provides a cheaper and sustainable source for the development of antifungal therapeutics from the leaves of Citrus pseudolimon. The medicinal plants offer a wealth of phytocompounds, including essential oils (EOs), which can be explored for antifungal activities. This study provides a sustainable and cheap source of essential oil from leaves of Citrus pseudolimon, that showed antifungal activity against Candida strains. The essential oil extracted from the leaves of Citrus pseudolimon also enhanced the bioavailability (synergistic effect) of Fluconazole and Amphotericin B by 5 to 8 folds respectively. Essential oils of Citrus pseudolimonshows synergistic effects with Amphotericin B and Fluconazole against S. cerevisiae(H1086),Candida albicans(ATCC90028) and Candida albicans(MTCC277).



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

(22) Date of filing of Application :30/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: A BIOSENSOR FOR DETECTING SALMONELLA AND PROCESS OF PRODUCING THE SAME

(51) International classification	:G01N0027327000, G01N0033543000, G01N0033569000, C12Q0001000000, H01L0023000000	(71)Name of Applicant: 1)Shoolini University of Biotechnology and Management Sciences Address of Applicant: Village-Bhajol, P.O. Sultanpur, Solan, 173229, Himachal Pradesh, India Himachal Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Kritika Saini
(33) Name of priority country	:NA	2)Ankur Kaushal
(86) International Application No	:NA	3)Shagun Gupta
Filing Date	:NA	4)Dinesh Kumar
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present invention relates to a biosensor for detecting Salmonella and process for producing the same comprising of: a screen-printed gold electrode with a working area and a counter area of gold and a reference area of silver; and a 5´-NH2 labelled single stranded DNA probe (ssG-DNA) immobilized on gold working area of electrode.



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

(22) Date of filing of Application :30/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : A METHOD FOR IMPROVING BIOSYNTHESIS OF PHYTOCHEMICALS AND ANTIOXIDANT POTENTIAL IN PLANTS

(51) International classification	:A01G0018100000, A01G0009029000, A01G0020200000, C12N0003000000, A01G0007060000	(71)Name of Applicant: 1)Shoolini University of Biotechnology and Management Sciences Address of Applicant: Village-Bhajol, P.O. Sultanpur, Solan, 173229, Himachal Pradesh, India Himachal Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Rachna Verma
(33) Name of priority country	:NA	2)Ashwani Tapwal
(86) International Application No	:NA	3)Dinesh Kumar
Filing Date	:NA	4)Sunil Puri
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present invention relates to a method for improving biosynthesis of phytochemicals and antioxidant potential of ethnomedicinal plants comprising: preparing and multiplying inoculum of mycorrhiza on Sorghum vulgare seedlings with single spore culture technique; inoculating ethnomedicinal plants at a three to four leaved stage with an inoculum comprising root cuttings, spores and soil from step a; growing the plant seedlings of ethnomedicinal plants in the pots having autoclaved soil and sand under a controlled temperature in a polyhouse/glasshouse; and supplementing the pots of ethnomedicinal plants with HoaglandTMs solution.

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

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

### (54) Title of the invention: PROCESS OF E-WASTE BIODEGRADATION IN PRESENCE OF BACTERIAL CONSORTIUM

(51) International classification	:C08J11/04	(71)Name of Applicant:
(31) Priority Document No	:NA	1)G.B. PANT UNIVERSITY OF AGRICULTURE &
(32) Priority Date	:NA	TECHNOLOGY, PANTNAGAR
(33) Name of priority country	:NA	Address of Applicant :PANTNAGAR UTTARAKHAND-
(86) International Application No	:NA	263145, INDIA Uttarakhand India
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)MR. PRASENJIT DEBBARMA
(61) Patent of Addition to Application Number	:NA	2)DR. M.G.H. ZAIDI
Filing Date	:NA	3)DR. DEEP CHANDRA SUYAL
(62) Divisional to Application Number	:NA	4)MR. SAURABH KUMAR
Filing Date	:NA	5)DR. REETA GOEL

#### (57) Abstract:

This invention describes the process for biodegradation of e-waste in presence of bacterial consortium under in situ conditions. The process relates to an optimum tolerance level (OTL) detection of e-waste against a consortium, comprising Microbacterium sp. strain MK3 (DQ318884), Bacterium Te68R strain P1M12 (DQ423487) and Pseudomonas putida strain MK4 (DQ318885). Talc based bioformulation was prepared by adding the talc in the tubes containing an active consortium after separating the cells from the nutrient broth through centrifugation at 5000 rpm. E-waste granules were incubated with freshly prepared bioformulation in soil pits for 9 months. The biodegradaed samples were recovered from the pits and properly washed with 70% ethanol and centrifuged to remove the adhered soil particles and microbial biomass. The biodegradation of e-waste was ascertained through diversified analytical techniques. The proposed protocol for in situ incubation is helpful in e-waste biodegradation through selective adaptability and enrichment under natural conditions.



No. of Pages: 25 No. of Claims: 6

PHYCOCYANIN FROM SPIRULINA PLATENSIS

(19) INDIA

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention : A SIMPLE METHOD FOR EXTRACELLULAR PRODUCTION OF HIGH PURITY C-

	:A61K0035748000,	(71)Name of Applicant:
	C12N0001120000,	1)TILAK RAJ SHARMA
(51) International classification	A23L0033105000,	Address of Applicant :CENTER OF INNOVATIVE AND
	A01G0033000000,	APPLIED BIOPROCESSING, SECTOR-81 (KNOWLEDGE
	C12R0001890000	CITY), PO MANAULI, S.A.S. NAGAR, MOHALI-140306,
(31) Priority Document No	:NA	PUNJAB, INDIA. Punjab India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)SUDESH KUMAR YADAV
(86) International Application No	:NA	2)ANJALI PUROHIT
Filing Date	:NA	3)VARUN KUMAR
(87) International Publication No	: NA	
(61) Patent of Addition to Application	:NA	
Number	:NA	
Filing Date	.11/1	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(57) Abatroat		•

#### (57) Abstract:

The present invention relates to a novel, simple, and energy efficient method for the extracellular production of c-phycocyanin (C-PC) from Spirulina platensis. The wet algal biomass or slurry of algal cells is treated with 25-50mM of MES buffer and/or water under dark, anaerobic and still conditions for less than 24 h. After 14-16 h of incubation, blue color pigment is leached out from the cells as crude C-PC. The crude C-PC is precipitated with 65%±5% of ammonium sulphate salt overnight at 4C. Precipitates obtained are further dialyzed in water, to remove MES along with salt. After dialysis, purity ratio of C-PC is found to be of food grade. Analytical grade C-PC is obtained on further purifying the dialyzed C-PC through anion exchange chromatography. The optimized process of C-PC production and recovery in MES buffer is compared with that in water medium and found that use of MES yielded higher quantity and purity of C-PC than in water. In MES, 63.19±2.54 mg of C-PC is obtained from per gram of wet biomass of Spirulina with purity ratio of 1.345±0.17 after dialysis and 34.513±6.72 mg of C-PC from per gram of wet biomass with purity ratio of 6.17±0.293 after anion exchange chromatography. Whereas in water extraction process, 35.07±3.07 mg of C-PC is obtained from per gram of wet biomass with purity ratio of 1.44±0.31 after anion exchange chromatography. Hence, study documented a simple and energy efficient extracellular production of C-PC of high purity and better yield as compared to the available cumbersome methods.

No. of Pages: 14 No. of Claims: 10

(22) Date of filing of Application :31/12/2018 (43)

(43) Publication Date: 03/07/2020

### (54) Title of the invention: ZINC OXIDE NANOPARTICLES AND METHOD OF PRODUCING THE SAME

	:A61K0036590000.	(71)Name of Applicant:
	B82Y0030000000,	1)Shoolini University of Biotechnology and Management
(51) International classification	C01G0009020000,	Sciences
	A61K0036886000,	Address of Applicant :Village-Bhajol, P.O. Sultanpur, Solan,
	A01N0059160000	173229, Himachal Pradesh, India Himachal Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Rajesh Kumar
(33) Name of priority country	:NA	2)Ankush Chauhan
(86) International Application No	:NA	3)Mamta Shandilya
Filing Date	:NA	4)Sapna Thakur
(87) International Publication No	: NA	5)Sushma Sharma
(61) Patent of Addition to Application	:NA	6)Pankaj Thakur
Number Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention relates to a Zinc Oxide(ZnO) nanoparticle and a method of producing of the said Zinc Oxide(ZnO) nanoparticles and specifically to the Zinc Oxide(ZnO) nanoparticles synthesized using leaf extract of Cannabis sativa, Aloe vera, Jatropha curcas and Tinospora cordifolia. The method of producing Zinc Oxide(ZnO)nanoparticles is performed under controlled pH to get maximum yield of nanoparticles using bio-synthesis. The method comprises preparing 100 ml solution of 0.02M Zinc acetate solution in distilled water and adding plant extract as stabilizing agent . The prepared solution was kept on magnetic stirrer for 10 minutes and then kept in microwave assistance for 40 seconds at 100% power of 800 watts. After that the solution was kept for one day for settling down. Thereafter, the solution was centrifuged at 5000 rpm for 10 minutes. Finally, after filtering, ZnO nanoparticles were collected. Zinc Oxide(ZnO) nanoparticles synthesized from leaf extract of Cannabis sativa, Aloe vera, Jatropha curcas and Tinospora cordifolia possess good antimicrobial activity against the numerous pathogenic bacteria.



No. of Pages: 23 No. of Claims: 9

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

### (54) Title of the invention: BENDING-BASED OPERATION OF FOLDABLE DISPLAY DEVICE

(51) International classification	:G06F0001160000, G06F0003041000, G06F0003140000, G06F0003048800, H04N0007140000	(71)Name of Applicant:  1)Samsung Electronics Co., Ltd. Address of Applicant: 416 Maetan-Dong, Yeongtong-GU, Suwon-SI, Gyeonggi-do 442-742, Republic of Korea Republic of Korea
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Prassanita
(33) Name of priority country	:NA	2)RAJA, Vivek
(86) International Application No	:NA	3)JAIN, Arihant
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A computer-implemented method (800), a system (102), and a foldable display device (104) for performing an operation in the foldable display device (104) having multiple display screens are disclosed. The method (800) includes receiving details indicative of bending of a first display screen (302) of the foldable display device (104), and determining an angle of bending of the first display screen (302) based on the details. Further, a notification indicative of a predefined operation associated with the determined angle of bending is generated. Each value of the angle of bending is associated with at least one predefined operation to be performed in the foldable display device (104). The method (800) includes receiving, in response to the notification, a touch input from a user on the first display screen (302). The touch input is indicative of an instruction to initiate the predefined operation. The predefined operation is initiated based on the angle of bending and the receipt of the touch input.



No. of Pages: 37 No. of Claims: 10

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

### (54) Title of the invention: TRAIN COLLISION AVOIDANCE SYSTEM

(51) International classification	:G01S0013930000, G08G0001160000, B61L0003120000, B61L0025020000, B25J0009160000	,
(31) Priority Document No	:NA	Uttar Pradesh, India Uttar Pradesh India
(32) Priority Date	:NA	2)Medha Servo Drives Pvt. Ltd.
(33) Name of priority country	:NA	3)KERNEX Microsystems (INDIA) Ltd.
(86) International Application No	:NA	4)HBL Power Systems Limited
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)GUDAVALLETI, Pavan Kumar
(61) Patent of Addition to Application Numb	er:NA	2)MANSUKHANI, Lalit Kumar
Filing Date	:NA	3)AGASTIAN, Arunachalam
(62) Divisional to Application Number	:NA	4)MANTHENA, Badari Narayan Raju
Filing Date	:NA	5)MANEPALLI, Vidyasagar Veera Venkata

#### (57) Abstract:

The present disclosure relates to Train Collision Avoidance System (s) (TCAS). The TCAS of the present invention is provided with the functions of on board display of signal aspect, preventing signal passing at danger (RED), Speed supervision (Ceiling speed of locos, track and Permanent/ temporary speed restrictions including loop line speed control), avoiding collisions (head on collisions, rear end collisions and unusual stoppages in the block section) and auto whistling at level crossing gates. The present invention includes on board equipment including loco TCAS Vital Computer, radio unit, RFID readers and Loco Pilot-Driver Machine Interface and track side equipment including stationary TCAS Vital Computer, radio unit, RFID tags and Station Master Operation Cum Indication Panel. According to the present invention, it is possible to implement the scheme up to train speeds of 200 KMPH.



No. of Pages: 16 No. of Claims: 10

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: METHOD AND DEVICE FOR DETERMINING OPERATION OF AN AUTONOMOUS DEVICE

(51) International classification	:G06F0003000000, G01S0003800000, G05D0001000000, G01S0015740000, H04N0009802000	(71)Name of Applicant:  1)WIPRO LIMITED  Address of Applicant: Doddakannelli, Sarjapur Road, Bangalore 560035, Karnataka, India. Jammu & Kashmir India (72)Name of Inventor:
(31) Priority Document No	:NA	1)RISHAV DAS
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A method and device for determining operation of an autonomous device is disclosed. The method includes receiving pixel data and sound data associated with an environment at an instance of time, wherein the pixel data is received from least an image sensor associated with the autonomous device, and wherein the sound data is received from at least four sound sensors placed in a quadrilateral configuration on the autonomous device. Each quadrant of the pixel data is associated with each of the at least four sound sensors. The sound data received is mapped the to the matrix to identify one or more pixels in the matrix corresponding to the sound data based on a difference in amplitude between a first sound sensor of the at least four sound sensors recording maximum sound amplitude with a plurality of second sound sensors of the at least four sound sensors.



No. of Pages: 36 No. of Claims: 17

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : SLOTTED WAVEGUIDE FED MICROSTRIP ANTENNA ARRAYS FOR MONOPULSE TRACKING RADARS

(51) International classification	:H01Q0025020000, H01Q0021000000, H01Q0013100000, H01Q0003340000, H01Q0003080000	Organisation (DRDO)
(31) Priority Document No	:NA	Delhi- 110011, Delhi India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)Girish Kumar
(86) International Application No	:NA	2)Yogesh Kumar Verma
Filing Date	:NA	3)Pratigya Mathur
(87) International Publication No	: NA	4)Hemant Kumar
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	5)Prashant Kumar Mishra
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(F7) A1		

#### (57) Abstract:

The circular tracking antenna system (CTAS) comprises multiple portions with similar size and geometry, herein after referred as quadrants. Each quadrant is fed with a waveguide. The quadrants are arranged to form a circular structure. Each quadrant comprises a dual sided substrate and the substrate comprises a radiating surface and a back surface. The radiating surface comprises multiple rows of microstrip antennas. The back surface comprises multiple slots, wherein a slot corresponds to a row of the microstrip antennas for feeding the row of the microstrip antennas with an input signal, a slotted waveguide that corresponds to the slots of the quadrant for feeding the slots with the input signal and a comparator. Input arms of the comparator corresponds to input terminals of the slotted waveguides for receiving output signals from all quadrants and output arms for providing sum and difference patterns for monopulse tracking from received output signals.



No. of Pages: 33 No. of Claims: 10

(22) Date of filing of Application :31/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : METHOD AND SYSTEM FOR FACILITATING EXECUTION OF APPLICATION IN COMPUTING-DEVICE

<ul><li>(51) International classification</li><li>(31) Priority Document No</li></ul>	:H04W0004500000, H04L0029080000, G06F0011340000, H04M0015000000, G06F0021100000	(71)Name of Applicant:  1)Samsung Electronics Co., Ltd. Address of Applicant: 416 Maetan-Dong, Yeongtong-GU, Suwon-SI, Gyeonggi-do 442-742, Republic of Korea Republic of Korea (72)Name of Inventor:
(32) Priority Date	:NA	1)SINGH, Manvendra
<ul> <li>(32) Phonty Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application</li> </ul>	:NA :NA :NA : NA	1)SINGII, Manvenura
Number Filing Date	:NA :NA	
(62) Divisional to Application Number Filing Date	:NA :NA	

#### (57) Abstract:

The present subject matter at least illustrates a method and system (400) for facilitating execution of application in a computing device. The method comprises analysing at-least one incoming-event to ascertain at least one relevant application. Thereafter, a capturing process executes for capturing either an absence of said application in a volatile memory, or at-least one usage related parameter related to said application. Based on said capturing, the at-least one application is automatically loaded in at least one predetermined state within the volatile-memory. Such automatic-loading of the application in the pre-determined state is predicted in real-time based on prediction-criteria. Thereafter, usage of the automatically loaded application is allowed in the form of a user-operation upon automatically loaded application, or usage by at least one associated application.



No. of Pages: 32 No. of Claims: 10

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: AN ERGONOMIC SNOW BOOT

(51) International classification	:A61F0005010000, A41D0027020000, A43B0005040000,	, ,
	A43B0013040000, A43B0023070000	Address of Applicant :Ministry Of Defence, Govt. of India, Room No. 348, B- Wing, DRDO Bhawan, Rajaji Marg, New
(31) Priority Document No	:NA	Delhi-110011, India Delhi India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)BHATTACHARYYA, Debojyoti
(86) International Application No	:NA	2)PAL, Madhusudan
Filing Date	:NA	3)CHATTERJEE, Tirthankar
(87) International Publication No	: NA	4)SEN, Suranjana
(61) Patent of Addition to Application Numb	er:NA	5)CHATTERJEE, Subhojit
Filing Date	:NA	6)KUMAR, Bhuvnesh
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

An ergonomic snow boot (100) includes a sole member (202) and an outer member (204). The outer member (204) includes a first inner portion (402) having an inner lining (502) attached to a strobel fabric (210) of the sole member (202). The inner lining (502) includes a foam material accommodated between a first inner surface (504) and a first outer surface (506) of the inner lining (502). The ergonomic snow boot (100) includes a hard tongue member (226) and a soft tongue member (406). The soft tongue member (406) includes a polyester cross-linked foam material. The ergonomic snow boot (100) also includes an upper box member (228) attached to the outer member (204) and the soft tongue member (406). Further, the ergonomic snow boot (100) includes an ankle support cuff-quarter (232) removably attached to the first outer portion (404) of the outer member (204) through a flexible hinge member (406).



No. of Pages: 35 No. of Claims: 21

(21) Application No.201811050095

(19) INDIA

(22) Date of filing of Application :31/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: A TELEMETRY CUM CONTROL SYSTEM FOR TOWED LINEAR PROJECTOR ARRAYS

(51)(71)Name of Applicant: 1) CHAIRMAN, DEFENCE International: H04L0012100000, H04L0012400000, B63G0008420000, G01V0001380000, H04R0017000000 classification RESEARCH AND (31) Priority DEVELOPMENT ORGANISATION Document :NA Address of Applicant : MINISTRY OF DEFENCE, GOVT. OF INDIA, No (32) Priority :NA ROOM NO. 348, B WING, DRDO BHAWAN, RAJAJI MARG, New Date (33) Name Delhi Delhi India of priority :NA (72)Name of Inventor: country 1)NIRMAL MOHAN (86)2)MANGALARAJ SAMUEL International THEOPHILUS Application :NA 3)KRISHNAKUMAR :NA PUTHUKKUDI Filing Date (87)International : NA Publication (61) Patent of Addition Application :NA :NA Number Filing Date (62)Divisional to Application :NA Number :NA Filing Date

### (57) Abstract:

The present invention mainly relates to towed projector arrays used in sonars and more particularly to a telemetry and control system for towed linear projector arrays, the system comprising: an onboard waveform control module positioned in a ship, wherein the control module is used to provide power and data signals to a towed linear projector arrays to generate a desired acoustic beam pattern, a coaxial tow cable connects the onboard control module to a towed linear projector array and to a towed acoustic receiver array, wherein the tow cable is used to transfer power and data signals to the towed linear projector array and to the towed acoustic receiver array and the towed linear projector array comprises a media convertor, plurality of ESB (Ethernet to serial bridge) and an ethernet cable, wherein the media convertors, plurality of ESBs are coupled to the ethernet cable, where each ESBs connects plurality of high-power element set to the onboard control module via coaxial towed cable to generate the desired acoustic beam pattern.



No. of Pages: 33 No. of Claims: 12

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: A METHOD TO DEVELOP LOW CALORIE KINNOW BASED HERBAL BEVERAGE

(51) International classification	A23L00020200000,	(71)Name of Applicant: 1)SHOOLINI UNIVERSITY OF BIOTECHNOLOGY AND MANAGEMENT SCIENCES Address of Applicant:SHOOLINI UNIVERSITY OF BIOTECHNOLOGY AND MANAGEMENT SCIENCES POST
(31) Priority Document No	:NA	OFFICE BOX NO 9, HEAD POST OFFICE THE MALL,
(32) Priority Date	:NA	SOLAN-173212 HIMACHAL PRADESH, INDIA. Himachal
(33) Name of priority country	:NA	Pradesh India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)RAJAT SINGH
(87) International Publication No	: NA	2)SOMESH SHARMA
(61) Patent of Addition to Application Numl	oer:NA	3)PANKAJ CHAUHAN
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

This invention relates to development of Novel low calorie kinnow based herbal beverage. Kinnow is an important citrus fruit of India and is a hybrid between "KingTM (citrus nobilis) and "Willow leafTM (citrus deliciosa) varieties of citrus fruits. In present investigations efforts have been made to prepare and standardize the ingredients for the preparation of low calorie kinnow based herbal beverage. Different treatments of beverage were prepared using different concentrations of kinnow, mint, ginger and giloy. On the basis of sensory characteristics, the treatment prepared with kinnow: mint: ginger: giloy in ratio of (10:2:2:1) was selected for further development of low calorie beverage. The selected combination was further developed using different levels of stevia and sugar i.e. (0:50:100%). The beverage prepared with 50% stevia and 50% sugar was highly accepted by the panellists as the treatment scoured the higher scores for various sensory attributes such as colour, aroma, body, taste and flavour. Further, the results of the various physicochemical characteristics revealed that the low calorie drink prepared with 50 % sugar + 50 % stevia had also lower content of total and reducing sugars. In another experiment the above prepared beverage was filled in presterlized bottles and stored at refrigerated (4-7°C) and ambient (27±50C) conditions for a period of 60 days. The sensory evaluation results revealed that low calorie kinnow based herbal beverage stored at refrigeration temperture was found highly acceptable compared to ambient storage. However, a decreasing trend was observed in pH and ascorbic acid and increasing trend was observed in TSS, titratable acidity, total sugar and reducing sugar content with increase in storage period at different storage conditions up to 60 days. The beverage was also evaluated for energy value and was found low (27.48 Kcl/100ml) in energy as compared to the beverage prepared with sugar. The cost of production of low calorie herbal beverage was Rs.10.44/200ml which is quite comparable with the costs of beverages available in the market. Therefore, from the present investigations it can be concluded that a quality low calorie kinnow based herbal beverage with high acceptibility can be prepared using 50% stevia and 50% sugar.

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

(22) Date of filing of Application :31/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : IRON OXIDE NANOPARTICLES, IRON OXIDE-CELLULOSE NANOCOMPOSITE AND METHOD OF PRODUCING THEREOF

	:B82Y0030000000,	(71)Name of Applicant :
	B82Y0040000000,	1)Shoolini University of Biotechnology and Management
(51) International classification	H01F0001000000,	Sciences
	A01N0059160000,	Address of Applicant :Village-Bhajol, P.O. Sultanpur, Solan,
	C07F0015020000	173229, Himachal Pradesh, India Himachal Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Mamta Shandilya
(33) Name of priority country	:NA	2)Sapna Thakur
(86) International Application No	:NA	3)Shweta Thakur
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Num	ber:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present invention relates to Iron Oxide nanoparticles and Iron Oxide -Cellulose nanocomposite and a method of producing Iron Oxide nanoparticles and Iron Oxide -Cellulose nanocomposite. Iron Oxide nanoparticles were synthesized by using hydrothermal technique. Using the Electro spin techniques Iron Oxide-Cellulose Nanocomposite were synthesized in the form of thin film. The synthesized Iron Oxide nanoparticles were characterized with the help of XRD. XRD confirms the formation and the crystalline nature of Iron Oxide-Cellulose Nanocomposite. Iron Oxide nanoparticles and Iron Oxide-Cellulose nanocomposite synthesized by the method of the present invention possess good antimicrobial activity against the numerous pathogenic bacteria.



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

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: NOVEL E-SEAL WITH TRACKING SYSTEM

(51) International classification	:G06K0019077000, H04W0004800000, H04B0005000000, G06K0019070000, G06K0007100000	Address of Applicant :VILL-YAHIYAPUR,POST-
(31) Priority Document No	:NA	2)PRANAY BHARDWAJ
(32) Priority Date	:NA	3)SAKUN AHUJA
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)RAJKAMAL SINGH CHAUHAN
Filing Date	:NA	2)PRANAY BHARDWAJ
(87) International Publication No	: NA	3)SAKUN AHUJA
(61) Patent of Addition to Application		
Number	: :01/01/1900	
Filed on	.01/01/1900	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present invention provides a novel E-seal comprised of a separate HF and UHF chip/inlays (with tamper evident capabilities) along with an additional inlay packaged together; resulting in a single chip device having both i.e UHF and HF combined in a single ship chip, coupled with NFC (Near field communication) as well, resulting in systematic tracking of the products along with provision of long read range, larger memory, and ability to read using a non-expensive device and providing the Open status of the seal coupled with software application facilitating real-time monitoring of product supply chain journey. The disclosed seal essentially comprised of 3 main materials namely Polycarbonate material that is used for outer housing, second-Steel, Zinc coated for bolt and third an RFID integrated circuit consisting unique chip with storage capability.



No. of Pages: 12 No. of Claims: 9

(22) Date of filing of Application :29/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: SYSTEMS AND METHODS FOR PATH DETERMINATION

(51) International classification	:G01C 21/20 G05D 1/02 G06F 16/29	(71)Name of Applicant: 1)BEIJING DIDI INFINITY TECHNOLOGY AND
(31) Priority Document No	:201811615760.8	DEVELOPMENT CO., LTD.
(32) Priority Date	:27/12/2018	Address of Applicant :BUILDING 34, NO. 8
(33) Name of priority country	:China	DONGBEIWANG WEST ROAD, HAIDIAN DISTRICT
(86) International Application No	:PCT/CN2018/124540	BEIJING 100193, CHINA China
Filing Date	:28/12/2018	(72)Name of Inventor:
(87) International Publication No	: NA	1)WANG, YANLONG
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present disclosure is related to systems and methods for open-surface navigation for a vehicle based on a time-space map. The method includes determining a time-space map of a first area. The time-space map may include a plurality of time-space grids. Each time-space grid may include temporal information and geographic information corresponding to the time-space grid. The method also includes obtaining obstacle status of each of one or more obstacles corresponding to a first time period. The method also includes determining a plurality of navigable grids and a plurality of unnavigable grids among the plurality of time-space grids, based on the obstacle status. The method further includes determining a path for the vehicle based on the plurality of navigable grids.

No. of Pages: 54 No. of Claims: 15

(22) Date of filing of Application :29/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: SYSTEMS AND METHODS FOR IDENTIFYING RISKY DRIVING BEHAVIOR

(51) International classification	:H04L 29/06, B60W 40/09	(71)Name of Applicant: 1)BEIJING DIDI INFINITY TECHNOLOGY AND
(31) Priority Document No	:201810171875.6	DEVELOPMENT CO., LTD.
(32) Priority Date	:01/03/2018	Address of Applicant :BUILDING 34, NO. 8
(33) Name of priority country	:China	DONGBEIWANG WEST ROAD, HAIDIAN DISTRICT,
(86) International Application No	:PCT/CN2018/123759	BEIJING, 100193, CHINA China
Filing Date	:26/12/2018	(72)Name of Inventor:
(87) International Publication No	:WO/2019/165838	1)ZHANG, HANG
(61) Patent of Addition to Application	:NA	2)CHEN, AO
Number	:NA	3)WANG, HENGZHI
Filing Date		
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present disclosure relates to systems and methods for identifying a risky driving behavior of a driver. The systems may obtain driving data from sensors associated with a vehicle driven by a driver; determine, based on the driving data, a target time period; obtain, based on the driving data, target data within the target time period; and identify, based on the target data, a presence of a risky driving behavior of the driver.

No. of Pages: 130 No. of Claims: 15

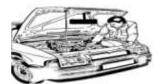
(22) Date of filing of Application :01/01/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: CAR (CAMERA ASSISTED REPAIR)

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number</li> </ul>	:G06F3/00 :NA :NA :NA :NA :NA : NA : NA	(71)Name of Applicant: 1)PARAS GAUTAM Address of Applicant: HOUSE NO2 GALI NO-1, ADARSH COLONY PALWAL HARYANA-121102, INDIA Haryana India (72)Name of Inventor: 1)PARAS GAUTAM
(61) Patent of Addition to Application Number Filing Date		
(62) Divisional to Application Number Filing Date	:NA :NA	

## (57) Abstract:

The car owners have always some kind of affection with their cars. Most of them are very cautious about the repairing of their cars . The big companies are also failed in giving the transparent repairingsprocess of cars . This business model relates to the method and adjustable mobile stand for the car repairing . Mobile camera will work as an eye of the customer. Tjie method describes the repairing process with the well connected mechanics.and the spare partS; shops . The method exhibits the transparent and ethical .mapper of repaiD!5 The method w/N! give the complete satisfaction to the customer abouthrpainnT:rK5 customers can check the video of repairing whenever they vvar;;



No. of Pages: 6 No. of Claims: 1

(22) Date of filing of Application :01/01/2019

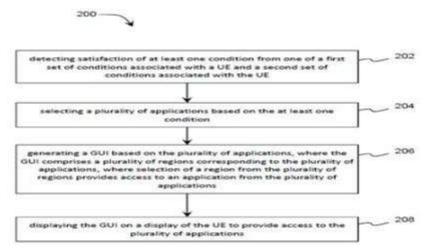
(43) Publication Date: 03/07/2020

## (54) Title of the invention: ACCESSING APPLICATIONS USING GRAPHICAL USER INTERFACE

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Num Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:G06F0009451000, A61B0006000000, G06F0003048800, H04W0004120000, H04W0076360000 :NA :NA :NA :NA :NA :NA :NA :NA :NA :NA	Address of Applicant :416 Maetan-Dong, Yeongtong-GU, Suwon-SI, Gyeonggi-do 442-742, Republic of Korea Republic of Korea
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------

#### (57) Abstract:

In an embodiment, a method of providing access to applications of a User Equipment (UE) is disclosed. The method comprises detecting satisfaction of at least one condition from one of a first set of conditions associated with a UE and a second set of conditions associated with the UE. The method further comprises selecting a plurality of applications based on the at least one condition. The method further comprises generating a Graphical User Interface (GUI) based on the plurality of applications, wherein the GUI comprises a plurality of regions corresponding to the plurality of applications, where selection of a region from the plurality of regions provides access to an application from the plurality of applications. The method further comprises displaying the GUI on a display of the UE to provide access to the plurality of applications.



No. of Pages: 30 No. of Claims: 10

(22) Date of filing of Application :02/01/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A SYSTEM FOR WATER AND ENERGY CONSERVATION IN A REVERSE OSMOSIS BASED WATER PURIFIER

(61) Patent of Addition to Application Number :NA 1)ANIS AHEMAD ANSARI	(31) Priority Document No :NA (32) Priority Date :NA (33) Name of priority country :NA (86) International Application No :NA Filing Date :NA	2 (71)Name of Applicant:  1)ANIS AHEMAD ANSARI  Address of Applicant: MECHANICAL ENGG. SECTION,  UNIVERSITY POLYTECHNIC, ALIGARH MUSLIM  UNIVERSITY, ALIGARH, UP-202002, INDIA Uttar Pradesh  India  (72)N
(62) Divisional to Application Number :NA Filing Date :NA	Filing Date :NA (62) Divisional to Application Number :NA	(72)Name of Inventor: 1)ANIS AHEMAD ANSARI

#### (57) Abstract:

Reverse osmosis based water purifier systems generate waste water simultaneously with the production of potable water. In general, the volumetric discharge of the waste water is more than the potable water produced. Since the waste water is non-potable, it is usually drained unutilized. However, if the cleanliness is concerned, it is normally free from suspended/particulate matters and appears as clean water. Moreover, the generation of non-potable water is a continuous phenomenon of the reverse osmosis process; the continuous drainage causes massive wastage of water. The present invention relates a system for the conservation of water and energy in a reverse osmosis based water purifier in which there is a provision for collection of the clean non-potable water. The non-potable water stream has substantial hydraulic pressure which is utilized to transfer this water into a reservoir for its use, as and when required. The clean non-potable water is suitable for many useful/domestic applications, such as vegetable wash, dish wash, floor wash, car wash, plantation, room cooler, etc. If this water is utilized in such applications, this amount of water is saved from wastage. Moreover, it would save the electrical energy which would be required otherwise to pump additional water for the above applications in place of the clean non-potable water. Thus, the present invention stops/ drastically reduces the wastage of water and energy from the reverse osmosis based water purifier.



No. of Pages: 13 No. of Claims: 10

(22) Date of filing of Application :02/01/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: DOOR CHECKER ASSEMBLY •

(51) International classification	:E05C0017200000, B60J0005040000, G01R0001040000, E05C0017440000, E05B0081200000	(71)Name of Applicant: 1)HYUNDAI MOTOR COMPANY Address of Applicant:12, Heolleung-ro, Seocho-gu, Seoul 06797, Republic of Korea Republic of Korea 2)KIA MOTORS CORPORATION
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)KANCHARAPU, Bhanu Kiran
(33) Name of priority country	:NA	2)KIM, Si Yun
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

The present invention relates to a door checker assembly (11) for the door comprising two-piece split type arm package (12) having an upper arm (12A) and a lower arm (12B) connected with bracket (3) and pin (4), step element (14A), plurality of springs(16A,16B), stopper (20) with stopper pad (21) and a modified inner panel reinforcement (17) for a vehicle door for engaging the door checker assembly.



No. of Pages: 21 No. of Claims: 11

(22) Date of filing of Application :02/01/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: ROTARY DIGIT ASSEMBLY FOR FFS PACKAGING MACHINE.

(51) International classification	:B65B0009200000, B65B0009040000, B65B0061180000, B65B0009213000, B29C0065000000	(71)Name of Applicant:  1)Himanshu Sharma Address of Applicant: Excel Solutions, A-11, Mohan Garden, Commercial Block Najafgarh Road, New Delhi-110059 (India) Delhi India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Himanshu Sharma
(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	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention generally relates to Rotary Digit Assembly (Assy.) to be used in and for Vertical Form, Horizontal form, Fill and Seal (FFS) packaging machine and the method of its application thereof; wherein said Rotary Digit Assy. Said novel Rotary Digit Assembly (Assy.) which comprises at least one rotatable digit block, embossed with digits/alphabets/characters for printing information like dates, batch numbers machine code etc., wherein said Rotary Digit Assembly (Assy.) is customized to be used with vertical FFS machines, Horizontal machines for simultaneous printing on surface of packaged products, generally in the form of sachets, pouches, packets, sealed strips, sealed bags etc. The most preferred embodiment of said Rotary Digit Assy, of the present invention in the form of plurality of Rotary Coding Block Assemblies, capable of being mounted with the plurality of FFC machines present in certain track of such packaging machines.



No. of Pages: 29 No. of Claims: 10

(22) Date of filing of Application :02/01/2019

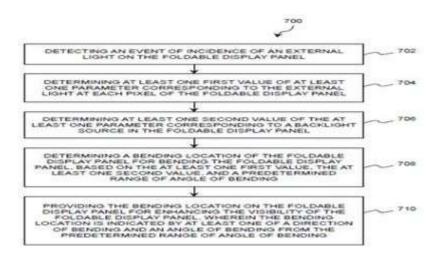
(43) Publication Date: 03/07/2020

# (54) Title of the invention : METHOD FOR ENHANCING VISIBILITY OF A FOLDABLE DISPLAY PANEL AND FLEXIBLE DISPLAY DEVICE THEREOF

(51) International classification	:G06F0001160000, G06F0003041000, G09F0009300000, H05B0033220000, G06T0005000000	(71)Name of Applicant:  1)Samsung Electronics Co., Ltd.  Address of Applicant: 416 Maetan-Dong, Yeongtong-GU, Suwon-SI, Gyeonggi-do 442-742, Republic of Korea Republic of Korea
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)AWASTHI, Saurabh
(33) Name of priority country	:NA	2)GEHLOT, Ghanshyam
(86) International Application No	:NA	3)CHUGH, Sachin
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present disclosure relates to a method for enhancing visibility of a foldable display panel and a flexible display device thereof. In accordance with one embodiment, the method includes detecting an event of incidence of an external light on the foldable display panel. The method includes determining at least one first value of at least one parameter corresponding to the external light at each pixel of the foldable display panel. The method includes determining at least one second value of the at least one parameter corresponding to a backlight source in the foldable display panel. The method includes determining a bending location of the foldable display panel for bending the foldable display panel, based on the at least one first value, the at least one second value, and a predetermined range of angle of bending. The method includes providing the bending location on the foldable display panel for enhancing the visibility of the foldable display panel.



No. of Pages: 27 No. of Claims: 9

(22) Date of filing of Application :02/01/2019

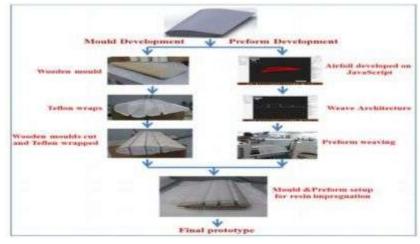
(43) Publication Date: 03/07/2020

# (54) Title of the invention: THREE-DIMENSIONAL INTEGRATED WEAVING OF WIND BLADE COMPOSITE

(51) International classification	:D03D0025000000, B29B0011160000, B29C0070240000, F03D0001060000, D03D0011020000	(71)Name of Applicant: 1)INDIAN INSTITUTE OF TECHNOLOGY DELHI Address of Applicant: Hauz Khas, New Delhi 110016 Delhi India (72)Name of Inventor:
(31) Priority Document No	:NA	1)BEHERA, B. K.
(32) Priority Date	:NA	2)R N, MANJUNATH
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present invention relates to a method of making wind blade composite, the method comprising: developing a three-dimensional weave design; forming a hollow three dimensional woven preform, including weaving an outer skin sections and a shear web section integrally woven extending from leading edge to trailing edge where warp threads are interlaced with the weft threads; and curing of hollow three dimensional woven preform.



No. of Pages: 30 No. of Claims: 13

(22) Date of filing of Application :24/01/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention : MULTISTORY HEAT TREATING FURNACE AND METHOD OF OPERATING THE SAME FOR HEATING METALLIC MATERIAL

(51) International classification	:H01L0021670000, F27D0007040000, H05B0006800000, F27B0017000000, F26B0025000000	(71)Name of Applicant:  1)Autogen Co., Ltd.  Address of Applicant: Sihwa Industrial Complex 2da-114 Ho, 180, Okgucheondong-ro, Siheung-si, Gyeonggi-do 15089, Republic of Korea Republic of Korea
(31) Priority Document No	:10-2018-0170031	(72)Name of Inventor:
(32) Priority Date	:27/12/2018	1)LIM, Ok Dong
(33) Name of priority country	:Republic of Korea	2)KANG, Nam Su
(86) International Application No	:NA	3)KONG, Yong Sik
Filing Date	:NA	4)KIM, Ji Hyeong
(87) International Publication No	: NA	5)KIM, Ki Taek
(61) Patent of Addition to Application Number	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

Disclosed herein is a multistory heat treating furnace capable of including a plurality of loading sections divided in a layered structure in a single heat transfer space and of efficiently heating a large number of metallic objects in a confined space by individually controlling opening and closing of doors shielding the loading sections. The multistory heat treating furnace includes a main body (100) having loading sections for dividing an internal heat transfer space in a layered structure, doors (200) detachably installed to the main body (100) so as to individually open and close inlets of the loading sections, locking actuators (210) for controlling opening and closing of the doors (200) with respect to the main body (100), and a switching adjuster (300) for individually controlling the opening and closing of the doors (200) with respect to the main body (100).



No. of Pages: 29 No. of Claims: 15

(22) Date of filing of Application :06/06/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention : AUTOMATIC TOOL CHANGING MECHANISM FOR MACHINE TOOL AND CONTROL METHOD THEREOF

	:B23Q0003155000,	(71)Name of Applicant:
	B25J0015040000,	1)SANJET INTERNATIONAL CO. LTD.
(51) International classification	B23Q0003157000,	Address of Applicant :No.288-1, Desheng Rd., Daya Dist.,
	B30B0015020000,	Taichung City 428, Taiwan
	H02J0007000000	(72)Name of Inventor:
(31) Priority Document No	:107147299	1)CHING-SAN CHANG
(32) Priority Date	:27/12/2018	
(33) Name of priority country /region	:Taiwan	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

An automatic tool changing mechanism (100) for a machine tool (101) and a control method thereof is disclosed. The automatic tool changing mechanism (100) includes a base (10, 110), a tool plate (12, 112) engaged with the base (10, 110), a tool plate motor (14, 114), a tool change arm (20, 120) disposed on a side of the tool plate (12, 112), a tool change motor (22, 122), and a frequency converter (26, 126) electrically connected to the tool plate motor (14, 114) and the tool change motor (22, 122). Several sleeves (12a, 112a) are disposed on the tool plate (12, 112). The tool plate motor (14, 114) is controllable to drive the tool plate (12, 112) to rotate. The tool change motor (22, 122) is controllable to drive the tool change arm (20, 120) to pivot. The frequency converter (26, 126) is controllable to output a signal to the tool plate motor (14, 114) or the tool change motor (22, 122), thereby to control the tool plate motor (14, 114) or the tool change motor (22, 122) to rotate.



No. of Pages: 42 No. of Claims: 21

(22) Date of filing of Application :17/07/2019 (43) Publication Date : 03/07/2020

## (54) Title of the invention: SHEAR WALL FORMWORK BRACKET CONNECTING STRUCTURE

(51) International classification	:E06B0003964000, A47K0005120000, A47G0001160000, E04G0009020000, E04G0011180000	,
(31) Priority Document No	:201811622817.7	1)LIANYU ZHANG
(32) Priority Date	:28/12/2018	
(33) Name of priority country	:China	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention relates to the field of brackets for buildings, and provides a shear wall formwork bracket connecting structure comprising a bracket located externally of a formwork for fixing a formwork, wherein the bracket is provided with a connecting member capable of adjusting a supporting distance at at least one of the right-angled connections; the connecting member comprises a push-pull rod axially and slidably coupled to a connector of a linear reinforcing profile; the connector and the push-pull rod define respectively a plurality of limiting slots; a front end of the push-pull rod is inserted with a right-angled piece of a connecting strip structure; the right-angled piece is movably connected with the upper and lower limits of a lateral side of the push-pull rod; a rear side of the right-angled piece is provided with a rectangular slot for cutting through the connector; the connector is horizontally inserted into the slot, and the upper and lower sides of the slot define respectively a limit slot into which a limit pin is inserted. In the present application, a movable connecting piece is formulated at the right angles, and thereby avoids deformation of the wall or the bracket caused by the fixing, which may affect the construction quality and a repeated use of the bracket. It is highly versatile with the origin bracket.



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

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201914045822 A

(19) INDIA

(22) Date of filing of Application:11/11/2019 (43) Publication Date: 03/07/2020

# (54) Title of the invention: REFRIGERATOR

· ·	1)LG ELECTRONICS INC.
′	Address of Applicant :128, Yeoui-daero, Yeongdeungpo-gu, Seoul, 07336, Republic of Korea Republic of Korea
· ·	(72)Name of Inventor:
	1)Hyunbum KIM
	1)11yunbun Khvi
A	
A	
ΙA	
A	
A	
A	
A	
5]  7  -3/  -1/  A  A  A	B0088900000 2018-0172529 12/2018 public of Korea

#### (57) Abstract:

A refrigerator includes a cabinet having a storage space therein, and a drawer slidably movable forward and backward from the storage space. The drawer includes a door, and a storage box provided at a rear surface of the door, an elevation plate disposed within the storage box, and an elevation device including a plurality of elevation parts which are connected to a plurality of points, respectively, at the elevation plate to allow the elevation plate to move vertically. The plurality of elevation parts include a first elevation part connected to a first point at the elevation plate, and a second elevation part connected to a second point at the elevation plate, which is spaced apart from the first point.



No. of Pages: 85 No. of Claims: 20

(22) Date of filing of Application :11/11/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: INTERNAL COMBUSTION ENGINE AND STRADDLED VEHICLE HAVING THE SAME

(51) International classification	:F02F0001240000, F02F0001400000, F02F0001420000, H01L0049020000, B60K0013040000	(71)Name of Applicant:  1)YAMAHA HATSUDOKI KABUSHIKI KAISHA Address of Applicant: 2500, Shingai, Iwata-shi, Shizuoka Japan (72)Name of Inventor:
(31) Priority Document No	:2018-244931	1)Soraki OGAWA
(32) Priority Date	:27/12/2018	
(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	r :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

As viewed along a cylinder axial line CA so that a center 51C of a first intake opening 51A is located leftward and upward of the cylinder axial line CA, an axial line 55C of a plug hole 55 is inclined relative to the cylinder axial line CA so as to diverge leftward of the cylinder axial line CA while extending away from an ignition opening 55A along the cylinder axial line CA. The plug hole 55 is located between a first intake port 51 and a first exhaust port 61. A water jacket 10A includes a middle passage 30 including an interport passage 31 that is located between the first exhaust port 61 and a second exhaust port 62 and downward of the cylinder axial line CA, and an extension passage 32 extending upward from the inter-port passage 31 to a position that is upward of the cylinder axial line CA.



No. of Pages: 32 No. of Claims: 15

(22) Date of filing of Application: 12/11/2019 (43) Publication Date: 03/07/2020

# (54) Title of the invention : MULTI-EMBEDDED RADIO FREQUENCY BOARD AND MOBILE DEVICE INCLUDING THE SAME

(51) International classification	:H05K0001140000, H05K0003360000, H01L0025065000, H05K0003460000, H05K0001110000	(71)Name of Applicant: 1)The Boeing Company Address of Applicant: 100 North Riverside Plaza, Chicago, IL 60606-2016, U.S.A. U.S.A. (72)Name of Inventor:
(31) Priority Document No	:16/237,897	1)WU, Shihchang
(32) Priority Date	:02/01/2019	2)WOOLRICH, Kyle A.
(33) Name of priority country	:U.S.A.	3)SPENCE, Jay Stuart
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

A multi-embedded radio frequency board includes a plurality of printed circuit boards stacked one on the others, at least one of the printed circuit boards of the plurality of printed circuit boards being configured so as to have a different processing function than another processing function of another printed circuit board of the plurality of printed circuit boards, and an interconnection join layer disposed between adiacent printed circuit boards of the plurality of printed circuit boards so as to physically and electrically couple the adjacent printed circuit boards to each other so as to form an integrated printed circuit board module having a predetermined radio frequency communication characteristic.



No. of Pages: 70 No. of Claims: 14

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201914046421 A

(19) INDIA

(22) Date of filing of Application :14/11/2019 (43) Publication Date : 03/07/2020

(54) Title of the invention: REFRIGERATOR

	:F25D0023020000,	(71)Name of Applicant :
	F25D0025020000,	1)LG ELECTRONICS INC.
(51) International classification	F25D0023040000,	Address of Applicant :128, Yeoui-daero, Yeongdeungpo-gu,
	E05F0015619000,	Seoul, 07336, Republic of Korea Republic of Korea
	A47B0067040000	(72)Name of Inventor:
(31) Priority Document No	:10-2018-0172480	1)Hyunbum KIM
(32) Priority Date	:28/12/2018	
(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 Num	ber:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(57) Alastus at .		

## (57) Abstract:

A refrigerator includes a cabinet having a storage space therein, and a drawer slidably movable forward and backward from the storage space. The drawer includes a door, a storage box provided at a rear surface of the door, an elevation plate disposed within the storage box, and an elevation device connected with one side of the elevation plate to vertically elevate the elevation plate. The elevation device includes a driving motor, a first curved rack to rotate by a rotational force generated by the driving motor, the first curved rack being curved at a predetermined curvature and having an outer circumferential surface, a first elevation bar to connect the first curved rack with the elevation plate, a second curved rack being curved rack, and a second elevation bar to connect the second curved rack with the elevation plate.



No. of Pages: 81 No. of Claims: 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201914046772 A

(19) INDIA

(22) Date of filing of Application :16/11/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: MOBILE PHONE AND SLAVE MACHINE

(51) International classification	:G06K0009000000, H04M0001020000, H05K0005000000, G09G0003320800, G06F0021320000	(71)Name of Applicant: 1)GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD. Address of Applicant: No.18, Haibin Road, Wusha, Chang'an, Dongguan, Guangdong 523860, China. China
(31) Priority Document No	:201822277606.6	(72)Name of Inventor:
(32) Priority Date	:29/12/2018	1)LI, Jie
(33) Name of priority country	:China	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A slave machine for a mobile phone includes a display screen, a main board, a fingerprint identification assembly and a power source unit. The fingerprint identification assembly includes a connecting circuit board and an identification unit, and the identification unit is able to be in communication connection with the main board through the connecting circuit board. The power source unit is capable of supplying power to the display screen, the main board and the

fingerprint identification assembly. The main board is provided with a first through hole, and the identification unit is inserted into the first through hole. The present application further provides a mobile phone.



No. of Pages: 36 No. of Claims: 11

(22) Date of filing of Application :25/11/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: ELECTRONIC DEVICE •

(51) International classification	:G06F0001160000, H04M0001020000, G02F0001130000, H04N0005232000, G09F0009300000	TELECOMMUNICATIONS CORP., LTD.
(31) Priority Document No	:201811641857.6	(72)Name of Inventor:
(32) Priority Date	:29/12/2018	1)ZUO, Zhouquan
(33) Name of priority country	:China	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

The embodiment of the present disclosure provides an electronic device including a main body, a flexible screen, and a processor, the main body being a reel structure; the flexible screen being selectively in a first state wound inside the main body and a second state being released from the main body, the processor being configured to control the flexible screen to be changed between the first state and the second state in response to operation instructions applied on the main body or the flexible screen.



No. of Pages: 52 No. of Claims: 15

(22) Date of filing of Application :25/11/2019 (43) Publication Date : 03/07/2020

(54) Title of the invention: ELECTRONIC DEVICE

	:G06F0001160000,	(71)Name of Applicant :
	H04M0001020000,	1)GUANGDONG OPPO MOBILE
(51) International classification	G10K0009122000,	TELECOMMUNICATIONS CORP., LTD.
	H04B0001388800,	Address of Applicant :No. 18 Haibin Road, Wusha,
	H04M0001030000	Chang™an, Dongguan, Guangdong-523860, China China
(31) Priority Document No	:201811640399.4	(72)Name of Inventor:
(32) Priority Date	:29/12/2018	1)ZUO, Zhouquan
(33) Name of priority country	:China	-
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(57) A1		·

#### (57) Abstract:

The embodiment of the disclosure provides an electronic device. The main body includes a first end portion and a side portion coupled to the first end portion, the main body is enabled in a standing state by the supporting of the first end portion, the side portion defines at least two first electroacoustic holes, the at least two first electroacoustic holes are spaced apart in a direction surrounding the side portion. The at least one electroacoustic component is disposed in the main body and configured to transmit sound signals through the at least two electroacoustic holes. The embodiment of the disclosure can transmit sound signals multi-directionally.

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No. of Pages: 75 No. of Claims: 15

(22) Date of filing of Application :26/11/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: STORAGE PORTION STRUCTURE OF INSTRUMENT PANEL

(51) International classification	B65G0001137000, A61F0013534000,	(71)Name of Applicant:  1)SUZUKI MOTOR CORPORATION  Address of Applicant: 300 Takatsuka-cho, Minami-ku,  Hamamatsu-shi, Shizuoka 432-8611, Japan Japan  (72)Name of Inventor:
(31) Priority Document No	:2018-245607	1)Ryota UEMATSU
(32) Priority Date	:27/12/2018	
(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	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A storage surface (11) that stores an article 45 to be stored therein is provided in a lid member (10) that forms the storage portion, an upper-side attachment member (20) and a lower-side attachment member (30) that protrude to the rear side with respect to the storage surface (11) and extend in the width direction are provided on the upper side and the lower side of the storage surface (11), a rope (40) that holds the article (45) to be stored from the rear side is removably attached to the upper-side attachment member (20) and the lower-side attachment member (30), and the rope 40 holds the article (45) to be stored in a state of being stretched between the upper-side attachment member (20) and the lower-side attachment member (30). Figure 3



No. of Pages: 32 No. of Claims: 8

(22) Date of filing of Application :28/11/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention : METHOD FOR PROTECTING A VEHICLE FROM CYBER ATTACKS, AND CORRESPONDING DEVICE

(51) International classification	H04L0001000000, H04L0029080000, H04L0012400000,	Corbetta (Miilano), Italy Italy
<ul> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number</li> <li>Filing Date</li> <li>(62) Divisional to Application Number</li> </ul>	:31/12/2018 :Italy :NA :NA :NA	2)Universit di Pisa (72)Name of Inventor: 1)ROSADINI Christian 2)NESCI Walter 3)BALDANZI Luca 4)CROCETTI Luca 5)FANUCCI Luca
Filing Date	:NA	

### (57) Abstract:

Described herein is a method for protecting from cyber attacks a vehicle CAN (Controller Area Network) communication network (20) that comprises a CAN bus (10) and a plurality of nodes (11), which are associated to said CAN bus (10) in a signal-exchange relationship and are associated at least in part to units for controlling vehicle functions, said method comprising the operations of: analyzing the content of CAN messages (M) in transit between nodes of said plurality of nodes (11) to identify illicit CAN messages (MF); and blocking (Bl, B2) said illicit messages (MF), said blocking operation (Bl, B2) comprising rendering said illicit messages (MF) non-valid (Fl, F2) for an integrity check carried out by a CAN controller (13) of said nodes (11) by inserting (Fl) a corruption bit sequence (NV) recognized as an error by said CAN controller (13), to obtain a corrupt message (MF). According to the solution described herein, it is envisaged to insert (Fl) said corruption bit sequence (NV) in an integrity-check field (S5), in particular a CRC field, of the illicit CAN message (MF) at a bit time (btj_5), the value of which is such as to align temporally a separator field (ITM) of the illicit message with a corresponding separator field of an error message (EM) generated by a node of the network (20) which receives said illicit message (MF) that comprises said corruption bit sequence (NV). In order to guarantee alignment of the separator fields (ITM) of the illicit message (MF) and of the error message (EM), the solution described herein also envisages a concealment operation (F2) designed to mask sending of the error message/messages (EM) and to emulate correct reception (OR) of the illicit message/messages.



No. of Pages: 37 No. of Claims: 11

(22) Date of filing of Application :05/12/2019 (43) Publication Date : 03/07/2020

## (54) Title of the invention: STORAGE UNIT STRUCTURE FOR SADDLE RIDING VEHICLE

(51) International classification	:B62K0011040000, B62J0001120000, B62K0019460000, B62H0005020000, B60R0025200000	(71)Name of Applicant:  1)HONDA MOTOR CO., LTD.  Address of Applicant: 1-1, Minami-Aoyama 2-chome, Minato-ku, Tokyo 107-8556 Japan Japan  (72)Name of Inventor:
(31) Priority Document No	:2018-248282	1)KIKUCHI Takehiko
(32) Priority Date	:28/12/2018	
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

To achieve, in a storage unit structure for a saddle riding vehicle, a simple structure for solely switching restriction on opening or closing of a lid for a storage member independently of switching a locked state of the storage member. [Solving Means] In a storage unit structure for a saddle riding vehicle including a box-shaped storage member 52 removably mounted on a vehicle body side and a key cylinder 66 that is disposed in the storage member 52 and that is rotationally operated, in which a locked state and an unlocked state of the storage member 52 with respect to the vehicle body side are switched through an operation of the key cylinder 66, the storage unit structure includes: a lid operator 68 that operates to open or close a lid 61 of the storage member 52; an operating knob 75 that imposes or releases restriction on opening or closing of the lid 61 by the lid operator 68; and a first link mechanism 85 that imposes or releases restriction on the operation of the operating knob 75. A state of restriction on the operating knob 75 by the first link mechanism 85 is switched in response to an operation of the key cylinder 66.

No. of Pages: 103 No. of Claims: 12

(22) Date of filing of Application :09/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: LIQUID CRYSTAL DISPLAY DEVICE

(51) International classification	G09G0003360000, G02F0001136200,	Address of Applicant :128, Yeoui-daero, Yeongdeungpo-gu,
	H01L0021768000, G02F0001133000	Seoul 07336, Republic of Korea Republic of Korea (72)Name of Inventor:
(31) Priority Document No	:10-2018-0174154	1)KIM Jin-Sam
(32) Priority Date	:31/12/2018	2)LEE Hun-Jong
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

A liquid crystal display device (1000) changes a connection structure of an internal common electrode (110, 170c) to enhance static electricity characteristics in a borderless structure, thereby enhancing reliability and yield.



No. of Pages: 47 No. of Claims: 22

(22) Date of filing of Application :09/12/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention: ORGANIC LIGHT EMITTING DISPLAY DEVICE

	:H01L0051520000,	(71)Name of Applicant:
	H01L0051500000,	1)LG Display Co., Ltd.
(51) International classification	H01L0027320000,	Address of Applicant :128, Yeoui-daero, Yeongdeungpo-gu,
	H01L0051000000,	Seoul 07336, Republic of Korea Republic of Korea
	G02F0001133300	(72)Name of Inventor:
(31) Priority Document No	:10-2018-0173646	1)LEE Eun-Hyung
(32) Priority Date	:31/12/2018	
(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	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

Disclosed is an organic light emitting display device using an ultraviolet (UV) blocking film (122; 232; 242; 252) which addresses outgassing from an organic film provided in the display device in environments, such as a UV reliability test or outdoor use for a long time, and addresses degradation of an organic stack in an organic light emitting diode caused by the outgassing.



No. of Pages: 63 No. of Claims: 20

(22) Date of filing of Application :09/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: LENS ASSEMBLY DRIVING MODULE AND ELECTRONIC DEVICE

	.C02B0007020000	(71) Name of Applicant
		(71)Name of Applicant:
(51) T	G02B0027640000,	1)LARGAN DIGITAL CO., LTD.
(51) International classification	H04N0005225000,	
	G02B0007080000,	Taichung City 408, Taiwan
	H01Q0001240000	(72)Name of Inventor:
(31) Priority Document No	:107147862	1)Te-Sheng TSENG
(32) Priority Date	:28/12/2018	2)Ming-Ta CHOU
(33) Name of priority country /region	:Taiwan	3)Wen-Hung HSU
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
		-

#### (57) Abstract:

A lens assembly driving module includes a base, a cover, a lens carrier and a damping agent. The cover is coupled to the base. The lens carrier is integrally formed with a plastic barrel into a coaxial unitary element which has an internal space for receiving at least one optical lens element and includes at least two protrusion portions located on one end of the coaxial unitary element close to the base. The damping agent is filled between the base and each of the protrusion portions. The protrusion portions are a part of the coaxial unitary element, and a distance in a direction perpendicular to an optical axis between the part of the coaxial unitary element and the internal space is a maximum distance among distances in the direction perpendicular to the optical axis between other parts of the coaxial unitary element and the internal space.



No. of Pages: 44 No. of Claims: 17

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201914051531 A

(19) INDIA

(22) Date of filing of Application :12/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: LIQUID CRYSTAL DISPLAY DEVICE

(51) International classification	:G09G0003360000, G02F0001134300, G02F0001136200, G02F0001134500,	(71)Name of Applicant:  1)LG Display Co., Ltd.  Address of Applicant: 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea Republic of Korea
	G02F0001133500	(72)Name of Inventor:
(31) Priority Document No	:10-2018-0173614	1)KIM Jin-Sam
(32) Priority Date	:31/12/2018	
(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) A1		

## (57) Abstract:

A liquid crystal display device comprises additional common electrode patterns to shield data lines (132) and common lines (133) and, thus, to avoid undesired fringe fields. The liquid crystal display device prevents crosstalk and enhances visibility.



No. of Pages: 43 No. of Claims: 15

(21) Application No.201914052079 A

(19) INDIA

(22) Date of filing of Application :16/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: LIGHT EMITTING DISPLAY DEVICE, LIGHT EMITTING DISPLAY PANEL, DRIVING CIRCUIT, AND DRIVING METHOD

(51) International classification	G06F0003044000, G09G0003323300,	
	G09G0003360000, G09G0003320000	Seoul 07336, Republic of Korea Republic of Korea (72)Name of Inventor:
(31) Priority Document No	:10-2018-0171863	1)Kim, SeYoung
(32) Priority Date	:28/12/2018	
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Disclosed are a light emitting display device (100), a light emitting display panel (110), a driving circuit, and a driving method. A light emitting display device (100), a light emitting display panel (110), a driving circuit, and a driving method with an embedded touch sensor are provided in which a data voltage and a first reference voltage (Vrefl) are supplied to a plurality of data lines (DL) and a plurality of reference electrodes which are arranged in the light emitting display panel (110) in a first driving period, and a second reference voltage (Vref2) different from the first reference voltage (Vref1) is supplied to one or more of the plurality of reference electrodes in a second driving period different from the first driving period.



No. of Pages: 99 No. of Claims: 17

(22) Date of filing of Application: 17/12/2019 (43) Publication Date: 03/07/2020

## (54) Title of the invention: ILLUMINATION CONTROL SYSTEM AND ILLUMINATION SYSTEM

(51) International classification	G11C0016300000, H05B0033080000,	(71)Name of Applicant:  1)Panasonic Intellectual Property Management Co., Ltd. Address of Applicant: 1-61, Shiromi 2-chome, Chuo-ku, Osaka-shi, Osaka 540-6207 Japan. Japan (72)Name of Inventor:
(31) Priority Document No	:JP2018-243200	1)Fumihiro KOMATSUBARA
(32) Priority Date	:26/12/2018	2)Hiroshi HAMANO
(33) Name of priority country	:Japan	3)Junichi UEKARIYA
(86) International Application No	:NA	4)Shunsuke TSURUOKA
Filing Date	:NA	5)Shojiro KIDO
(87) International Publication No	: NA	6)Kiyoshi OGASAWARA
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

An illumination control system and illumination system according to the present disclosure is able to reduce the complexity of control. An illumination control system (3) according to an embodiment includes a plurality of DC power supply circuits (5), each including a first output terminal (501) and a second output terminal (502), and a first power line (61) including a first terminal, to which the respective first output terminals (501) of the plurality of DC power supply circuits (5) are branch-connected. The illumination control system (3) further includes a second power line (62) including a first terminal, to which the respective second output terminals (502) of the plurality of DC power supply circuits (5) are branch-connected. Each of the plurality of DC power supply circuits (5) causes a constant current to flow between the first and second output terminals (501, 502) thereof. A plurality of light fixtures (2) are electrically connected together in series between a second terminal of the first power line (61) and a second terminal of the second power line (62).



No. of Pages: 54 No. of Claims: 16

(22) Date of filing of Application :18/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: BAG-MAKING AND PACKAGING MACHINE

(51) International classification	B65B0009200000, B29C0065740000, B29C0065180000,	Kyoto-shi, Kyoto 606-8392 JAPAN Japan
(21) Priority Dogument No.	B65B0009207000 :2018-245371	(72)Name of Inventor:
(31) Priority Document No (32) Priority Date	:27/12/2018	1)KOIKE, Shinji 2)FUJITA, Kento
(33) Name of priority country	:Japan	2)1 Collin, ixemo
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

A bag-making and packaging machine packages, in bags made from a film, articles discharged and dropped from an article discharge apparatus. The bag-making and packaging machine has a transverse sealing mechanism, a receiving member, a vertical moving mechanism, and a control unit. The transverse sealing mechanism transversely seals a film tube. The receiving member contacts an outer surface of the film tube above the transverse sealing mechanism and receives the articles A that drop through the inside of the film tube. The vertical moving mechanism moves the transverse sealing mechanism and the receiving member in the up and down direction. The control unit switches between a first mode and a second mode. In the second mode, the receiving member contacts the outer surface of the film tube at a lower height position than in the first mode.



No. of Pages: 34 No. of Claims: 9

(22) Date of filing of Application :23/12/2019

(43) Publication Date: 03/07/2020

## (54) Title of the invention: ANALYSIS DEVICE, PROGRAM FOR AN ANALYSIS DEVICE AND ANALYSIS METHOD

(51) International classification	:G01N0021390000, G01N0021350400, G01N0021640000, G01N0021250000, A61B0005145500	(71)Name of Applicant:  1)HORIBA, Ltd.  Address of Applicant:2, Miyanohigashi-cho, Kisshoin, Minami-ku, Kyoto-shi, Kyoto 601-8510, Japan Japan (72)Name of Inventor:
(31) Priority Document No	:2018-242183	1)SHIBUYA, Kyoji
(32) Priority Date	:26/12/2018	
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present invention enables an analysis device that utilizes light absorption to measure concentrations of target components by means of a simple calculation, and without any complex spectrum calculation processing being required, and analyzes target components that are contained in a sample, and is provided with a light source 2 that emits modulated light whose wavelength is modulated relative to a central wavelength using a predetermined modulation frequency, a photodetector 3 that detects an intensity of sample light obtained when the modulated light is transmitted through the sample, a correlation value calculation unit 62 that calculates correlation values between intensity-related signals that are related to the intensity of the sample light, and predetermined feature signals, and a concentration calculation unit 64 that calculates concentrations of the target components using the correlation values obtained by the correlation value calculation unit.



No. of Pages: 51 No. of Claims: 14

(22) Date of filing of Application :23/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention : FALLING OBJECT PREVENTION FENCE OF PASSENGER CONVEYOR AND PASSENGER CONVEYOR

(51) International classification	:B62D0025080000, F16B0043000000, B66B0021040000, B66B0023140000, B66B0023000000	(71)Name of Applicant: 1)Hitachi, Ltd. Address of Applicant: 6-6, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8280, Japan Japan (72)Name of Inventor:
(31) Priority Document No	:2018-247043	1)Kohsei Obara
(32) Priority Date	:28/12/2018	2)Hirobumi Utsunomiya
(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 Numl	per:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

A falling object prevention fence 15 includes a strut 16 and a panel member 17. The strut 16 includes a strut base 21, a support member 22, and a connecting member 23. The strut base 21 is fixed to an upper surface portion of a frame 2 by a fixing bolt 41. The support member 22 is arranged above the strut base 21 in the vertical direction and supports the panel member 17. The connecting member 23 connects the support member 22 and the strut base 21 by connecting bolts 42 and 43 to be closer to the inner side in the width direction of the frame 2 than the panel member 17.



No. of Pages: 43 No. of Claims: 8

(22) Date of filing of Application :23/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: VEHICLE POWER SUPPLY SYSTEM

(51) International classification	H02J0007000000, H02J0007140000, B60L0003000000,	(71)Name of Applicant:  1)TOYOTA JIDOSHA KABUSHIKI KAISHA Address of Applicant:1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571, Japan Japan (72)Name of Inventor:
<ul><li>(31) Priority Document No</li><li>(32) Priority Date</li><li>(33) Name of priority country</li><li>(86) International Application No</li><li>Filing Date</li></ul>	:2018-245011 :27/12/2018 :Japan :NA	1)Takaji KIKUCHI 2)Kenji FUNAHASHI 3)Yuji TOBA 4)Daisuke HOSHINO
<ul> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	: NA	

### (57) Abstract:

A vehicle power supply system includes: a main battery (3); a sub-battery (4) with output voltage; a power converter (10) having an input end (11) connected to the main battery and an output end (12) connected to a motor (90) and converting output power of the main battery to driving power for the motor; a voltage converter (21) connected between the main battery and the sub-battery and stepping down the voltage of the main battery to the voltage of the sub-battery; a charging inlet (8) connected to the main battery and connecting to a power supply device outside a vehicle; a capacitor (7) connected between a positive electrode and a negative electrode of the input end; and a coil (30) connected between the main battery and the voltage converter. The coil is connected to the capacitor not via a charging power path (CP) from the charging inlet to the main battery.



No. of Pages: 30 No. of Claims: 6

(22) Date of filing of Application :24/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention : METHOD AND APPARATUS FOR ADJUSTING SIGNAL LEVEL IN WIRELESS COMMUNICATION SYSTEM

(51) International classification	:C07D0403120000, H04W0036220000, C07D0403140000, C07D0417060000, C07D0413040000	Address of Applicant :129, Samsung-ro, Yeongtong-gu,
(31) Priority Document No	:10-2018-0169147	1)Jaesik JANG
(32) Priority Date	:26/12/2018	2)Kyuhwan AN
(33) Name of priority country	:Republic of Korea	3)Youngchang YOON
(86) International Application No	:NA	4)Kihyun KIM
Filing Date	:NA	5)Sangho LEE
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

A method and apparatus capable of adjusting a signal level in a wireless communication system are provided. An electronic device includes an oscillator configured to output a local oscillator (LO) signal, a mixer configured to convert a frequency band of a first signal based on the LO signal and output a second signal, and a feedback circuit configured to output a feedback signal for adjusting a magnitude of the LO signal, wherein the mixer is further configured to adjust a magnitude of LO signal based on the feedback signal.



No. of Pages: 45 No. of Claims: 25

(22) Date of filing of Application :24/12/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention: ELECTRONIC DEVICE

(51) International classification	:H04W0036220000, G06F0017220000, G06F0017210000, C07D0403120000, C07D0413040000	(71)Name of Applicant: 1)GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD. Address of Applicant: No.18, Haibin Road, Wusha, Chang'an, Dongguan, Guangdong 523860, China. China
(31) Priority Document No	:201811621699.8	(72)Name of Inventor:
(32) Priority Date	:28/12/2018	1)YANG, Xin
(33) Name of priority country	:China	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present application provides an electronic device. The electronic device includes a housing (40), a rear cover (10), and a rear camera (300). The rear cover (10) is connected to the housing (40) and includes a transparent casing (200) and an electrochromic device (100). The electrochromic device is opposite the camera (300) and includes a first conductive layer (110), a chromic material layer (130), and a second conductive layer (120) stacked sequentially, and the first conductive layer (110) is provided at a surface of the transparent casing (200). The electronic device provided by embodiments of the present application can realize integrated appearance design effect.



No. of Pages: 65 No. of Claims: 15

(22) Date of filing of Application :24/12/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention : TOTALLY-ENCLOSED ROTATING ELECTRICAL MACHINE, ANDLEAKING LIQUID DETECTION STRUCTURE

	:G01N0033533000, H05B0031000000,	(71)Name of Applicant: 1)TOSHIBA MITSUBISHI-ELECTRIC INDUSTRIAL
(51) International classification	B01J0020286000,	SYSTEMS CORPORATION
` '	C02F0003280000,	Address of Applicant :3-1-1, Kyobashi, Chuo-ku, Tokyo 104-
	B63C0007260000	0031, Japan Japan
(31) Priority Document No	:2018-243017	(72)Name of Inventor:
(32) Priority Date	:26/12/2018	1)KURITA, Satoshi
(33) Name of priority country	:Japan	2)TSUBOI, Yuichi
(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 totally-enclosed rotating electrical machine (100, 101) comprises: a rotor (10) including a rotor shaft (11) extending horizontally and a rotor core (12); a stator (20) including a stator core (21) and stator windings (22); a frame (30); two bearing brackets (35); two bearings (32); a cooler (40) including cooling pipes (41) and a cooler cover (42); a fan mechanism (50, 50a, 50b) including an inmachine external fan (51) that is installed outside the frame (30), and a fan cover (54) that forms an enclosed space (40a) along with the frame (30) and the cooler cover (42); and a leakage detection device (70) to detect a leaking liquid being moved from the cooler (40) into the fan cover (54). The fan cover (54) includes a lower reservoir (55) capable of temporarily holding a leaking liquid or coolant leaking from the cooling pipe (41).



No. of Pages: 30 No. of Claims: 7

(22) Date of filing of Application :24/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: ELECTRIC VEHICLE

	:B60H0001000000,	(71)Name of Applicant:
	B60K0001040000,	1)SUZUKI MOTOR CORPORATION
(51) International classification	B60L0003000000,	Address of Applicant :300 Takatsuka-cho, Minami-ku,
	F25D0029000000,	Hamamatsu-shi, Shizuoka 432-8611, Japan Japan
	B60H0001220000	(72)Name of Inventor :
(31) Priority Document No	:2018- 243443	1)Tomotaka INOUE
(32) Priority Date	:26/12/2018	2)Naohiro UCHIDA
(33) Name of priority country	:Japan	3)Hirotaka KATO
(86) International Application No	:NA	4)Ryohei OKAWACHI
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(57) A1		·

## (57) Abstract:

An electric vehicle 1 includes a motor 2 serving as a driving power source of the electric vehicle 1; an air conditioner 5 conditioning air in a passenger compartment; a battery 4 supplying electric power to the motor 2 and the air conditioner 5; a passenger compartment temperature sensor 51 detecting a passenger compartment temperature; and a control device 6 changing an electric power consumption distribution between the motor 2 and the air conditioner 5 in response to the passenger compartment temperature, when an output of the battery 4 is limited.



No. of Pages: 19 No. of Claims: 4

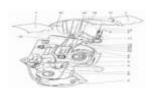
(22) Date of filing of Application :26/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: CAR SEAT BACKREST LOCK CONTROL DEVICE

(51) International classification	:B62M0025040000, H01R0012700000, B60N0002360000, B60N0002660000, B25G0001000000	(71)Name of Applicant: 1)BRANO a.s. Address of Applicant: Opavska 1000 - Hradec nad Moravic, CZ. Czech Republic (72)Name of Inventor:
(31) Priority Document No	:PUV 2018-35795	1)Newerla Michal
(32) Priority Date	:28/12/2018	
(33) Name of priority country	:Czech Republic	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

Car seat backrest lock control device comprises a handgrip (11) mounted in a rotary way in a housing (2) arranged in the seat backrest (1) and consisting of two arms (13, 15), one of which is the grip arm (13) ended with a handle (14) for manual holding and the other one is the transmission arm (15) adapted at its free end to receive in a rotary way one end of a fastener (21), the other end of which is in a rotary way connected to a control arm (5) of a latch (4) of a lock (3) arranged in the housing (2) to engage the lock (3) in the lug (7) or to release the lock (3) from the lug (7) attached to the fixed bodywork section, whereas the fastener (21) consists of a flexible cable (22), one end of which is firmly connected to a radial arm (23) of a transmission pin (24) mounted in a rotary way in the transmission arm (15) of the handgrip (11) and provided with at least one collar (25, 26) for axial support for the transmission pin (24), and another end of which is firmly connected to a radial arm (27) of a control pin (28) mounted in a rotary way in the control arm (5) of the latch (4) of the lock (3).



No. of Pages: 5 No. of Claims: 4

(22) Date of filing of Application :26/12/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention : METHOD AND DEVICE FOR OPERATING AN ENGINE SYSTEM WITH AN INTERNAL COMBUSTION ENGINE

(51) International classification	:G01N0033533000, H05B0031000000, B01J0020286000, C02F0003280000, B63C0007260000	(71)Name of Applicant:  1)ROBERT BOSCH GMBH  Address of Applicant:Postfach 30 02 20, 70442 Stuttgart,  Germany Germany  (72)Name of Inventor:
(31) Priority Document No	:102018251721.5	1)BERKEMER, Juergen
(32) Priority Date	:27/12/2018	2)HEIKES, Henning
(33) Name of priority country	:Germany	<u> </u>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(55) A1		•

### (57) Abstract:

The present subject matter relates to a method for operating an internal combustion engine (2) with at least one cylinder (3) and with an intake manifold injection, comprising the following steps: - providing a desired air charge required to set a predetermined desired engine torque; - determining a throttle valve position of a throttle valve (10) in an intake manifold section (51) depending on the desired air charge; - limiting the throttle valve position to a maximum throttle valve position, which is predetermined such that the desired air charge is reached at the end of an intake stroke at a certain engine speed and at the same time during a piston movement that enlarges the combustion chamber in the cylinder (3), a maximum flow velocity of the air is reached in the intake manifold section (51).



No. of Pages: 17 No. of Claims: 9

(22) Date of filing of Application :27/12/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention : DIFFERENTIATING METHOD BETWEEN MODEL INACCURACIES AND LAMBDA OFFSETS FOR MODEL-BASED CONTROL OF CATALYTIC CONVERTER-FILL LEVEL

(51) International classification	:G01N0033533000, H05B0031000000, B01J0020286000, C02F0003280000, B63C0007260000	(71)Name of Applicant: 1)ROBERT BOSCH GMBH Address of Applicant: Postfach 30 02 20, 70442 Stuttgart, Germany Germany (72)Name of Inventor:
(31) Priority Document No	:102018251726.6	1)FEY, Michael
(32) Priority Date	:27/12/2018	
(33) Name of priority country	:Germany	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

A method for regulating a fill level of an exhaust gas component store of a catalytic converter (26) of an internal combustion engine (10) is presented, wherein the fill level is regulated using a system model (100), which has a catalytic converter model (102), and wherein uncertainties of measurement or model variables which influence the regulation of the fill level are corrected by an adaptation which is based on signals from an exhaust gas probe (34) arranged on the outlet side of the catalytic converter (26). The method is characterized in that an adaptation requirement is learned depending on the operating point, that the learned adaptation requirement is saved depending on the operating point, and that a distinction is made between different causes of the uncertainties on the basis of the operating point dependency.



No. of Pages: 39 No. of Claims: 15

(22) Date of filing of Application :27/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: EAR CLEANING DEVICES AND METHODS

(51) International classification	A61M0025000000, A61K0031437000, A61M0031000000	1)SafKan, Inc. Address of Applicant :17049 164th Way SE, Renton, WA 98058 (US) U.S.A. (72)Name of Inventor:
(31) Priority Document No	:16/235,469	1)DIWAN, Aadil
(32) Priority Date	:28/12/2018	
(33) Name of priority country	:U.S.A.	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

A system and method to irrigate a user's auditory canal. A fluid can be dispensed from a reservoir through a fluid path and out through openings of a delivery element into the auditory canal. A pump may be used to facilitate the process of dispensing the fluid. The fluid can be delivered to the user's auditory canal for a predetermined period of time. Such a time period may be user selectable. The discharge from the irrigation is removed from the user's auditory canal via a discharge port located on the delivery element. The discharge exits the delivery element and proceeds to a discharge reservoir via a discharge path. A vacuum may be used to generate a negative pressure to facilitate the removal of the discharge from the auditory canal.



No. of Pages: 125 No. of Claims: 17

(22) Date of filing of Application :27/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention : APPARATUS AND METHOD FOR RESOURCE MANAGEMENT IN WIRELESS COMMUNICATION SYSTEM

(51) International classification	H04W0072040000, H04W0088080000,	Address of Applicant :129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea Republic of
(31) Priority Document No	:10-2018-0172620	(72)Name of Inventor:
(32) Priority Date	:28/12/2018	1)Jeongsik DONG
(33) Name of priority country	:Republic of Korea	2)Chungkeun LEE
(86) International Application No	:NA	3)Yoonjeong HA
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present disclosure relates to a pre-5th-Generation (5G) or 5G communication system to be provided for supporting higher data rates Beyond 4th-Generation (4G) communication system such as Long Term Evolution (LTE). An apparatus of a base station in such a wireless communication system includes at least one transceiver, and at least one processor operatively coupled to the at least one transceiver, wherein the at least one processor is configured to acquire a channel quality of a first vehicle apparatus, acquire a resource allocation area of the first vehicle apparatus according to the channel quality, and transmit, to the first vehicle apparatus, allocation information relating to a transmission resource determined in the resource allocation area, wherein the transmission resource is used by the first vehicle apparatus to transmit a message to a second vehicle apparatus.



No. of Pages: 61 No. of Claims: 20

(22) Date of filing of Application :30/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention : WIND FARM CONTROL SYSTEM AND ASSOCIATED METHOD, WIND TURBINE CONTROL SYSTEM AND ASSOCIATED METHOD

(51) International classification	:F03D0007040000, H02J0003180000, F03D0007020000, F03D0007000000, H02J0003380000	
(31) Priority Document No	:18383010.8	1)GARC□A SAY‰S, Jos Miguel
(32) Priority Date	:31/12/2018	2)BERIAIN GUEMBE, Guillermo
(33) Name of priority country	:EPO	3)GARC • A BARACE, Alberto
(86) International Application No	:NA	4)GIL GURUCEAGA, Javier
Filing Date	:NA	5)ORTIZ IRIGOYEN, Daniel
(87) International Publication No	: NA	6)ARLAB • N GABEIRAS, Teresa
(61) Patent of Addition to Application Numb	er:NA	7)GONZALEZ MURUA, Alejandro
Filing Date	:NA	8)ROYO GARC • A, Ricardo
(62) Divisional to Application Number	:NA	9)NU'EZ POLO, Miguel
Filing Date	:NA	, , ,

## (57) Abstract:

The present invention relates to a control system and control method of a wind farm which allows taking into account dynamic variations in the possibilities of reactive power generation of each wind turbine with respect to maximum reactive power generation capacities. The present invention also proposes a control system and a control method of a wind turbine configured for calculating an initial setpoint and sending it to the control system of a wind farm and receiving a final setpoint taking into account dynamic variations in the possibilities of reactive power generation of said wind turbine with respect to maximum reactive power generation capacities.



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

(21) Application No.201917043029 A

(19) INDIA

(22) Date of filing of Application :23/10/2019 (43) Publication Date : 03/07/2020

:NA

:NA

:NA

(54) Title of the invention: SOLDER ALLOY

:B23K 35/26, C22C (51) International classification 13/00, C22C 13/02 (31) Priority Document No :2017-255303 (32) Priority Date :31/12/2017 (33) Name of priority country :Japan (86) International Application No :PCT/JP2018/047747 Filing Date :26/12/2018 (87) International Publication No :WO/2019/131718 (61) Patent of Addition to Application :NA

(71)Name of Applicant:

1)SENJU METAL INDUSTRY CO., LTD.

Address of Applicant :23, Senju-Hashido-cho, Adachi-ku,

Tokyo 1208555 Japan (72)**Name of Inventor:** 

1)YOKOYAMA Takahiro

2)YOSHIKAWA Shunsaku

(57) Abstract:

Filing Date

Filing Date

Number

Provided is a solder alloy having superior continuous casting performance. The solder alloy of the present invention has an alloy composition by mass% of Cu: 0.8 to 10% the remainder being Sn and includes an intermetallic compound. In a region with a thickness of more than or equal to  $50~\mu m$  from a surface of the solder alloy the intermetallic compound has a maximum crystal grain size of not more than  $100~\mu m$ .



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

(62) Divisional to Application Number

(22) Date of filing of Application :04/12/2019

(43) Publication Date: 03/07/2020

## (54) Title of the invention: ANTENNA AND MOBILE TERMINAL

(51) International classification	:H01Q 1/44, H01Q 5/20	(71)Name of Applicant: 1)HUAWEI TECHNOLOGIES CO., LTD.
(31) Priority Document No	:201810554555.9	Address of Applicant :Huawei Administration Building,
(32) Priority Date	:01/06/2018	Bantian, Longgang District Shenzhen, Guangdong 518129 China
(33) Name of priority country	:China	(72)Name of Inventor:
(86) International Application No	:PCT/CN2018/124150	1)ZHOU, Dawei
Filing Date	:27/12/2018	2)LI, Yuanpeng
(87) International Publication No	:WO/2019/227914	3)LIANG, Tiezhu
(61) Patent of Addition to Application	:NA	4)ZHANG, Gonglei
Number	:NA	
Filing Date	.11/1	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present application relates to an antenna provided on a mobile terminal. The mobile terminal comprises a radiation portion and a circuit board. The circuit board comprises a side edge and a ground layer. The radiation portion is separated by an insulation gap into a feeding stub and a parasitic stub. The circuit board and the radiation portion collectively define a gap. A feeding branch for feeding the antenna extends from the feeding stub to the gap. A grounding branch electrically connected to a grounding portion extends from the parasitic stub to the gap. The antenna triggers, on the ground portion, the feeding stub, and the parasitic stub, a current loop surrounding the gap. The antenna of the present application creates resonance at a position in which an induced current is relatively large and thus ensures that a communication signal has greater power, such that efficiency attenuation of the antenna is still controlled even when a mobile terminal is being used in a hand-to-head mode, so as to maintain a favorable call effect.



No. of Pages: 24 No. of Claims: 15

(19) INDIA

(22) Date of filing of Application :05/12/2019

(21) Application No.201917050163 A

(43) Publication Date: 03/07/2020

(54) Title of the invention: GAS SENSOR

:G01N 27/416, (51) International classification G01N 27/407 (31) Priority Document No :2017-249914 (32) Priority Date :26/12/2017 (33) Name of priority country :Japan :PCT/JP2018/047885 (86) International Application No Filing Date :26/12/2018 :WO/2019/131776

(87) International Publication No

(61) Patent of Addition to Application :NA Number :NA Filing Date (62) Divisional to Application Number :NA Filing Date :NA

(71)Name of Applicant:

1)NGK INSULATORS, LTD.

Address of Applicant :2-56, Suda-cho, Mizuho-ku, Nagoya-

shi, Aichi 4678530 Japan (72)Name of Inventor:

1)NAKAGAKI Kunihiko

#### (57) Abstract:

The present invention relates to a gas sensor capable of measuring the concentrations of each of a plurality of target components in a gas being measured. The gas sensor comprises a sensor element (12), an oxygen concentration control means (102), and a target component concentration acquiring means (104). The oxygen concentration control means controls the oxygen concentration in a first chamber and a second chamber of a first sensor cell (15A), and the oxygen concentration in a second chamber of a second sensor cell (15B). The target component concentration acquiring means acquires the concentration of a second target component on the basis of a difference AIp between a first pump current value and a second pump current value, and acquires the concentration of a first target component by subtracting the concentration of the second target component from the second pump current value (total concentration).



No. of Pages: 63 No. of Claims: 17

(22) Date of filing of Application :01/01/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : WINDOW, METHOD OF MANUFACTURING WINDOW, AND DISPLAY DEVICE INCLUDING WINDOW

(51) International classification	C03C0017340000, B05D0007020000,	(71)Name of Applicant:  1)Samsung Display Co., Ltd. Address of Applicant:1, Samsung-ro, Giheung-gu, Yongin-si, Gyeonggi-do, 17113, Republic of Korea Republic of Korea (72)Name of Inventor:
(31) Priority Document No	:10-2019-0000284	1)HEO, Jin Nyoung
(32) Priority Date	:02/01/2019	2)LEE, kilsung
(33) Name of priority country	:Republic of Korea	3)SOHN, Hoseok
(86) International Application No	:NA	4)LEE, Yongseok
Filing Date	:NA	5)LEE, Dong Woon
(87) International Publication No	: NA	6)JEON, Yusik
(61) Patent of Addition to Application Numb	er:NA	7)CHOI, Beomgyu
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

A window (300) includes a base layer (310) and a first coating layer (330). The first coating layer (330) is disposed on a first surface (311) of the base layer (310). The first coating layer (330) is a single layer. The first coating layer (330) includes a siloxane-based compound. The siloxane-based compound includes fluorine and silica.



No. of Pages: 36 No. of Claims: 10

(22) Date of filing of Application :12/02/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: REDUCTION GAS EXTRACTION FROM SATURATED TOP GAS •

Filing Date  (87) International Publication No (61) Patent of Addition to Application Number Filing Date  (87) Date  (88) International Publication No (89) International Publication No (89) International Publication No (80) International Publication No (80) Patent of Addition to Application Number Filing Date  (80) Divisional to Application Number Filing Date  (81) STEINWANDTER, Andreas  2)MILLNER, Robert  3) OFNER, Hanspeter  SNA SNA SNA SNA SNA SNA SNA SNA SNA SN	<ul> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application</li> <li>Number</li> <li>Filing Date</li> <li>(62) Divisional to Application Number</li> </ul>	:WO/2019/048243 :NA :NA :NA	2)MILLNER, Robert
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#### (57) Abstract:

The invention relates to a method for reducing metal oxides (2) to metallized material (3) by means of contact with reduction gas, wherein an accumulated top gas is dry dedusted and reformed in a raw gas mixture together with gaseous hydrocarbons. The water vapor content of the dry dedusted top gas designated for the preparation of the raw gas mixture is adjusted in a saturator (11) in the countercurrent by means of saturation water, wherein the temperature of the saturation water is adjusted, by mixing cold water with a hot water having a higher temperature than the cold water, in order to produce the saturation water at a target value. The invention further relates to a device for carrying out such a method, having corresponding conduits.



No. of Pages: 33 No. of Claims: 13

(22) Date of filing of Application :12/02/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: CONNECTION MEMBER AND METHOD

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application</li> <li>Number Filing Date</li> <li>(62) Divisional to Application Number</li> </ul>	:A61B 17/16 :62/548490 :22/08/2017 :U.S.A. :PCT/EP2018/071060 :02/08/2018 :WO/2019/038055 :NA :NA	(71)Name of Applicant:  1)DEPUY IRELAND UNLIMITED COMPANY Address of Applicant: Loughbeg Industrial Estate Ringaskiddy County Cork Ireland (72)Name of Inventor: 1)CANNON, Patrick 2)STURTIVANT, Alexander 3)TEMPLE, Duncan 4)YOUNG, Duncan
(62) Divisional to Application Number Filing Date	:NA :NA	

## (57) Abstract:

A connection member for connecting a surgical tool to a plurality of different kinds of corresponding connector. A surgical tool including the connection member. A surgical kit including the surgical tool. The connection member includes an elongate shaft having a longitudinal axis, a proximal end and a distal end. The connection member also includes a plurality of connection features located at the proximal end of the shaft. The plurality of connection features includes at least one connection feature for mating with a first kind of corresponding connector. The plurality of connection features also includes at least one connection feature for mating with a second, different kind of corresponding connector. The connection member may be a male connection member and the corresponding connectors may be female. A method including providing the surgical tool and connecting the connection member to a corresponding connector.



No. of Pages: 25 No. of Claims: 21

(22) Date of filing of Application :12/02/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: ARTICULATION SECTION FOR SHAFT ASSEMBLY OF SURGICAL INSTRUMENT

(51) International classification	:A61B 18/14, A61B 17/29, A61B 17/00	(71)Name of Applicant: 1)ETHICON LLC
(31) Priority Document No	:15/686753	Address of Applicant :#475 Street C, Suite 401 Los Frailes
(32) Priority Date	:25/08/2017	Industrial Park Guaynabo, 00969 U.S.A.
(33) Name of priority country	:U.S.A.	(72)Name of Inventor:
(86) International Application No	:PCT/US2018/047309	1)OTREMBIAK, Candice
Filing Date	:21/08/2018	2)BOUDREAUX, Chad P.
(87) International Publication No	:WO/2019/040482	3)WORRELL, Barry C.
(61) Patent of Addition to Application	:NA	4)CUMMINGS, Nathan
Number	:NA	5)KALLENBERGER, Kris E.
Filing Date	.IVA	6)LAMPING, Michael R.
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

An apparatus includes a body, a shaft assembly, an end effector, and an articulation section. The articulation section is longitudinally interposed between a distal end of the shaft assembly and a proximal end of the end effector. The articulation section is configured to flex to thereby provide deflection of the end effector away from the longitudinal axis of the shaft assembly. The articulation section includes a first frame member, a second frame member, and a sleeve. The proximal end of the second frame member is proximal to the proximal end of the first frame member. The sleeve is disposed about the first and second frame members.



No. of Pages: 41 No. of Claims: 20

(22) Date of filing of Application :12/02/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: METHOD FOR DEGRADATION OF GLIADIN TO OBTAIN GLUTEN-FREE FLOUR •

(51) International classification	:A21D 8/04, A21D 2/26, A21D 10/00	(71)Name of Applicant: 1)GONZALEZ DE LA TORRE, Javier
(31) Priority Document No	:NA	Address of Applicant :Rinconadas del Arco 346, Col. El
(32) Priority Date	:NA	Palomar, Jalisco Tlajomulco de Zº±iga, 45643 Mexico
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:PCT/IB2017/054218	1)PEDROZA ISLAS, Ruth
Filing Date	:12/07/2017	
(87) International Publication No	:WO/2019/012312	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present invention relates to a method for the degradation of gliadin in flour for bread making, by means of a step of mixing the flour with water, at least one step of performing enzymatic hydrolysis, at least one step of fermenting using microorganisms in controlled-pH conditions, and a step of drying to obtain a gliadin-free flour.



No. of Pages: 14 No. of Claims: 38

(22) Date of filing of Application :12/02/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: INSERT FASTENER WITH A COMPRESSION SLEEVE •

(51) International classification	:F16B 13/00, F16B 13/06, F16B 13/12, F16B 19/10, F16B 37/04	(71)Name of Applicant: 1)PENN ENGINEERING & MANUFACTURING CORP. Address of Applicant:5190 Old Easton Road Danboro, PA 18916 U.S.A.
(31) Priority Document No	:62/546065	(72)Name of Inventor:
(32) Priority Date	:16/08/2017	1)MALONEY, Michael J.
(33) Name of priority country	:U.S.A.	2)BENTRIM, Brian G.
(86) International Application No	:PCT/US2018/046818	
Filing Date	:16/08/2018	
(87) International Publication No	:WO/2019/036546	
(61) Patent of Addition to Application Number	:NA :NA	
Filing Date	.11/1	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

A two-part fastener with an insert and a compression sleeve. The insert is an internally-threaded fastener intended to be installed into a hole of a very hard panel. The insert itself is relatively hard with a knurled outer barrel portion and a flange at the bottom. A compression sleeve is made of relatively soft material and is preassembled around the barrel of the insert by friction fit. Upon installation into a panel with a blind hole having parallel sides, the compression sleeve is pressed into the panel and deforms outwardly between the insert and the side wall of the hole. Friction between the compression sleeve and the wall of the hole prevents torque out and pull out of the fastener from the panel.



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

(19) INDIA

(22) Date of filing of Application :12/02/2020

(21) Application No.202017006084 A

(43) Publication Date: 03/07/2020

# (54) Title of the invention: REEL BRAKING SYSTEM •

(51) International classification	:B65H 75/44, F04C 2/10	(71)Name of Applicant: 1)MACNAUGHT PTY LTD
(31) Priority Document No	:2017903360	Address of Applicant :41- 49 Henderson Street Turrella, New
(32) Priority Date	:21/08/2017	South Wales 2205 Australia
(33) Name of priority country	:Australia	(72)Name of Inventor:
(86) International Application No	:PCT/AU2018/050880	1)UCCELLANI, Marco
Filing Date	:20/08/2018	2)SINGH, Prabhjot
(87) International Publication No	:WO/2019/036750	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

A braking system for a hose or cable reel comprising a housing configured to fit inside a drum of the reel and to rotate with the drum during use, and a gerotor comprising inner and outer gears disposed inside the housing, wherein the inner gear is attachable to a shaft of the reel and the outer gear is configured to rotate relative to the inner gear with the housing during use thereby causing hydraulic fluid to be pumped through the gerotor and impede rotation of the drum.



No. of Pages: 13 No. of Claims: 21

(22) Date of filing of Application :12/02/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : CALIBRATION SYSTEM FOR AUDIENCE RESPONSE CAPTUREAND ANALYSIS OF MEDIA CONTENT •

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application</li> <li>Number Filing Date</li> </ul>	:H04N 21/422, H04N 21/4223, G11B 27/34, H04H 60/33, H04N 21/25 :62/560460 :19/09/2017 :U.S.A. :PCT/IB2018/056897 :10/09/2018 :WO/2019/058209 :NA :NA	(71)Name of Applicant: 1)SONY CORPORATION Address of Applicant:1-7-1 Konan Minato-ku, Tokyo 108- 0075 Japan (72)Name of Inventor: 1)SRIVASTAVA, Anubhav 2)DHARAMUKKALA, Venkatesh
(62) Divisional to Application Number Filing Date	:NA :NA	

### (57) Abstract:

A calibration system for media content comprises a memory, a media device, a plurality of different types of sensors, and a control circuitry. The memory is configured to store a media item and expected-emotions-tagging metadata for the media item. The control circuitry is configured to compute a reaction delay for a first emotional response of the audience captured by the plurality of different types of sensors for a first scene of the media item with respect to a position of the first marker. The first scene of the media item spans a first time slot that corresponds to the first scene in the media item. The control circuitry is configured to calibrate the position of the first marker to associate a first set of frames of the first scene with the first emotional response, based on at least the computed reaction delay.



No. of Pages: 78 No. of Claims: 25

(22) Date of filing of Application :12/02/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention : METHOD AND APPARATUS FOR RE MAPPING AND RATE MATCHING FOR ADVANCED RADIO SYSTEM $\bullet$

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> </ul>	:H04W 72/04, H04W 72/08, H04W 74/08, H04L 5/00 :62/552715 :31/08/2017 :U.S.A. :PCT/KR2018/010132 :31/08/2018	(71)Name of Applicant:  1)SAMSUNG ELECTRONICS CO., LTD.  Address of Applicant:129, Samsung-ro, Yeongtong-gu Suwon-si, Gyeonggi-do 16677 Republic of Korea (72)Name of Inventor:  1)NAM, Younghan
(87) International Publication No	:WO/2019/045514	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number Filing Date	:NA :NA	

### (57) Abstract:

The present disclosure relates to a communication method and system for converging a 5th-Generation (5G) communication system for supporting higher data rates beyond a 4th-Generation (4G) system with a technology for Internet of Things (IoT). The present disclosure may be applied to intelligent services based on the 5G communication technology and the IoT-related technology, such as smart home, smart building, smart city, smart car, connected car, health care, digital education, smart retail, security and safety services. A method of a user equipment (UE) for receiving resource information is provided. The method comprises receiving, from a base station (BS), a synchronization signal/physical broadcast channel (SS/PBCH) including a master information block (MIB); receiving, from the BS, SystemInformationBlockType1 (SIB1) comprising a first ssb-PositionsInBurst indicating indexes of SS/PBCH blocks for which the UE does not receive other signals or channels in resource elements (REs) that overlap with REs corresponding to the SS/PBCH blocks.



No. of Pages: 28 No. of Claims: 15

(22) Date of filing of Application: 12/02/2020 (43) Publication Date: 03/07/2020

# (54) Title of the invention: DEVICE AND METHOD FOR RECOMMENDING CONTACT INFORMATION •

(51) International classification	:H04M 1/725, H04M 1/275, H04M 1/2745	(71)Name of Applicant: 1)SAMSUNG ELECTRONICS CO., LTD.
(31) Priority Document No	:10-2017-0178737	Address of Applicant :129, Samsung-ro, Yeongtong-Gu,
(32) Priority Date	:22/12/2017	Suwon-Si, Gyeonggi-do 16677 Republic of Korea
(33) Name of priority country	:Republic of Korea	(72)Name of Inventor:
(86) International Application No	:PCT/KR2018/016536	1)HWANG, Jinyoung
Filing Date	:21/12/2018	
(87) International Publication No	:WO/2019/125082	
(61) Patent of Addition to Application	:NA	
Number	:NA	
Filing Date	.11/1	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A device is provided. The device includes a processor and a memory configured to store instructions executable by the processor. The processor is configured to execute the instructions to extract context information from displayed data based on an application which is being executed by the device, identify an identifier from the context information, search for at least one recommended contact related to the identifier based on the identifier and a relation graph obtained by inputting information regarding a communication between a plurality of users into a first training model for determining an association between the plurality of users, identify a priority of the at least one recommended contact, and control to display the at least one recommended contact according to the priority.



No. of Pages: 28 No. of Claims: 15

(21) Application No.202017006108 A

(19) INDIA

(22) Date of filing of Application :12/02/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: HETEROCYCLIC INHIBITORS OF ATR KINASE

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> </ul>	:A61K 31/505, C07D 413/14 :62/531951 :13/07/2017 :U.S.A. :PCT/US2018/042128 :13/07/2018 :WO/2019/014618	(71)Name of Applicant:  1)BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM  Address of Applicant: 210 W. 7th Street Austin, TX 78701 U.S.A.  2)CHEMPARTNER CORPORATION (72)Name of Inventor:  1)DI FRANCESCO, Maria, Emilia 2)JONES, Philip
<ul> <li>(61) Patent of Addition to Application</li> <li>Number</li> <li>Filing Date</li> <li>(62) Divisional to Application Number</li> <li>Filing Date</li> </ul>	:NA :NA :NA :NA	3)CARROLL, Christopher, Lawrence 4)CROSS, Jason, Bryant 5)RAMASWAMY, Suyambu Kesava, Vijayan 6)JOHNSON, Michael, Garrett 7)LIVELY, Sarah 8)LAPOINTE, David

# (57) Abstract:

The present disclosure relates to heterocyclic compounds and methods which may be useful as inhibitors of ATR kinase for the treatment or prevention of cancer.

No. of Pages: 203 No. of Claims: 101

(21) Application No.202017006110 A

(19) INDIA

(22) Date of filing of Application :12/02/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: HIGH-PLACE OBSERVATION DEVICE

(51) International classification	:G03B 17/56, B64B 1/50, B64C 27/08, B64C 39/02, G03B 15/00	(71)Name of Applicant: 1)AERONEXT INC. Address of Applicant: 3-5,Ebisu-nishi 2-chome,Shibuya-ku Tokyo 1500021 Japan
(31) Priority Document No	:PCT/JP2017/025346	(72)Name of Inventor:
(32) Priority Date	:12/07/2017	1)SUZUKI Yoichi
(33) Name of priority country	:PCT	
(86) International Application No	:PCT/JP2017/025346	
Filing Date	:12/07/2017	
(87) International Publication No	:WO/2019/012614	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

[Problem] To provide a high-place observation device that is capable of stably performing fixed point observation of an object at a high place. [Solution] This high-place observation device is provided with: a long pole 30 that is disposed upright on an installation surface E and formed so as to freely elongate or contract; a rotary blade machine 40 that is connected to the pole 30, and that elongates or contacts the pole 30 by means of buoyancy in the connected state, so as to position the pole 30 at a desired height; a winding mechanism 22 for fixing and holding the height position of the pole 30 at the height where the pole is positioned by the rotary blade machine 40; and a camera 50 that is attached to the rotary blade machine 40.



No. of Pages: 29 No. of Claims: 9

(21) Application No.202017006114 A

(19) INDIA

(22) Date of filing of Application :12/02/2020 (43) Publication Date : 03/07/2020

# (54) Title of the invention: TOELESS GARMENT

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application</li> <li>Number Filing Date</li> </ul>	:27/07/2018 :WO/2019/023561 :NA :NA	(71)Name of Applicant:  1)HBI BRANDED APPAREL ENTERPRISES, LLC Address of Applicant: 1000 East Hanes Mill Road Winston Salem, North Carolina 27105 U.S.A. (72)Name of Inventor: 1)COWELL, William
1 (01110 01	:NA :NA :NA	

### (57) Abstract:

A garment, such as sheer hosiery or other toeless garment, includes a body portion configured to encircle at least part of a lower leg of a wearer of the garment, and a welt portion adjacent an end of the body portion. The welt portion is configured to encircle a foot of the wearer, and defines an opening for a portion of the foot of the wearer. The welt portion can include a turned welt.



No. of Pages: 10 No. of Claims: 21

(22) Date of filing of Application :06/03/2020 (4)

(43) Publication Date: 03/07/2020

# (54) Title of the invention: IMMUNOGENIC PEPTIDE AGAINST GROUP A STREPTOCOCCUS

(51) International classification  (51) International classification  (51) International classification  (31) Priority Document No (32) Priority Date (33) Name of priority country (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date  (33) Name of priority country (34) Name of priority country (35) Name of priority country (36) International Application No (37) Priority Date (38) Priority Date (39/40, C07K 4/04, C07K 14/315, C07 (30) Priority Date (31) Priority Date (32) Priority Date (33) Name of priority country (34) Name of priority country (35) Name of priority country (36) International Application No (37) Priority Date (38) Priority Date (39/40, C07K 4/04, C07K 14/315, C07 (30) Priority Date (31) Priority Date (32) Priority Date (32) Priority Date (33) Name of priority country (34) Priority Date (35) Name of priority country (36) International Application No (57) Priority Date (58) Priority Date (59) Priority Date (50) Priority Date (50) Priority Date (50) Priority Date (50) Priority Date (51) Priority Date (51) Priority Date (52) Priority Date (53) Priority Date (54) Priority Date (54) Priority Date (55) Priority Date (56) Priority Date (57) Priority Dat	1)GRIFFITH UNIVERSITY Address of Applicant :170 Kessels Road Nathan, Queensland 4111 Australia (72)Name of Inventor: 1)GOOD, Michael F. 2)PANDEY, Manisha
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# (57) Abstract:

A modified p145 peptide having enhanced mucosal immunogenicity for use in eliciting a mucosal immune response to group A streptococcal bacteria in a mammal such as a human. Intramuscular administration of the modified p145 5 peptide may be particularly efficacious. An S2 peptide or variant may be co- administered with the modified p145 peptide to enhance the immune response.



No. of Pages: 50 No. of Claims: 25

(22) Date of filing of Application :06/03/2020

(43) Publication Date: 03/07/2020

# (54) Title of the invention : METHODS AND COMPOSITIONS FOR COOLING YARNS AND FABRICS, AND ARTICLES COMPRISING SAME

(51) International classification	:D01F 8/12, D01F 8/14, D06M 11/36	(71)Name of Applicant: 1)BRRR! INC.
(31) Priority Document No	:106129771	Address of Applicant :550 Pharr Road NE Suite 215 Atlanta,
(32) Priority Date	:31/08/2017	Georgia 30305 U.S.A.
(33) Name of priority country/region	:Taiwan	(72)Name of Inventor:
(86) International Application No	:PCT/US2018/048901	1)SU, Hung-Yuan
Filing Date	:30/08/2018	2)WEI, Ying-Pin
(87) International Publication No	:WO/2019/046608	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

In one aspect, the disclosure relates to composite yarns having a structure comprising a core component and sheath layer, wherein each of the core component and the sheath layer independently comprise a polymer and a disclosed cooling compsition. In various further aspects, the present disclosure pertains to double covered yarns comprising an elastic core comprising an elastic core; a first yarn in contact with the elastic core, and wherein the first yarn comprises a disclosed yarn comprising a core component and a sheath layer; and a second yarn in contact with the first yarn, and wherein the second yarn comprises a yarn comprising a cellulosic fiber. In still further aspects, the present disclosure pertains to a fabric, such as a denim fabric. This abstract is intended as a scanning tool for purposes of searching in the particular art and is not intended to be limiting of the present disclosure.



No. of Pages: 146 No. of Claims: 20

(22) Date of filing of Application :24/02/2020

(43) Publication Date: 03/07/2020

(54) Title of the invention: A METHOD FOR PREPARING PARTIALLY HYDRATED (E)-N-{4-[3-CHLORO-4-(2-PYRIDINYLMETHOXY)ANILINO]-3-CYANO-7-ETHOXY-6-QUINOLINYL}-4-(DIMETHYLAMINO)-2-BUTENAMIDE AS A MALEATE SALT

:C07D 401/12, A61K (71) Name of Applicant: (51) International classification 31/404, A61P 35/00 (31) Priority Document No :61/124,796 (32) Priority Date Jersey 07940, USA U.S.A. :17/10/2007 (72)Name of Inventor: (33) Name of priority country :U.S.A. :PCT/US2008/080130 (86) International Application No Filing Date :16/10/2008 (87) International Publication No :WO/2009/052264 (61) Patent of Addition to Application :NA Number :NA

1)QINGHONG LU 2)MANNCHING SHERRY KU 3)WARREN CHEW

1)WYETH LLC

4)GLORIA K. CHEAL 5) ANTHONY F. HADFIELD 6)MAHMOUD MIRMEHRABI

Address of Applicant : Five Giralda Farms, Madison, New

(57) Abstract:

Filed on

Filing Date

The present invention relates to maleate salt forms of (E)-N-{4-[3-chloro-4-(2-pyridinylmethoxy)anilino]-3-cyano-7-ethoxy-6quinolinyl}-4-(dimethylamino)-2-butenamide, (NERATINIB) methods of preparing crystalline maleate salt forms, the associated compounds, such as its degradation and impurities and pharmaceutical compositions containing the same. The maleate salts are useful in treating cancers, particularly those affected by kinases of the epidermal growth factor receptor family.

:1135/DELNP/2015

:12/02/2015



No. of Pages: 39 No. of Claims: 2

(62) Divisional to Application Number

(22) Date of filing of Application :24/02/2020

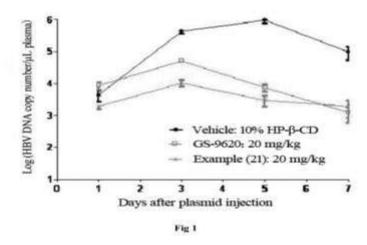
(43) Publication Date: 03/07/2020

# (54) Title of the invention: PYRROLOPYRIMIDINE COMPOUNDS USED AS TLR7 AGONIST

(51) International classification	:C07D 487/04, A61K 31/519, A61P 31/12	(71)Name of Applicant: 1)CHIA TAI TIANQING PHARMACEUTICAL GROUP
(31) Priority Document No	:201410405136.0	CO., LTD.
(32) Priority Date	:15/08/2014	Address of Applicant :No. 369 Yuzhou South Rd., Haizhou
(33) Name of priority country	:China	District, Lianyungang City, Jiangsu 222062, China China
(86) International Application No	:PCT/CN2015/086909	(72)Name of Inventor:
Filing Date	:14/08/2015	1)DING, Zhaozhong
(87) International Publication No	:WO/2016/023511	2)WU, Hao
(61) Patent of Addition to Application	:NA	3)SUN, Fei
Number	:NA	4)WU, Lifang
Filing Date	.11/1	5)YANG, Ling
(62) Divisional to Application Number	:201717007964	
Filed on	:14/08/2015	

## (57) Abstract:

The present invention provides pyrrolopyrimidine compounds used as a TLR7 agonist, and specifically relates to compounds of formula (I) or pharmaceutically acceptable salts thereof, a preparation method therefor, pharmaceutical compositions containing such compounds, and use thereof in preparing antiviral drugs.



No. of Pages: 67 No. of Claims: 11

(21) Application No.201721025702 A

(19) INDIA

(22) Date of filing of Application :19/07/2017 (43) Publication Date : 03/07/2020

# (54) Title of the invention: A PROCESS FOR PREPARING PSEUDO-BOEHMITE CRYSTALS

(51) International classification	:C01F0007020000, C01F0007440000, B01J0021040000, B01J0037000000, B01J0035100000	(71)Name of Applicant:  1)HINDALCO INDUSTRIES LIMITED, Address of Applicant: AHURA CENTRE, 1ST FLOOR, B-WING, MAHAKALI CAVES ROAD, ANDHERI (EAST), MUMBAI 400 093, INDIA Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)POOMALAI SARAVANAN
(33) Name of priority country	:NA	2)SEETHARAMAN SANKARANARAYANAN
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	er :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

A process for preparing pseudo boehmite crystals from aluminum trihydrate is disclosed. The process comprising the steps of calcining aluminum trihydrate to form alumina; milling the alumina to obtain alumina particles having a particle size distribution in the range of 10 to  $80\mu m$ ; forming a slurry of the alumina particles in an aqueous solution of acetic acid; heating the slurry under a pressure; and flashing the slurry by withdrawing the pressure to form pseudo boehmite crystals.

No. of Pages: 16 No. of Claims: 9

(22) Date of filing of Application :08/08/2017 (43) Publication Date : 03/07/2020

# (54) Title of the invention: Advanced Steering Operated Braking Mechanism for Tractors

(51) International classification	:A61B0005180000, A61B0090000000, G11B0017220000, F04D0029540000, G06Q0050020000	(71)Name of Applicant:  1)Mayur Balasaheb Kolhe Address of Applicant: A/p Derde korhale. Tal: Kopargaon Dist: Ahmednagar. Maharashtra India  2)Prasad Sanjay Khadangale
(31) Priority Document No	:NA	3)Balasaheb Bhagwat Kolhe
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)Mayur Balasaheb Kolhe
(86) International Application No	:NA	2)Prasad Sanjay Khadangale
Filing Date	:NA	3)Balasaheb Bhagwat Kolhe
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present invention is an advanced steering operated braking mechanism that is fixedly attachable to a tractor is disclosed. The advanced mechanism has plurality of links that includes the engaging assembly and the braking assembly connected via an actuating shaft that allows a tractor operator to turn the tractor without using manual brakes. The invention in accordance with the present invention reduces operator fatigue and time consumed in manoeuvring tractor in a farm land. The mechanism in accordance with the present invention is a post-sale accessory.



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

(22) Date of filing of Application :30/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : MODULAR SYSTEM, AND METHOD IMPLEMENTED THEREIN, FOR RECLAMATION OF WASTEWATER

(51) International classification	:F28D0007100000, G06F0009451000, B01L0007000000, B25J0009080000, F21S0004200000	(71)Name of Applicant:  1)Kedarnath Arun Chakradeo Address of Applicant: A3/802 Karishma Cooperative Housing Society, Kothrud, Pune 411038, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Kedarnath Arun Chakradeo
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A decentralized modular system for treatment of waste water is disclosed herein characterized in having integral components compactly compartmentalized within interconnecting discrete modules which allow flexibility in achieving operations which require minimal human intervention and customizable configurability suited to nature and scale of application intended, while being unobtrusive to aesthetics of the surrounding space.



(22) Date of filing of Application :26/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: PREMIXES OF DEUTETRABENAZINE

(51) International classification	C07F0009658400, C07C0041220000, C11D0011000000,	
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)RAJPUT, Lalitkumar Dilipsing
(33) Name of priority country	:NA	2)DESHMUKH, Mahesh Sadashiv
(86) International Application No	:NA	3)PAWAR, Pratim Shivaji
Filing Date	:NA	4)PAWAR, Yogesh Dadaji
(87) International Publication No	: NA	5)SHIVDAVKAR, Radhakrishna Bhikaji
(61) Patent of Addition to Application Number	:NA	6)BHISE, Nandu Baban
Filing Date	:NA	7)SINGH, Girij Pal
(62) Divisional to Application Number	:NA	•
Filing Date	:NA	

## (57) Abstract:

The present invention provides stable premix of deutetrabenazine comprising deutetrabenazine and eudragit. The present invention provides novel polymorphs of deutetrabenazine premix with eudragit. The present invention further provides process for preparation of these premixes.

(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: A FLAME RETARDANT FABRIC AND A METHOD FOR MANUFACTURING THE FABRIC

(51) International classification	D03D0015120000, G06F0015780000,	(71)Name of Applicant:  1)Arvind Limited Address of Applicant: Naroda Road, Ahmedabad 380025, Gujarat Gujarat India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Smarita Bharimal
(32) Priority Date	:NA	2)Satyapriya Dash
(33) Name of priority country	:NA	3)Rahul Dev Mal
(86) International Application No	:NA	4)Shailesh Patel
Filing Date	:NA	5)Vijendra Labade
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention relates to a flame retardant fabric. The fabric is light in weight and can be dyed with variety of colours. The flame retardant fabric comprises at least 40% w/w cellulosic fibers, at least 25% w/w modacrylic fibers, and at least 10% flame-retardant vinylon fibers. In an embodiment, the fabric comprises 40% to 60% w/w cellulosic fibers, 25% to 40% w/w modacrylic fibers, 10% to 25% flame-retardant vinylon fibers. In another embodiment, the fabric comprises 0% to 8% w/w para aramid fibers. In yet another embodiment, the fabric comprises 0% to 2% w/w antistatic fibers.



(22) Date of filing of Application :26/12/2018 (43) Publication Date : 03/07/2020

### (54) Title of the invention: SENSOR-LESS SINGLE PHASE BRUSHLESS DC HUB MOTOR

(51) International classification	:H02K0021120000, H02K0021200000, H02P0006060000, H02K0021240000, H02P0006182000	(71)Name of Applicant:  1)Ashwin Patil  Address of Applicant:House no340, ward no.27,Parshuram chowk,chaitanyawadi,buldhana Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Ashwin Patil
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A sensor-less single phase brushless DC hub motor(100) comprises of rotor(2) and stator(1) assembled together. Permanent magnetic arcs(2A) are placed in hub of brushless DC hub motor(100) in coaxial manner creating a gap between them and balancing weights(2B) of same geometry and having equal weight as that of permanent arc magnet(2A) are positioned equally opposite to the permanent arc magnets(2A). A stator(1) consisting of coils(12) and cores(11) assembled together to form an electromagnet is provided on the stator plate(13) in equally spaced circular pattern. Multiple coils(12) on stator(1) are activated and deactivated incrementally in circular pattern generating a rotation of magnetic field along the axis of the shaft(4) whereby rotating magnetic field creates a magnetic force of attraction between permanent arc magnets(2A) and cores(11), and torque is generated on the rotor(2) leading to rotate it along with magnetic field. The speed and direction(D) of brushless DC hub motor(100) is controlled by controller circuit comprising sequencing logic circuit and commutation logic circuit.



(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: SUCTION IRRIGATOR TIP

(51) International classification	:A61M0001000000, H02J0007000000, A61M0003020000, A61C0017020000, A61M0005142000	(71)Name of Applicant:  1)BAGVE, Yashwant Sahadev  Address of Applicant: Bldg No C 18, 2 Plot D, Shantipark Layout, Opp Sector No 6, Mira Road East, Thane, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)BAGVE, Yashwant Sahadev
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A suction irrigator tip including a first tube with a curved profile wherein the first tube is configured to be removably joined at its inlet to a second tube is disclosed. There movable joining is configured to be stepless. The curved profile comprises at least one curve on any or a combination of outlet rim and inlet rim of the first tube. Using any or a combination of threads and clamps, the first tube can be removably joined with the second tube. At least one notch is configured on periphery of outlet rim of the first tube, and it has at least one hole on its surface for any or a combination of suction and irrigation. The first tube can be made of any or a combination of a soft material and Delrin Rods Fully Autoclave Metal. A suction irrigator including the suction irrigator tip is described.



(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

### (54) Title of the invention: A PROCESS FOR RECYCLING MIXED PLASTIC WASTE

(51) International classification	B29B0017020000, B29B0017040000,	(71)Name of Applicant: 1)SHAH, Jignesh Address of Applicant: 2nd Floor, Indrabhuvan, Vachha Gandhi Marg, Gamdevi, Mumbai - 400007, Maharashtra India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)SHAH, Jignesh
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT A PROCESS FOR RECYCLING MIXED PLASTIC WASTE The present disclosure relates to a process for recycling mixed plastic waste. The process comprises obtaining mixed plastic waste, followed by shredding the plastic waste to obtain shredded material, which are compacted, mixed, dried and then distributed between two independent sheets to obtain an intermediate laminate comprising a layer of the dried material therein. The intermediate laminate is hot pressed at a temperature in the range of 140 to 210 °C to obtain a hot laminate. The hot laminate is cooled to a temperature in the range of 25 to 50 °C. The cooled laminate is cold pressed to obtain a laminate comprising recycled mixed plastic waste. The laminate is in the form of a sheet, a film or a board. The process of recycling mixed plastic waste, of the present disclosure, is simple, efficient and economic.



(22) Date of filing of Application :26/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: A FLEXIBLE PANEL AND A SYSTEM FOR FORMING THE FLEXIBLE PANEL

(51) International classification	:B65D0075580000, B65B0061180000, H01L0051000000, G06F0003041000, H01L0051560000	(71)Name of Applicant:  1)Huhtamaki PPL Limited Address of Applicant:12A-06, B-Wing, 13th Floor, Parinee Crescenzo, C-38/39, G- Block, Bandra Kurla Complex, Bandra (East) Mumbai 400051, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Marzban Thanevala
(33) Name of priority country	:NA	2)Durga Konduri
(86) International Application No	:NA	3)Debkanta Bakshi
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numbe	r:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT A FLEXIBLE PANEL AND A SYSTEM FOR FORMING THE FLEXIBLE PANEL The present invention relates to a flexible packaging panel, and a system for forming the flexible panel. The system (100) comprises a first station (110) for supplying a first flexible panel comprising plurality of segments (202) and a second station (120) for supplying a second flexible panel, the second flexible panel comprising a carrier substrate with plurality of removable articles (X). An application station (140) facilitates transfer of at-least one removable article from the second flexible panel to each segment of the first flexible panel to form a final flexible panel. The flexible panel or package formed from the flexible panel comprises at-least one removable article adhered to it such that that the article does not get mixed with contents of the flexible package and can be removed as per requirement. Reference Figure 1



(22) Date of filing of Application :26/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: RECYCLABLE LAMINATE

(51) International classification	:B32B0027320000, B32B0027080000, B32B0027340000, B32B0027360000,	11
	B32B0027300000, B32B0007120000	(East) Mumbai 400051, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Ashwini Kumar Singh
(33) Name of priority country	:NA	2)Aishwarya Vanage
(86) International Application No	:NA	3)Mahuwa Masalia
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT Recyclable Laminate The present invention relates to a recyclable laminate comprising a first layer and a second layer, each layer being a polyolefin layer having a thickness in the range of 12 micron to 100 microns; and an intermediate layer having thickness in the range of 10 microns to 35 microns sandwiched between the first polyolefin layer and the second polyolefin layer, the intermediate layer being a metallized polyolefin film having alcohol based polymer barrier resins therein.

(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: INCORPORATING VARIANT INFORMATION INTO OMICS DATA FOR TAXONOMIC IDENTIFICATION AND SUBSEQUENT DATA ANALYSIS

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No</li> </ul>	:G06F 19/00 :NA :NA :NA :NA	(71)Name of Applicant: 1)N.A. MAHALAKSHMI SRINIVASAN Address of Applicant: FLAT 401, BLDG NO.3, SEAWOODS ESTATES, NRI COMPLEX, NERUL, NAVI MUMBAI, MAHARASHTRA,INDIA, PIN CODE: 400 706 Maharashtra India
Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date	:NA : NA :NA :NA :NA :NA	(72)Name of Inventor : 1)N.A. MAHALAKSHMI SRINIVASAN

#### (57) Abstract:

The invention belongs to the field of Bioinformatics and is a program to incorporate variant information into Omics data. The omics data so obtained could be used for taxonomic studies, data analysis, annotation, interpretation and visualisation. The program originally developed using R could be a standalone program or integrated into the software / tools (commercial or free) available. It is an excellent substitute to manual curation of omics data, probe designing and addresses the pitfalls associated with 16S rRNA based tax¬onomic classification. The invention involves approaches to enable editing of omics data, using program which transform the data type, manipulate, incorporate information in a sequential manner and convert them back to the same omics file format specification. Keywords: Biological sequence, commercial bioinformatics software, online tools, coverage, %identity, NCBI BLAST, R, R Studio, Taxonomy, Omics data, probe designing, new species, variant, known species, novel species, manual curation, annotation, taxonomy, analysis, visuali¬sation, DNA-DNA hybridization, 16S rRNA.

(22) Date of filing of Application :27/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention : AN AUTOMATED DEVICE AND METHOD FOR TESTING THE FINENESS MODULUS OF AGGREGATES.

(51) International classification	:H04W0072040000, H04W0004200000, H04W0012060000, G01N0033380000, G01G0019000000	(71)Name of Applicant:  1)KALANI ADITYA SACHIN  Address of Applicant: Plot No H-2, Old MIDC SATARA  Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)KALANI ADITYA SACHIN
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(57) A1		

#### (57) Abstract:

The present invention provides for an automated device for testing the fineness modulus (FM) of a sample aggregate and a method for testing the fineness modulus of the sample aggregate which is used for concrete in construction industry. The automated device for testing the fineness modulus (FM) of aggregates is a vertical assembly of plurality of sieves for separating and retaining aggregates and a vessel for collecting fine aggregates. Weighing containers are provided with electronic load cells for weighing the retained aggregates at the sieves and the vessel. An electronic control unit for receiving data from the load cells of the weighing containers to transmit to the central processing unit for calculating the fineness modulus and displaying the data in a tabular and graphic form. Ref.Fig 2



(21) Application No.201821049300 A

(19) INDIA

(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: NOVEL DRUG DELIVERY SYSTEM COMPRISING METHOTREXATE

	·F02C	(71)Name of Applicant :
(51) International classification	7/236	
(31) Priority Document No	:NA	Address of Applicant :3/15, OLD BARRACK, NEAR SAI
(32) Priority Date	:NA	BABA TEMPLE, BEHIND JAI BHARAT HIGH SCHOOL,
(33) Name of priority country	:NA	MULUND COLONY, MULUND (W), MUMBAI-400082,
(86) International Application No	:NA	MAHARASHTRA, INDIA Maharashtra India
Filing Date	:NA	2)DR. KURUP NALINI SATISH
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application Number	:NA	1)RAJNANI NIKHIL PREM NISHA
Filing Date	:NA	2)DR. KURUP NALINI SATISH
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

⁽⁵⁷⁾ Abstract:

The present invention relates to novel drug delivery system comprising Methotrexate.

(22) Date of filing of Application :27/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention : DFIP-MACHINE : DESIGN AND FABRICATION OF INTELLIGENT AUTOMATED PIPE HANDLING MACHINE

#### (57) Abstract:

In this invention is to advancements in technology and automation, the field of pipe handling has faced tremendous changes from completely man powered pipe handling to semi automated pipe handlers to expensive fully automated pipe handling machines. Also with it came high risk of working man power, expensive bills and size ineffective mechanisms and designs. The design presented in various figure is figure description, cost effective and intuitive design intended to picking and keeping the pipes autonomously. The machine requires a simple use of a crane to handle the machine which ensures safety of the people and also is cost effective since the machine is completely mechanical with easy-to-manufacture and easily available parts. In This invention automatic controlling device through artificial programming



(22) Date of filing of Application :26/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: CURABLE SILICONE-BASED COMPOSITIONS AND APPLICATIONS THEREOF

(51) International classification	:C08L0083000000, C09J0183040000, C08L0083060000, C08G0077200000, C08K0003340000	(71)Name of Applicant:  1)MOMENTIVE PERFORMANCE MATERIALS INC. Address of Applicant: 260, HUDSON RIVER ROAD, WATERFORD, NEW YORK 12188, U.S.A. U.S.A. (72)Name of Inventor:
(31) Priority Document No	:NA	1)MONDAL, Titash
(32) Priority Date	:NA	2)GAHLOUT, Pragati
(33) Name of priority country	:NA	3)BHAT, Shreedhar
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

TITLE: CURABLE SILICONE-BASED COMPOSITIONS AND APPLICATIONS THEREOF The present technology provides a curable silicone composition comprising a polymer A comprising one or more alkenyl functional groups; a polymer B comprising one or more hydride functional groups; and a filler, wherein at least one of polymer A and/or polymer B is a silicone polymer.

(22) Date of filing of Application :26/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: CURABLE SILICONE-BASED COMPOSITIONS AND APPLICATIONS THEREOF

(51) International classification	:G03F0007000000, C09D0183060000, C08G0077140000, C09D0183040000, H01M0008104800	Address of Applicant :260 HUDSON RIVER ROAD
(31) Priority Document No	:NA	1)MONDAL, Titash
(32) Priority Date	:NA	2)MG, Murali
(33) Name of priority country	:NA	3)BHAT, Shreedhar
(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:

TITLE: CURABLE SILICONE-BASED COMPOSITIONS AND APPLICATIONS THEREOF A curable composition comprising a polymer A, a polymer B, and one or more fillers, wherein the polymer A includes organic molecules or siloxane molecules comprising two or more epoxy functional groups, and the polymer B includes an organic amine or a hybrid silicone amine.

(22) Date of filing of Application :26/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: CURABLE SILICONE-BASED COMPOSITIONS AND APPLICATIONS THEREOF

(51) International classification	:C08G0077200000, C08G0077120000, C08L0083040000, H01L0023000000, H01L0023310000	(71)Name of Applicant:  1)MOMENTIVE PERFORMANCE MATERIALS INC. Address of Applicant: 260 HUDSON RIVER ROAD WATERFORD, NEW YORK U.S.A. 12188 U.S.A. (72)Name of Inventor:
(31) Priority Document No	:NA	1)MONDAL, Titash
(32) Priority Date	:NA	2)MG, Murali
(33) Name of priority country	:NA	3)BHAT, Shreedhar
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

TITLE: CURABLE SILICONE-BASED COMPOSITIONS AND APPLICATIONS THEREOF The present technology provides a curable silicone-based composition comprising a hybrid silicone polymer, a catalyst, and a filler. In embodiments, the present technology provides a curable silicone composition comprising a polymer A comprising an organic molecule or a siloxane molecule comprising an alkoxy radical, a hydroxyl radical, an isocyanate radical, a primary amine, or a carboxylic radical; optionally a polymer B comprising an organic molecule, a siloxane molecule, or a hybrid-siloxane molecule; a catalyst; and a filler.

(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: INTRUSION DETECTION AND ALERT SYSTEM

(51) International classification	:H04L0029060000, G06F0021550000, H04L0029080000, G08B0013196000, G08B0013240000	(71)Name of Applicant:  1)Rohan Madan Valvekar  Address of Applicant: Plot. No 52, ~OM TM , United Western Society, Near Tathawade Garden, Karvenagar, Pune 411052, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Rohan Madan Valvekar
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

INTRUSION DETECTION AND ALERT SYSTEM Abstract Disclosed is a intrusion detection and alert system (100) for detecting unauthorized human intrusion and providing and instant/ delayed alerts to a subscribed user and other authorized users. The system (100) solves the issue of keeping the video/ image records intact and also provides cloud platform support for storing the recorded data. The system (100) is a security system combining the functionality of digital video recorder security systems and cloud-based platform. The system (100) is designed on the principle of distributed systems, where the camera component and the processing components are independent of each other. Both the elements of the system (100) have a small footprint and form factor, which makes them untraceable and highly concealable. Figure 1



(22) Date of filing of Application :27/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: A WHEEL ASSEMBLY FOR A VEHICLE

(51) International classification	:B60B0035100000, B60B0033000000, B62D0049060000, B60B0035120000, B62D0021140000	(71)Name of Applicant:  1)KStudio Solutions Pvt. Ltd. Address of Applicant: World Trade Center, 802, Tower 2, Dholepatil Farms Road, Opp. EON Free Zone, MIDC Knowledge Park, Kharadi, Pune 411014, Maharashtra, India. Maharashtra
(31) Priority Document No	:NA	India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)RAVALE, Gopal
(86) International Application No	:NA	2)ANTAO, Ralph
Filing Date	:NA	3)MAIND, Krishna
(87) International Publication No	: NA	4)GAWANDE, Ruchita
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present disclosure provides a wheel assembly for a vehicle adapted for alterable track width. The wheel assembly comprises a telescopic axle disposed between the wheels. The telescopic axle, in turn, comprises a pair of female shafts with splines configured to move over a central male shaft with splines, the relative motion occurring due to the meshing of the spines. This configuration allows extension and retraction of the female shafts away and towards one another respectively, resulting in varying track width.



(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: ABSORBENT ARTICLE

(51) International classification	:A61F0013511000, A61F0013150000, A61F0013475000, B32B0005020000, A61F0013513000	(71)Name of Applicant:  1)J2LFA Co., Ltd Address of Applicant:701, MBC Academy Bldg, Baekjegobun-ro 9-gil 10, Songpa-gu, Seoul, 05562, Republic of Korea
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)LEE, Woo-Bok
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(55) 11		

#### (57) Abstract:

An absorbent article according to the present invention may comprise an absorbent pad 12, which includes: a wood pulp web 12b and a cotton-based nonwoven fabric 12a laminated on the wood pulp web 12b, wherein the nonwoven fabric 12a includes a valley part continuously formed on a surface thereof in a length direction and arranged at a predetermined interval in a width direction thereof. The absorbent article manufactured according to the present invention includes the absorbent pad layer 12 consisting of the cotton-based nonwoven fabric 12a, wherein the nonwoven fabric 12a includes the valley part continuously formed in the length direction and arranged at a predetermined interval in the width direction on the surface of the nonwoven fabric 12a in order to form channels C in the length direction of the absorbent pad 12, thereby effectively preventing leakage of the menstrual fluid or urine. Further, the absorbent article according to the present invention includes the wood pulp web 12b as well as the cotton-based nonwoven fabric 12a in the absorbent pad 12, thus to rapidly absorb the menstrual fluid or urine and safely keep the same therein.



(22) Date of filing of Application :27/12/2018

(43) Publication Date: 03/07/2020

#### (54) Title of the invention: METHOD AND SYSTEM FOR PREDICTING FAILURES IN SOFTWARE PROCESSES

(51) International classification	:H04N0019593000, G05B0023020000, H04W0088080000, G06F0003038000, G06F0011070000	(71)Name of Applicant:  1)Tata Consultancy Services Limited Address of Applicant: Nirmal Building, 9th Floor, Nariman Point, Mumbai - 400021, Maharashtra, India Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)VASUDEVAN, Bagya Lakshmi
(32) Priority Date	:NA	2)THAMBIDURAI, Grace Vanilla John
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

There is a demand for low-cost robust method for predicting failures from the software processes. This disclosure herein relates to method and system for predicting failures in software processes for improving downtime and to increase operational time. The method initially processes the received input data from the software processes using scanbot and determines a correlation factor corresponding to the input data indicating a failure alert. Further, using a predictor model, a failure prediction metrics corresponding to the input data is predicted based on a fault threshold range, a correlation factor and a reference database. The fault threshold range is determined dynamically for the input data based on the reference database in accordance with time drift. The proposed method predicts software processes failures thereby increasing the scalability, reducing cost and is capable of eliminating manual intervention reducing human errors thereby increasing performance efficiency.



(22) Date of filing of Application :27/12/2018 (43) Publication Date : 03/07/2020

#### (54) Title of the invention: METHOD AND SYSTEM FOR AN AUTOMATED COGNITIVE CREDIT EVALUATION

(51) International classification	:G06N0020000000, G06Q0050000000, G06Q0030020000, G06Q0010060000, G06F0015760000	(71)Name of Applicant:  1)Tata Consultancy Services Limited Address of Applicant: Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)MANDAL, Indrajit
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(F7) A1		-

#### (57) Abstract:

This disclosure relates generally to a system and method for an automated credit evaluation based on a cognitive digital platform to recommend a credit decision for lending a loan to a user. The system is configured to collect data from various sources as past financial transactions, wealth information, demographic related data, statutory compliance data, business performance data and social data. In order to improve the business efficiency, the data is collected via online APIs in a few seconds of time with a prior permission of the user. The collected data is utilized by machine learning and natural processing program algorithms for training machine learning models. A recommendation module based on the machine learning algorithms recommends to make personalized recommendations for each user application. The business decisions are taken by a cognitive digital platform that reduces the cost of operation and increases the scalability of business. [To be published with FIG. 2]



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: MECHANICAL DEVICE, AND METHOD OF USING THE SAME, FOR DRAWING ELLIPSES

(51) International classification	B43L0011055000, B43L0011045000,	(71)Name of Applicant:  1)Jasleen Kaur Arora Address of Applicant: 202, Granada-A, Fortaleza Co-operative Housing Society, Central Avenue, Opposite Gold Big Cinemas, Kalyani Nagar, Pune 411006, Maharashtra, India Maharashtra
(31) Priority Document No	:NA	India
(32) Priority Date	:NA	2)Paramjeet Singh Arora
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)Jasleen Kaur Arora
Filing Date	:NA	2)Paramjeet Singh Arora
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Disclosed herein is a device for drawing ellipses. Said device consists of two calibrated linear scales (02 and 03) held movably together by means of a gear assembly / tracing pinion (08). Freely rotatable nib / apex pits (05 and 07) are received respectively at the free ends of the scales (02 and 03). The gear assembly / tracing pinion (08) may be rotated by a user to thus translate along calibrations on scales (02 and 03) and thereby confirm major and minor axes of the ellipse to be drawn. The nib / apex pits (05 and 07) determine focal points of the ellipse to be drawn on the surface on which said ellipse is to be drawn. A drawing instrument may then be passed through central bore of the gear assembly / tracing pinion (08) to thus draw the desired ellipse.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

### (54) Title of the invention: LOW THERMAL CONDUCTIVITY ENVELOPS FOR NEW GENERATION BUILDINGS.

(51) International classification	:B82Y0030000000, C04B0028020000, C04B0028040000, C04B0016060000, E04C0002040000	(71)Name of Applicant:  1)MAHINDRA LIFESPACE DEVELOPERS LTD. Address of Applicant:5TH FLOOR, MAHINDRA TOWERS, ROAD NO 13, WORLI, MUMBAI- 400018, MAHARASHTRA, INDIA. Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)AMIT PAL
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

An improved building-envelop for constructing new generation buildings, comprising: a plurality of building blocks made of cellular light-weight concrete (CLC) containing nano-admixture consisting of surface treated carbon nanotubes with nanosized Ca, Fe, Si, ZnO added on-site or off-site into Cellular Light-weight Concrete (CLC) to form a cement matrix composite; said building blocks forming various building components for making the building-envelop according to the preconfigured building layout; a plurality of layers of coatings applied to the external sides of said building-envelop; and another plurality of layers of coatings applied to the internal sides of said building-envelop; wherein said nano admixture is mixed on-site or off-site to be thoroughly impregnated into said cellular light-weight concrete (CLC) to form a cement matrix composite having a higher flexural strength and compressive strength and increased interfacial interaction therebetween and thus reduces the crack propagation in said cement matrix used as a cement composite for making the building-envelop for new generation buildings. FIGURE 2.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: AN ARRANGEMENT FOR HOLDING AN ARTICLE IN A VEHICLE INTERIOR

(51) International classification	B60R0007040000, B60R0011000000, B25B0011000000,	(71)Name of Applicant: 1)FAURECIA INDIA PRIVATE LIMITED Address of Applicant: Plot No.T-187, Pimpri Industrial Area (B.G. Block), Behind Bhosari Police Station, Bhosari, Pune,
(31) Priority Document No	A61F0013020000 :NA	411026 MH. India Maharashtra India (72)Name of Inventor:
(32) Priority Date	:NA	1)JAIN, Chetan
(33) Name of priority country	:NA	2)PATHARKAR, Nikhil
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

The present invention is to provide an arrangement for holding an article in a vehicle interior. The arrangement includes a holder and at least a flexible member. The holder is for receiving and gripping the article. The flexible member is an elongated member having a first end that is connected with the holder and having a second end that is adapted to be locked with the holder. The flexible member is biased resiliently for holding articles of different sizes. Figure 3



(22) Date of filing of Application :28/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: AN AIRBAG ASSEMBLY FOR A VEHICLE

(51) International classification	B60R0021216500, B60R0021160000,	(71)Name of Applicant:  1)FAURECIA INDIA PRIVATE LIMITED  Address of Applicant: Plot No.T-187, Pimpri Industrial Area (B.G. Block), Behind Bhosari Police Station, Bhosari, Pune, 411026 MH. India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)RASHINKAR, Prashant
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention provides an airbag assembly 100 for a vehicle. The airbag assembly 100 is having a chute 10 and an airbag holder 20. Further, at least one tab 12a is extending from the chute 10. Furthermore, at least one engaging channel 22a is configured on at least one hook 24a. The least one hook 24a is extending from the airbag holder 20. The at least one hook 24a is passing through a hooking window 14a in the chute 10. The at least one tab 12a is extending towards the airbag holder 20 and directed towards the engaging channel 22a of the hook 24a for avoiding disengagement of the airbag holder 20 with the chute 10 when an airbag is deployed and also avoiding the wobbling motion therebetween during the airbag deployment. Figure 1



(22) Date of filing of Application :28/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: BALL PEN ON/OFF USING FLUID PRESSURE AT NOZZLE BODY

		(71)Name of Applicant:
	:G06F0003035400,	1)RAHUL KRISHNAJI BAWANE
	G01N0001280000,	Address of Applicant :FLAT-5, ANTHORIUM BUILDING,
(51) International classification	B43K0024080000,	SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507,
	B43K0007000000,	MAHARASHTRA, INDIA Maharashtra India
	E21B0034000000	2)AKSHAY SOPAN MAHALLE
(31) Priority Document No	:NA	3)ARYAN RAVINDRA PATANGE
(32) Priority Date	:NA	4)ANIMESH SARANGI
(33) Name of priority country	:NA	5)KRISHNA RAJENDRA KORE
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RAHUL KRISHNAJI BAWANE
(61) Patent of Addition to Application Number	er:NA	2)AKSHAY SOPAN MAHALLE
Filing Date	:NA	3)ARYAN RAVINDRA PATANGE
(62) Divisional to Application Number	:NA	4)ANIMESH SARANGI
Filing Date	:NA	5)KRISHNA RAJENDRA KORE
		6)NILIMA BALIRAM GADGE

#### (57) Abstract:

This innovation is based on a system for on / off ball pen using fluid pressure at nozzle body, said system have flexible grip filled with incompressible fluid thus when it is hold the pressure is applied on the fluid which slide out refill from the pen nozzle against the retracting spring, and when pressure is removed the retracting spring kick back the refill inside the nozzle thus pen if off and thus pen refill tip protected from any damage and flexible grip provide fluid cushioning to finger and the said system thus provided better fluid grip and enhance writing comfort.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: IMPLICIT SIGNAL BASED VIRTUAL ASSISTANT SYSTEM FOR AUTOMATIC QUESTION GENERATION, TASK PREDICTION AND SCHEDULING

(51) International classification	G06F0017270000, A61B0005110000,	(71)Name of Applicant:  1)ZENSAR TECHNOLOGIES LIMITED  Address of Applicant: ZENSAR KNOWLEDGE PARK, PLOT # 4, MIDC, KHARADI, OFF NAGAR ROAD, PUNE- 411014, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)KULKARNI, Sumant
(33) Name of priority country	:NA	2)NAMBIAR, Ullas Balan
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

IMPLICIT SIGNAL BASED VIRTUAL ASSISTANT SYSTEM FOR AUTOMATIC QUESTION GENERATION, TASK PREDICTION AND SCHEDULING • Methods and system for providing assistance to the user. The method includes capturing one or more user activities, generating one or more questions by analysing the user activities. The one or more questions are indicative of attributes of assistance required to the user. The method further includes determining one or more tasks based on the generated questions, prioritizing one or more determined tasks, and executing the tasks based on the priority thereby providing assistance to the user. [Fig. 3]



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: ALTERATION IN PAPER PUNCHING MACHINE TO STAPLE SIMULTANEOUSLY

		(71)Name of Applicant :
	:B25C0005020000,	
	G06F0011100000,	· ·
(51) International classification	H01L0029100000,	
(31) International classification		
	B42F0003000000,	MAHARASHTRA, INDIA Maharashtra India
	B26F0001160000	2)HRITHIK DILIP GHORPADE
(31) Priority Document No	:NA	3)SUDHANSHU AVINASH BHURE
(32) Priority Date	:NA	4)MANDAR VINOD NAIKWADI
(33) Name of priority country	:NA	5)PRATIK HARISHCHANDRA KULABKAR
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RAHUL KRISHNAJI BAWANE
(61) Patent of Addition to Application Numb	er:NA	2)HRITHIK DILIP GHORPADE
Filing Date	:NA	3)SUDHANSHU AVINASH BHURE
(62) Divisional to Application Number	:NA	4)MANDAR VINOD NAIKWADI
Filing Date	:NA	5)PRATIK HARISHCHANDRA KULABKAR
		6)NILIMA BALIRAM GADGE

#### (57) Abstract:

This innovation is based on providing a simultaneously punching and the stapling operation, in this a common handle is use to operate the punch for producing holes in the paper sheet and at the same time to operate the stapler to pierce the staple pin at the centre of the space between two punch holes, thus using this new and improve punching machine one can simultaneously punch and staple the paper to fastening together.



(22) Date of filing of Application :28/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: AN ALTERATION IN RULER TO DRAW PARALLEL LINE

		(71)Name of Applicant:
	:G06T0011600000,	1)RAHUL KRISHNAJI BAWANE
	H04L0012400000,	Address of Applicant :FLAT-5, ANTHORIUM BUILDING,
(51) International classification	G07F0011000000,	SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507,
	C12N0007000000,	MAHARASHTRA, INDIA Maharashtra India
	B43L0007000000	2)SAURABH PRAMOD SAHARE
(31) Priority Document No	:NA	3)BHARGAV CHANDRASHEKHAR PIMPARKAR
(32) Priority Date	:NA	4)ASHISH RAJARAM PAWALE
(33) Name of priority country	:NA	5)SNEHAL BHAGWAN THITE
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RAHUL KRISHNAJI BAWANE
(61) Patent of Addition to Application Numb	per:NA	2)SAURABH PRAMOD SAHARE
Filing Date	:NA	3)BHARGAV CHANDRASHEKHAR PIMPARKAR
(62) Divisional to Application Number	:NA	4)ASHISH RAJARAM PAWALE
Filing Date	:NA	5)SNEHAL BHAGWAN THITE
		6)NILIMA BALIRAM GADGE

#### (57) Abstract:

This innovation is based on providing a extensible parallel line ruler, in which one part of ruler matched with the parental line and the other part is extend out using calibrated extension arm to fix the offset distance, and using lock screw one can lock the offset distance during drawing parallel line using the other part of ruler, thus this innovation in alteration in ruler scale use to draw parallel line without error and get compact to carry easily.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: OFFSET DRILLING FIXTURE FOR DRILLING HOLE ON INCLINED SURFACE OF ANY OBJECT

		(71)Name of Applicant :
	:B23Q0003060000,	
	G06Q0010060000,	
(51) International classification	B23B0047280000,	SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507,
(e 1) International Glassification	B41F0016000000,	MAHARASHTRA, INDIA Maharashtra India
	E21B0047024000	2)NIKHIL RAJENDRA PATIL
(31) Priority Document No	:NA	3)SHRIKANT SANJAY RAJPUT
(32) Priority Date	:NA	4)AMITABH BHANUDAS SIRSAT
(33) Name of priority country	:NA	5)ANIKET BHIMRAO PATIL
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RAHUL KRISHNAJI BAWANE
(61) Patent of Addition to Application Numb	er:NA	2)NIKHIL RAJENDRA PATIL
Filing Date	:NA	3)SHRIKANT SANJAY RAJPUT
(62) Divisional to Application Number	:NA	4)AMITABH BHANUDAS SIRSAT
Filing Date	:NA	5)ANIKET BHIMRAO PATIL
		6)NILIMA BALIRAM GADGE

#### (57) Abstract:

This innovation is based on providing a fixture with facility of rotating job work to any angular position on calibrated angular scale, without removing the job work, and also this fixture provide a means to guide and support a drill during drilling operation on inclined surface, which eliminate addition work of spot facing required on inclined surface of any object when drill approaching, and at the same time the collate provide a circumferential grip to give more firm and rigid holding of job work without any gripping marks or spoiling surface finish.



(22) Date of filing of Application :28/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: READYMADE, LIGHT-WEIGHT BALCONY RAILINGS WITH FIBRE CEMENT PANELS.

(51) International classification	B28C0005400000, E04B0001000000,	· /
(31) Priority Document No	:NA	2)ASHOK B. LALL ARCHITECTS
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)AMIT PAL
(86) International Application No	:NA	2)PROF. ASHOK BEHARI LALL
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	r :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A readymade, light-weight balcony railing fitted with fibre cement panels, said balcony railing comprising: a prefabricated MS steel angle frame of predefined shape and size; and a plurality of fibre cement panels fitted in said steel frame on-site; wherein said fibre panel is provided with a plurality of uniformly arranged predefined fascia cut therein by means of machine-controlled water-jet process in predefined sizes according to the targeted balcony sizes. Each of said prefabricated balcony railing is assembled in the respective balcony by means of nut-bolt arrangement in a very quick and cost-effective manner. FIGURE 1.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: ROTATING LOCK RING AND FIXED SLIDER HOSE CLAMP

(51) International classification	:F16M0013020000, H01R0013627000, B29D0030060000, F16L0033030000, F16L0037084000	(71)Name of Applicant: 1)RAHUL KRISHNAJI BAWANE Address of Applicant:FLAT-5, ANTHORIUM BUILDING, SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507, MAHARASHTRA, INDIA Maharashtra India 2)ABHISHEK SUNIL VALLAL
(31) Priority Document No	:NA	3)SAKET VINAY SHINDIKAR
(32) Priority Date	:NA	4)SHREYAS GULAB WAGH
(33) Name of priority country	:NA	5)BHUPENDRA NARAYAN BANSHKAR
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	· /
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application		1)RAHUL KRISHNAJI BAWANE
Number	:NA	2)ABHISHEK SUNIL VALLAL
Filing Date	:NA	3)SAKET VINAY SHINDIKAR
<u>e</u>	.NT A	4)SHREYAS GULAB WAGH
(62) Divisional to Application Number	:NA	5)BHUPENDRA NARAYAN BANSHKAR
Filing Date	:NA	6)NILIMA BALIRAM GADGE

#### (57) Abstract:

This innovation is based on providing a mechanical system to provide the locking of the hose clamp, for this the rotating lock ring is rotated along with the inner profile ring whose profile is rested against the slider of the fixed knob, when profile slides over the slider it result in inward movement of profile ring and provide the clamping grip over the hose pipe and when the lock ring rotates clockwise then the pressure on the profile ring released and due to elastic in nature the profile ring restored its unlock position and thus hose clamp released the fitting.



(22) Date of filing of Application :28/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: PNEUMATIC PRESSURE OPERATED HOSE CLAMP

		(71)Name of Applicant :
	:A61B0017000000,	
	B05C0017015000,	Address of Applicant :FLAT-5, ANTHORIUM BUILDING,
(51) International classification	F16L0033030000,	SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507,
	B29C0063000000,	MAHARASHTRA, INDIA Maharashtra India
	F16L0033080000	2)ABHISHEK SUNIL VALLAL
(31) Priority Document No	:NA	3)ABHISHEK SUNIL MORE
(32) Priority Date	:NA	4)ANIKET ARUN THORAT
(33) Name of priority country	:NA	5)ADITYA GANPATRAO PHALKE
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RAHUL KRISHNAJI BAWANE
(61) Patent of Addition to Application Number	er:NA	2)ABHISHEK SUNIL VALLAL
Filing Date	:NA	3)ABHISHEK SUNIL MORE
(62) Divisional to Application Number	:NA	4)ANIKET ARUN THORAT
Filing Date	:NA	5)ADITYA GANPATRAO PHALKE
		6)NILIMA BALIRAM GADGE

#### (57) Abstract:

This innovation is based on providing a even pressure on especially soft and delicate hose pipe by using pneumatic pressure clamp which having a bellows to pump the air into the clamp and this air pressure used to expand the inner flexible lining and provide a firm grip without damaging the hose pipe, also the pressure relief valve used to control and limit the clamping pressure which avoid excess pressure on clamping, thus using pneumatic pressure operated hose clamp one can make a hose fitting easy and quick.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention : EXTENSIBLE SUN VISOR TO OBSTACLE SUN RAYS FROM THE CENTRE PORTION OF THE WIND SHIELD OF VEHICLE

		(71)Name of Applicant:
	:B60J0003020000,	1)RAHUL KRISHNAJI BAWANE
	B60J0001200000,	Address of Applicant :FLAT-5, ANTHORIUM BUILDING,
(51) International classification	B60J0003060000,	SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507,
	B62J0017040000,	MAHARASHTRA, INDIA Maharashtra India
	B65D0083040000	2)SHARVARI RAJENDRA PATIL
(31) Priority Document No	:NA	3)VISHAKHA VILAS SOLANKURE
(32) Priority Date	:NA	4)KIRTI GANPATI PATIL
(33) Name of priority country	:NA	5)RUTUJA RAJESH PARALIKAR
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RAHUL KRISHNAJI BAWANE
(61) Patent of Addition to Application Number	:NA	2)SHARVARI RAJENDRA PATIL
Filing Date	:NA	3)VISHAKHA VILAS SOLANKURE
(62) Divisional to Application Number	:NA	4)KIRTI GANPATI PATIL
Filing Date	:NA	5)RUTUJA RAJESH PARALIKAR
		6)NILIMA BALIRAM GADGE

#### (57) Abstract:

This innovation is based on providing a sliding type extensible sun visor, this sliding sun visor is attached to the drivers sun visor and can slide out to cover the middle open gap portion of the wind shield, and it cover the open gap and obstacle the sun rays to passed through the wind shield and strike on the drivers eyes to avoid disturbance to the drivers site, this sliding sun visor can be wind up by sliding in and bring it to the overlap position and can be hinged with the main sun visor of the drivers side and thus this invention can use to protect drivers eye site from the sun rays passing through the middle portion of the wind shield when ever needed.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention : MECHANICAL LINKAGE OPERATED MUDGUARD EXTENSION FOR TWO WHEELER MOTOR VEHICLE

		(71)Name of Applicant:
	:B62D0025160000,	1)RAHUL KRISHNAJI BAWANE
	B62D0025180000,	Address of Applicant :FLAT-5, ANTHORIUM BUILDING,
(51) International classification	E21B0017070000,	SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507,
	F16F0009020000,	MAHARASHTRA, INDIA Maharashtra India
	F16F0009180000	2)HIMANSHU TOSHPAL MAHAJAN
(31) Priority Document No	:NA	3)ANIKET NAGRALE
(32) Priority Date	:NA	4)PREM SUNIL NARKHEDE
(33) Name of priority country	:NA	5)SAMRUDDHI CHANDRAKANT SARDAR
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RAHUL KRISHNAJI BAWANE
(61) Patent of Addition to Application Numb	er:NA	2)HIMANSHU TOSHPAL MAHAJAN
Filing Date	:NA	3)ANIKET NAGRALE
(62) Divisional to Application Number	:NA	4)PREM SUNIL NARKHEDE
Filing Date	:NA	5)SAMRUDDHI CHANDRAKANT SARDAR
		6)NILIMA BALIRAM GADGE

#### (57) Abstract:

This invention is based on a system for extensible extraction of guard in addition to convention mudguard to catch the splashes when wheel goes into dig, there is provided a linkage system attached to the extensible guard and its outward movement is depends on the inward movement of telescopic shock absorber, as the wheels pass through any dig, for absorbing shock the telescopic absorber piston rod moves inward, this movement pushes extensible guard outward and extend the length of mudguard and collect splashes from wheel, on normal condition linkages keep this extensible guard behind the main mudguard so that additional drag force is avoided.



(22) Date of filing of Application :28/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: NON-NEWTONIAN FLUID SHOE CUSHIONING AND SHOCK ABSORBING

		(71)Name of Applicant:
	:A43B0013180000,	1)RAHUL KRISHNAJI BAWANE
	C08G0018400000,	Address of Applicant :FLAT-5, ANTHORIUM BUILDING,
(51) International classification	A42B0003120000,	SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507,
	A43B0013200000,	MAHARASHTRA, INDIA Maharashtra India
	G02F0001152300	2)PIYUSH RAVINDRA VITTHALDAS
(31) Priority Document No	:NA	3)VEDANT RAVINDRA WALADKAR
(32) Priority Date	:NA	4)RONIT GANESH PAWAR
(33) Name of priority country	:NA	5)AYUSH SACHINKUMAR CHORDIYA
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RAHUL KRISHNAJI BAWANE
(61) Patent of Addition to Application Numb	er:NA	2)PIYUSH RAVINDRA VITTHALDAS
Filing Date	:NA	3)VEDANT RAVINDRA WALADKAR
(62) Divisional to Application Number	:NA	4)RONIT GANESH PAWAR
Filing Date	:NA	5)AYUSH SACHINKUMAR CHORDIYA
		6)NILIMA BALIRAM GADGE

#### (57) Abstract:

This invention is based on use of Non-Newtonian fluid in the shoe sole for the cushioning and shock absorption, specially Oobleck, which is a cornflour and water mixture, initially behaves like a liquid or a jelly, however, when gradual force is applied it behaves like a semi-solid material and absorbed shock by displace the fluid to other side in the pocket which enhance the comfort to the foot, but when sudden force is applied then non-Newtonian fluid become more denser and harder than semi-solid and absorbed the shock, thus the shoe with non-Newtonian fluid provides the good shock absorbing as well as enhance the comfort to the foot.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: GENERATION OF ELECTRICAL ENERGY USING PIEZOELECTRIC CELL ON BICYCLE PEDALS

(71)Name of Applicant:  1)RAHUL KRISHNAJI BAWANE Address of Applicant: FLAT-5, ANTHORIUM BUILDING, SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507, MAHARASHTRA, INDIA Maharashtra India  2)SOURAV DATTATRAY ZENDE  3)GAURAV RAJU PATIL 4)SHRIKANT SANJAY RAJPUT 5)RUSHIKESH RAJENDRA WAGH 6)NILIMA BALIRAM GADGE (72)Name of Inventor: 1)RAHUL KRISHNAJI BAWANE 2)SOURAV DATTATRAY ZENDE 3)GAURAV RAJU PATIL 4)SHRIKANT SANJAY RAJPUT 5)RUSHIKESH RAJENDRA WAGH
4)SHRIKANT SANJAY RAJPUT 5)RUSHIKESH RAJENDRA WAGH 6)NILIMA BALIRAM GADGE
S

#### (57) Abstract:

This innovation is based on providing a piezoelectric cell arrangement on the bicycle pedals so that when a rider applies force on the pedal to propel the bicycle the mechanical stresses applied on the piezoelectric cell generates the piezoelectric energy which then after rectifies and stored in a battery, these stored energy then after may be used for head lamp for illumination, operating radio or charging a mobiles etc., thus using no external power sources electrical / electronics devices can be operated by recovering riders mechanical force energy.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : COPASSENGER WEIGHT SENSING AUTOMATIC OPENING AND CLOSING FOOT REST OF BIKE

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number</li> </ul>	:A61G0005120000, B60N0003060000, E05F0015410000, A61G0005100000 :NA :NA :NA :NA :NA :NA	Address of Applicant: FLAT-5, ANTHORIUM BUILDING, SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507, MAHARASHTRA, INDIA Maharashtra India  2)ANIKET BHIMRAO PATIL  3)SIDDHESH JALINDAR JAGTAP  4)ABHISHEK RAMDAS TONDE  5)KARBASAPPA KAMANNA UMADI  6)NILIMA BALIRAM GADGE  (72)Name of Inventor:  1)RAHUL KRISHNAJI BAWANE  2)ANIKET BHIMRAO PATIL
Number	:NA :NA	3)SIDDHESH JALINDAR JAGTAP
Filing Date (62) Divisional to Application Number Filing Date	:NA :NA	4)ABHISHEK RAMDAS TONDE 5)KARBASAPPA KAMANNA UMADI 6)NILIMA BALIRAM GADGE

#### (57) Abstract:

This innovation is based on providing a system which senses the load of the co-passenger by using the load sensor and thus a signal send to programmed power supply base which send the corresponding electrical pulse to the DC motor, the said DC motor then convert the electrical pulse into mechanical work in terms of rotation of shaft in particular direction which moves foot rest in outward direction and thus foot rest open to rest the riders foot, when DC motor received opposite programmed electrical pulse then it rotates in opposite direction and move the foot rest inward to closing position, thus this system provide automatic opening and closing of foot rest of two wheeler / bikes by sensing co-passenger weight.



(22) Date of filing of Application :28/12/2018 (43)

(43) Publication Date: 03/07/2020

# (54) Title of the invention: TIRE WEAR OUT WARNING VISUAL INDICATOR

		(711N)
		(71)Name of Applicant :
	:B60C0011240000,	1)RAHUL KRISHNAJI BAWANE
	B29D0030060000,	Address of Applicant :FLAT-5, ANTHORIUM BUILDING,
(51) International classification	G06Q0040080000,	SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507,
	G01M0017020000,	MAHARASHTRA, INDIA Maharashtra India
	B32B0027200000	2)AKSHAY RAJU RASKAR
(31) Priority Document No	:NA	3)SHRIKANT SANJAY RAJPUT
(32) Priority Date	:NA	4)OMKAR VIJAY SALUNKE
(33) Name of priority country	:NA	5)TEJAS SUNIL PAWAR
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RAHUL KRISHNAJI BAWANE
(61) Patent of Addition to Application Numb	er:NA	2)AKSHAY RAJU RASKAR
Filing Date	:NA	3)SHRIKANT SANJAY RAJPUT
(62) Divisional to Application Number	:NA	4)OMKAR VIJAY SALUNKE
Filing Date	:NA	5)TEJAS SUNIL PAWAR
		6)NILIMA BALIRAM GADGE

## (57) Abstract:

This innovation is based on providing a color layer in the tire at a certain depth of the tire grooves beyond which if wear is exceed then tire does not provide the sufficient grip on road and get skidded and also there is a power loss because of less in traction, the system only visually indicate the time for replacement of tire when wear is exceed the certain limit, the system may incorporate the different color layer at different depth of tire grooves to show the severity of the tire wear and intern the tire life.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention: HAND HELD STAPLER WITH STAPLER LOCK

		(71)Nome of Amiliant.
		(71)Name of Applicant :
	:B25C0005020000,	1)RAHUL KRISHNAJI BAWANE
	B41J0002140000,	Address of Applicant :FLAT-5, ANTHORIUM BUILDING,
(51) International classification	A61B0017290000,	SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507,
	B42C0001120000,	MAHARASHTRA, INDIA Maharashtra India
	B42B0004000000	2)PUNEET DINESH SINGH
(31) Priority Document No	:NA	3)UDDESHYA AMAL RAJ
(32) Priority Date	:NA	4)PRAVIN HARIDAS PAWAR
(33) Name of priority country	:NA	5)PUSHKAR CHANDRASHEKHAR PATIL
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RAHUL KRISHNAJI BAWANE
(61) Patent of Addition to Application Number	er:NA	2)PUNEET DINESH SINGH
Filing Date	:NA	3)UDDESHYA AMAL RAJ
(62) Divisional to Application Number	:NA	4)PRAVIN HARIDAS PAWAR
Filing Date	:NA	5)PUSHKAR CHANDRASHEKHAR PATIL
		6)NILIMA BALIRAM GADGE

## (57) Abstract:

This invention is based on providing a hinged type stapler lock to the stapler which can be rotates to cover or uncover the stapler pin ejection port, in the regular stapler hammer is always in operative position which may cause ejection of staples pin unknowingly and result in injury, thus to safeguard it, the stapler lock is made hinged so that wherever not in used one can rotate the lock to the position which cover the stapler pin ejection port to block the staple pin from ejection so stapler become inoperative, which does not eject staples pin even if handle is pressed and when needed then stapler lock rotate at hinged to uncover the stapler pin ejection port so now the pressure applied on handle eject the staples pins for stapling the bunch of papers, thus the conventional hand held stapler is modified to make it operative or inoperative as needed to make it more safer when handled.



(22) Date of filing of Application :28/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: A COMPASS ATTACHMENT FOR DRAWING CIRCLE

		(71)Name of Applicant :
	:B43L0011000000,	1)RAHUL KRISHNAJI BAWANE
	B43L0009240000,	Address of Applicant :FLAT-5, ANTHORIUM BUILDING,
(51) International classification	A61H0001020000,	SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507,
	B43L0009020000,	MAHARASHTRA, INDIA Maharashtra India
	B43L0009000000	2)ASHISH RAJARAM PAWALE
(31) Priority Document No	:NA	3)SAURABH PRAMOD SAHARE
(32) Priority Date	:NA	4)DHIRAJ RAGHO PATIL
(33) Name of priority country	:NA	5)SIDDHARTH RAJARAM WABLE
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RAHUL KRISHNAJI BAWANE
(61) Patent of Addition to Application Number	er:NA	2)ASHISH RAJARAM PAWALE
Filing Date	:NA	3)SAURABH PRAMOD SAHARE
(62) Divisional to Application Number	:NA	4)DHIRAJ RAGHO PATIL
Filing Date	:NA	5)SIDDHARTH RAJARAM WABLE
		6)NILIMA BALIRAM GADGE

## (57) Abstract:

This innovation is based on providing an attachment for drawing an arc or circle without using any drawing instrument compass, for this an attachment having one fixed housing attached to pen and other end attached to pencil and lock with the lock screw and then using pivoted point one can vary the distance to draw an arc of the required radius, thus using this attachment one can replace the use of conventional drawing instrument compass.



(22) Date of filing of Application :28/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: AUTOMATIC BIKE PASSING HIGH AND LOW BEAM SIGNAL

		(71)Name of Applicant :
	:B60Q0001140000,	1)RAHUL KRISHNAJI BAWANE
	B60Q0001080000,	Address of Applicant :FLAT-5, ANTHORIUM BUILDING,
(51) International classification	B60Q0001240000,	SWARAJNAGARI, TALEGAON DABHADE, PUNE-410507,
	B60Q0001260000,	MAHARASHTRA, INDIA Maharashtra India
	B62J0006020000	2)DEVESH RAKESHBHAI PATEL
(31) Priority Document No	:NA	3)SAKSHI ASHOK PALHADE
(32) Priority Date	:NA	4)SHUBHAM PRASAD CHAUDHARI
(33) Name of priority country	:NA	5)VINAYAK PRADEEP SONAWANE
(86) International Application No	:NA	6)NILIMA BALIRAM GADGE
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)RAHUL KRISHNAJI BAWANE
(61) Patent of Addition to Application Numb	er:NA	2)DEVESH RAKESHBHAI PATEL
Filing Date	:NA	3)SAKSHI ASHOK PALHADE
(62) Divisional to Application Number	:NA	4)SHUBHAM PRASAD CHAUDHARI
Filing Date	:NA	5)VINAYAK PRADEEP SONAWANE
		6)NILIMA BALIRAM GADGE

## (57) Abstract:

This innovation is related to provision of a mechanism to make automatic pass signal by shifting high beam to low beam by detecting opposite side vehicle head lamp illumination, in this system a light beam detector senses the opposite side vehicle illumination and accordingly the electronic control unit generate the signal to actuate the shifting mechanism from high beam to low beam automatically to give the pass signal to the opposite side vehicle at night riding, when the vehicle is pass then resume the high beam illumination automatically again, thus the night driving visibility is enhanced and eliminate the human interference to operate the knob of pass signal and high and low beam of bike for better driving experience.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : METHOD AND SYSTEM FOR DATA ANALYSIS FOR GENERATING RESOURCE OPTIMIZATION RECOMMENDATIONS DURING CITY PLANNING

(51) International classification	G06Q0050060000, A61B0005055000, A61B0034100000, H04Q0009020000	(71)Name of Applicant:  1)Tata Consultancy Services Limited Address of Applicant: Nirmal Building, 9th Floor, Nariman Point, Mumbai - 400021, Maharashtra, India Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)PANDA, Jyoti Sankar
(32) Priority Date	:NA	2)SWAIN, Debiprasad
(33) Name of priority country	:NA	3)CHOUDHURY, Saroj Kumar
(86) International Application No	:NA	4)GANGWAR, Sachin
Filing Date	:NA	5)DASH, Hemanta Kumar
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

In any city, there are multiple resources that are integral components of the city. For example, water, electricity, transport and so on. Urban planning involves planning all such sources, which may be difficult to do manually considering amount of data processing required. The disclosure herein generally relates to city planning systems, and, more particularly, to generating recommendations for city planning using a city planning system (referred to as "systemTM hereafter). The system collects data pertaining to a current city model, and one or more reference city models as input. In response to a user request for performing resource optimization, the system, by processing the current city model, the one or more reference city models, and one or more real-time data collected, generates one or more recommendations for resource optimization. The system also determines by processing the data, a future demand for any or all of the resources.



(22) Date of filing of Application :28/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: A STAIRWAY ARRANGEMENT FOR A COMPARTMENT OF A PASSENGER VEHICLE

(51) International classification	:B65D0071360000, E04F0011060000, B65D0075000000, A47J0027040000, E01D0015240000	(71)Name of Applicant:  1)RELIANCE INDUSTRIES LIMITED  Address of Applicant: 3rd Floor, Maker Chamber-IV, 222,  Nariman Point, Mumbai 400 021, Maharashtra, India  Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)TILAK DEEPAK ROY
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(55) 11		I

#### (57) Abstract:

The present disclosure discloses a stairway arrangement (202) for a compartment (100) of a passenger vehicle. The stairway arrangement comprises at least one composite wall (104) configured to divide the compartment into plurality of cabins. The at least one composite wall extends from a floor (204) to an upper portion of the compartment defining an inclination. A plurality of steps (103) are connected along the inclination of the at least one composite wall, wherein the plurality of steps form a stairway to access one or more upper berths in the compartment. The inclination of the plurality of steps with the profile of the composite wall makes the passageway spacious. Further, the inclination of the plurality of steps enables ease of accessing the one or more upper berths. FIG.1 is a representative figure.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : A SYSTEM AND A METHOD FOR HEAD MOUNTED DEVICE BASED AUGMENTED ARTIFICIAL INTELLIGENCE (AI) BOT

(51) International classification	:G06T0019000000, G02B0027010000, G06N0003000000, G06F0003010000, A63F0013212000	(71)Name of Applicant:  1)DIMENSION NXG PRIVATE LIMITED  Address of Applicant: Dimension NXG, 410 & 411, 4th floor, Arcadia, Hiranandani Estate, Thane West- 400607, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Pankaj Raut
(33) Name of priority country	:NA	2)Abhijit Patil
(86) International Application No	:NA	3)Abhishek Tomar
Filing Date	:NA	4)Suraj Kumar Choudhary
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT A SYSTEM AND A METHOD FOR GENERATING A HEAD MOUNTED DEVICE BASED AUGMENTED ARTIFICIAL INTELLIGENCE (AI) BOT A method for generating an Artificial Intelligence (AI) bot comprises the steps of receiving (210) information of a human (3102), indicative of the physical characteristics including an appearance and vocals of the human (3102) and behavioural characteristics of the human (3102), analysing (220) the information for identifying and mimicking the vocals of the human (3102), analysing (230) the information for identifying and imitating the appearance of the human (3102), generating (240) the AI bot having the appearance of the human (3102) in a mixed reality space, processing and merging (250) the identified physical characteristics and the behavioural characteristics into the AI bot, displaying (260) the AI bot having physical characteristics and the behavioural characteristics of the human (3102) using the HMD (102), enabling (270) an interaction of the AI bot with users in the mixed reality space, thereby enabling the omnipresence of the human (3102). [FIGURE 2]



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention: A VEHICLE BODY SIDE STRUCTURE

(51) International classification	:B62D0025020000, B62D0025080000, B62D0025040000, B60J0005040000, B62D0029000000	(71)Name of Applicant: 1)Tata Motors Limited Address of Applicant: Bombay House, 24 Homi Mody Street, Hutatma Chowk, Mumbai - 400001, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)KSHIRSAGAR, Sarang Suresh
(33) Name of priority country	:NA	2)MUTHA, Chetan Anand
(86) International Application No	:NA	3)RAYJADE, Prashant Ramdas
Filing Date	:NA	4)BHAWSAR, Sachin Kumar
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

Disclosed is a vehicle body side structure of a vehicle. In one embodiment, the vehicle body side structure comprises an inner structural panel, an outer structural panel assembled with the inner structural panel to form the vehicle body side structure. Further, the outer structural panel comprises a front body panel surrounding a front door aperture of the vehicle and a rear skin panel forming the rear half of the rear door aperture of the vehicle. The front body panel and the rear skin panel are joint using a joinery. Further, the joint comprises an upper joint located on the upper end of the rear door aperture and a lower joint located on the lower end of the rear door aperture. Furthermore, an upper joint comprises 1 to 5 mating surface and wherein a lower joint comprises 1 to 3 mating surfaces.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : UNSUPERVISED REPRESENTATION LEARNING BY DEEP CONVOLUTION AUTOENCODER FOR IMAGE CLUSTERING

	:G06K0009620000,	(71)Name of Applicant:
	G06K0009460000,	1)Tata Consultancy Services Limited
(51) International classification	G06N0003080000,	Address of Applicant :Nirmal Building, 9th Floor, Nariman
	G06F0016583000,	Point Mumbai 400021 Maharashtra, India Maharashtra India
	G06F0016350000	(72)Name of Inventor:
(31) Priority Document No	:NA	1)DAS, Dipanjan
(32) Priority Date	:NA	2)BHOWMICK, Brojeshwar
(33) Name of priority country	:NA	3)GHOSH, Ratul
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application	:NA	
Number	:NA	
Filing Date	.11/1	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
7.7.		

#### (57) Abstract:

Despite significant advances in clustering methods in recent years, the outcome of clustering of a natural image dataset is still unsatisfactory due to need of a good feature representation of an image and a method for discriminating these features to different clusters such that intra-class variance is less and inter-class variance is high. Often these two are dealt with independently and thus features are not sufficient enough to partition data meaningfully. Embodiments of the present disclosure provide systems and methods that implement a Deep Convolutional Autoencoder to discover these features required for separation of images into various clusters, wherein image representation features are learnt automatically for clustering, wherein a coherent (positive) image and an incoherent/negative image are simultaneously selected for a given image for learning better discriminative features to group similar images in a cluster and at the same time separating dissimilar images across clusters.



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : METHOD AND SYSTEM FOR AUTOMATICALLY RENDERING AN ADVERTISEMENT IMAGE OVER A MEDIA CONTENT

(51) International classification	:G06Q0030020000, H04N0021810000, H04N0021440000, H04L0029080000, H04N0021258000	(71)Name of Applicant:  1)Tata Consultancy Services Limited    Address of Applicant: Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)PEDANEKAR, Niranjan
(32) Priority Date	:NA	2)SIVAPRASAD, Sarath
(33) Name of priority country	:NA	3)SAXENA, Rohit
(86) International Application No	:NA	4)AGRAWAL, Rishabh
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Nowadays, advertisements are placed in the video which may be distracting and at the same time might disturb the aesthetic appeal of the both the video and advertisement. The stylized logo rendering requires specific skill set and it consumes a lot of time and effort. A method and system for automatically rendering an advertisement image over a media content such as a video file has been provided. The method and system analyses the input media content and identifies the regions appropriate for stylized ad placement. Such regions are selected on the basis of multiple factors, viz. amount of motion, context, aesthetics, area available for ad placement etc. Once such regions are selected, candidate ads are determined on the basis of context and aesthetic considerations. These ads are then rendered over the video automatically at the same time maintaining the aesthetic appeal of the media content. To be published with FIG.1



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : FEATURES SEARCH AND SELECTION TECHNIQUES FOR SPEAKER AND SPEECH RECOGNITION

(51) International classification	:G06K0009000000, G10L0015020000, G10L0015200000, G10L0021020800, G10L0017020000	(71)Name of Applicant:  1)Tata Consultancy Services Limited Address of Applicant: Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)PANDA, Ashish
(32) Priority Date	:NA	2)KOPPARAPU, Sunilkumar
(33) Name of priority country	:NA	3)JOSHI, Sonal Sunil
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(57) A1		·

#### (57) Abstract:

With recent real-world applications of speaker and speech recognition systems, robust features for degraded speech have become a necessity. In general, degraded speech results in poor performance of any speech-based system. This poor performance can be attributed to feature extraction functionality of speech-based system which takes input speech file and converts it into a representation called as a feature. Embodiments of the present disclosure provide systems and methods that compute distance between each degraded speech feature extracted from an input speech signal with each clean speech feature comprised in a memory of the system to obtain set of matched clean speech features wherein at least a subset of cleaned speech features are dynamically selected based on a pre¬defined threshold and the computed distance, thereby computing statistics for the dynamically selected clean speech features set for utilizing in at least one of a speech recognition system and a speaker recognition system.



(22) Date of filing of Application :28/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: A SYSTEM FOR CLEANING A PANEL

(51) International classification	:G11B0007085000, D06G0001000000, B23Q0017220000, F16H0007020000, G09F0011020000	(71)Name of Applicant:  1)MAHINDRA & MAHINDRA LIMITED  Address of Applicant: Gateway Building Apollo Bunder  Mumbai - 400001 Maharashtra, India, Maharashtra India  (72)Name of Inventor:
(31) Priority Document No	:NA	1)KIRAN G. SOMAN
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

The present invention provides a system (100) for wet and dry cleaning of a panel. The system (100) comprises: a movable frame (110) comprising a main shaft (120) with bristles (X) rotatably mounted within the movable frame (110), at-least one secondary shaft (130) rotatably mounted parallel to the main shaft (120), and plurality of wheels (102), whereby the main shaft (120) and the secondary shaft (130) is driven by a single motor unit. The main shaft (120) with bristles (X) forms a rotary brush like device enabling the system (100) to remove articles deposited on the panel. The system (100) also comprises a washing unit (160) for washing away any articles deposited on the panel. (Ref. Fig. 1)



(22) Date of filing of Application :28/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention: AN EFFICIENT ONION ROOT AND LEAF REMOVAL DEVICE WITH MINIMUM SKIN DAMAGE.

(51) International classification	:A23N0015080000, A01D0027040000, A01D0027000000, H01L0021673000, E03F0009000000	(71)Name of Applicant:  1)Yogesh Uttam Kale Address of Applicant: At- Kalewadi, Post- Naravane, Tal- Man, Dist-Satara 415540 Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Yogesh Uttam Kale
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
Filing Date	:NA	

### (57) Abstract:

Absract- An onion root and leaf removal device having a hopper tray (2), first orientation rods (3) mounted on the hopper tray, multiple v-wall channels (4) to receive onions through the first orientation rods, slope adjustment support rods (6) engaged with v-wall channels, a vibrating system (7) attached to the hopper and channels, an onion transport system (9), a root removal system (11), a leaf or stalk removal system (12) and a separator (13), wherein the improvement comprises an efficient vibration transfer from the vibrating system (7) to the v-wall channels (4) via the support rods (6); a second orientation mechanism (10), in the form of a friction member (101) to tilt the onion while travelling on the onion transport system (9); and a root cutting operation itself negating the tilt caused by the second orientation mechanism (10).



(22) Date of filing of Application :29/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: SYSTEM AND METHOD OF TRANSPARENT FUEL DISPENSER

(51) International classification	B67D0007220000, B67D0007040000,	· ·
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)RAHULKUMAR DASHRATHBHAI PATEL
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

Abstract SYSTEM AND METHOD OF TRANSPARENT FUEL DISPENSER • The present invention relates to a system and method of dispensing fuel comprising of transparent container and measurement scale. The fuel dispensing process is visible to the consumer due to transparent container and measurement scale which maintain the quantity and quality of fuel respectively. The fuel-dispensing system performs to maintain hydraulic continuity, to regulate the direction of flow and fluid pressure, metering the liquid fuel, registering accurately the quantity delivered, and computing the price of the delivery as well as it serves to control the operation of the system, switching it on and off, resetting the volume and price indicators, regulating the delivery. The present invention provides reliability between consumer and owner. The present invention also restricts the cheating, stealing while dispensing the fuel in automobiles.



(22) Date of filing of Application :29/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: HOMEOPATHIC MEDICAMENT USEFUL FOR IMMUNOMODULATION

(51) International classification	:A61K0036220000, A61K0036280000, A61K0036030000, A61K0036110000, A61K0031185000	(71)Name of Applicant:  1)DR. RAJ HOMEO PHARMACY  Address of Applicant: 25 SHRI KRUPA INDUSTRIAL  ESTATE DHAMATVAN UNDREL ROAD DASKROI  AHMEDABAD - 382465 GUJARAT INDIA Gujarat India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)DR. ROBERT PIRAINO
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT HOMEOPATHIC MEDICAMENT USEFUL FOR IMMUNOMODULATION The present invention provides a Homeopathic immunomodulator medicament, in the treatment of the immunomodulator/ immune balance, an immune-therapy named as ~CANOVA • . It contains the immunology Formula: Aconitum napellus 20X, Apis mellifica 19X, Arsenicum album 17X, Asafoetida 20X, Baryta carbonica 20X, Bryonia alba 14X, Calcarea carbonica 20X, Conium maculatum 16X, Ipecacuanha 13X, Lachesis muta 18X, Lycopodium clavatum 20X, Pulsatilla nigricans 13X, Rhus Toxicodendron 17X, Ricinus communis 14X, Silicea 18X, Thuya occidentalis 16X, Veratrum album 20X. Further, it has the potency of enhancing or suppressing immunity and provides symptomatic relief in many diseases like upper or lower respiratory infections such as common cold, soar throat, tonsillitis, sinusitis, allergic bronchitis, allergic rhinitis, cough, asthma, allergies from dust or pollution, skin allergies, food allergies, any skin diseases like dermatitis and others, dengue, chikungunya, zika virus, any nutritional deficiencies, indigestion, liver problem, diabetes, rheumatism, arthritis, gout, sciatica, pediatrics, gives relief from the symptoms caused due to cancer, HIV, autoimmune diseases, sexually transmitted diseases, urinary track infections, tuberculosis, psoriasis, HPV, Herpes, and all other conditions with a weakened immune system and immune response. The present invention of CANOVA is not just for curing the symptoms but also effective for healthy people in the prevention of any viral bacterial and fungal infections, inflammation, and/or tumors in the body and enhances the quality of life • .

(22) Date of filing of Application :29/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: AN AUTONOMOUS VEHICLE

(51) International classification	:G06F0016953500, H04N0019910000, H04W0036140000, G06F0003038000, H04N0021437000	· ·
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)KULKARNI, Sumant
(33) Name of priority country	:NA	2)NAMBIAR, Ullas Balan
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numl	per:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

AN AUTONOMOUS VEHICLE The present invention relates to a method which comprises capturing at least one of audio data and video data in an environment. The method also comprises processing the at least one captured audio data and video data to determine at least one context in the environment. The processing of the at least one captured audio data and video data comprises extracting one or more parameters from the at least one captured audio data and video data and comparing the extracted one or more parameters with one or more predefined parameters related to the at least one context in the environment. The at least one context comprises at least one of an undesirable human activity, a misplaced object and a suspicious object. The method further comprises generating an output signal in response to the determination of the at least one context. [Fig. 2]



(22) Date of filing of Application :29/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A SYSTEM AND METHOD FOR CONTEXT BASED CONTENT RETRIEVAL IN AN ONLINE VIDEO STREAMIG

K, IE-

#### (57) Abstract:

ABSTRACT A SYSTEM AND METHOD FOR CONTEXT-BASED CONTENT RETRIEVAL IN ONLINE VIDEO STREAMING Disclosed is a system and a method for context-based content retrieval in online video streaming. The processor (201) is configured for receiving a streaming video. The processor (201) is configured for transforming raw data obtained from an imagery in one or more scenes in the streaming video into structured data. The processor (201) is configured for identifying an object and/or event of interest from the structured data in order to determine a context of the one or more scenes in the streaming video. The processor (201) is configured for fetching a relevant media content based on context of the streaming video. The processor (201) is configured to displaying the relevant media content in the streaming video on a user device associated with a user. [To be published with Figure 1]



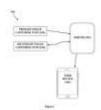
(22) Date of filing of Application :29/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: A REAL-TIME EVENT MONITORING AND ALERTING SYSTEM AND METHOD THEREOF

(51) International classification	G06Q0010100000, H04W0004020000,	· ·
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)MUNIRAJ, Vijay Ramanagar
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT A REAL-TIME EVENT MONITORING AND ALERTING SYSTEM AND METHOD THEREOF Discloses is a real-time event monitoring and alerting system. A server (101) may receive a visual media from a primary image capturing unit (102) based upon occurrence of an event at the location. and alert a secondary image capturing unit (103) to capture a supplementary visual media associated to the visual media. The secondary image capturing unit (103) may capture and perform partial analysis of the supplementary visual media and send it to the server (101). The server (101) may then perform comprehensive analysis of the visual media received from the primary (102) and secondary image capturing unit (103). The server (101) may determine type of event occurred at the location based upon the comprehensive analysis step. The server (101) may then transmit an alert notification to a user device (104) for assisting a concerned user to take appropriate action in response to the event determined at the location. [To be published with Figure 1]



(22) Date of filing of Application :29/12/2018

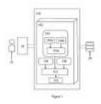
(43) Publication Date: 03/07/2020

## (54) Title of the invention: A SYSTEM FOR CLIENT SENTIMENT PROFILING AND A METHOD THEREOF

(51) International classification	G06Q0010060000, G06F0016953500, G06F0016000000, G06F0017240000	(71)Name of Applicant:  1)ZENSAR TECHNOLOGIES LIMITED  Address of Applicant: ZENSAR KNOWLEDGE PARK, PLOT # 4, MIDC, KHARADI, OFF NAGAR ROAD, PUNE- 411014, MAHARASHTRA, INDIA Maharashtra India (77)Name of Inventor:
(31) Priority Document No (32) Priority Date	:NA :NA	(72)Name of Inventor: 1)KISHORE, Sandeep
(33) Name of priority country	:NA	2)DESHPANDE, Aditya Nitin
(86) International Application No	:NA	3)SARAWAGI, Nishant Sanjay
Filing Date	:NA	4)BANKA, Rohit
(87) International Publication No	: NA	5)GUPTA, Shivam Ashokkumar
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT A SYSTEM FOR CLIENT SENTIMENT PROFILING AND A METHOD THEREOF The present disclosure relates to the field of data analysis and discloses a system (100) and a method (200) for sentiment profiling of key executives within a client organization into a plurality of categories. The system (100) comprises a server (102) configured to receive an input note associated with a client meeting from a user (10) via a user interface (20) and prior meeting notes and internal and external survey results from a client database (30). The server (102) comprises a keyword-based scoring engine (104), an internal survey based scoring engine (106), and an external survey based scoring engine (108) which generate first, second and third scores respectively based on meeting notes, input note, and internal and external survey results. A profiling module (110) performs summation of the received scores to generate a sentiment profile of each of the key executives.



(22) Date of filing of Application :29/12/2018

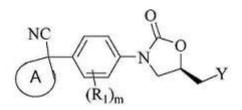
(43) Publication Date: 03/07/2020

# (54) Title of the invention: NOVEL COMPOUNDS FOR THE TREATMENT OF MAMMALIAN INFECTIONS •

(51) International classification	:A61K0031496000, C07D0413140000, C07D0493040000, A61K0031474500, C07D0491180000	(71)Name of Applicant:  1)CADILA HEALTHCARE LIMITED  Address of Applicant: Zydus Tower, Satellite Cross Roads, Ahmedabad 380015, Gujarat, India Gujarat India (72)Name of Inventor:
(31) Priority Document No	:NA	1)DESAI, Ranjit
(32) Priority Date	:NA	2)PANDYA, Vrajesh
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTARCT Novel compounds for the treatment of mammalian infection Present invention relates to compounds of formula (I), their stereoisomers, tautomers and pharmaceutically acceptable salts. Present invention also relates to process for the preparation of compounds of formula (I). Further, these compounds are directed to use for treating tuberculosis infection. Formula (I)



Formula (I)

(22) Date of filing of Application :29/12/2018

(43) Publication Date: 03/07/2020

## (54) Title of the invention: METHOD FOR DETECTING AND CLASSIFYING DISTURBANCE IN POWER TRANSFORMER

(51) International classification	:G01R0031020000, G01R0031340000, G01R0031080000, H01F0027400000, G01V0001300000	(71)Name of Applicant: 1)Shamal Mithil Kalambe Address of Applicant: Uttam nagar lane no. 1 Near bhim tekadi area, yashayah nagar bypss road, Amravati.444606 Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Shamal Mithil Kalambe
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Present invention relates to a method to detect and classify disturbance in power transformer. The method uses wavelet based disturbance detector in order to detect any disturbance related to a power transformer, whereas a neural network based routine is used to classify the disturbance type (internal fault, external fault and transformer energization) appropriately, as well as to classify the internal faults. Several events were simulated, such as external and internal faults, with variations of fault resistance, fault inception angle, and fault type parameters, as well as transformer energizations. The method presented an excellent success rate regarding the correct classification of the disturbance as well as an accurate fault classification. Following invention is described in detail with the help of Figure 1 of sheet 1 showing generalized ANFIS architectural model, Figure 2 of sheet 1 showing working flow diagram and Figure 3 of sheet 2 showing working flow chart of the invention.

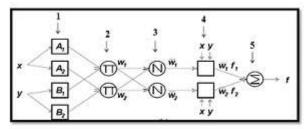


Figure 1

(22) Date of filing of Application :29/12/2018 (43) P

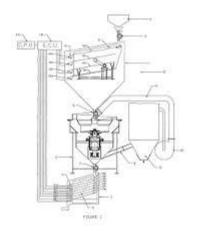
(43) Publication Date: 03/07/2020

# (54) Title of the invention : AN EQUIPMENT AND A METHOD FOR EVALUATING THE SAMPLE OF A CRUSHING MATERIAL.

(51) International classification	:H04W0072040000, B02C0013286000, H04W0004120000, H04N0021422000, E02F0003960000	(71)Name of Applicant:  1)KALANI ADITYA SACHIN  Address of Applicant: Plot No H-2 Old MIDC SATARA  Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)KALANI ADITYA SACHIN
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(55) A1		•

#### (57) Abstract:

An equipment (E) for evaluating the sample of a crushing material(A) having a first automated grading device (1) and a second automated device(2) for grading and weighing the sample of the crushing material to be crushed, a VSI crusher(2), a dust collecting unit(8) for collecting dust laden air from VSI crusher (2) and dispensing air into the VSI crusher(2); an Electronic control unit(12) for receiving data from the automated grading device (1) and second automated grading device (3) and transmitting the received data to a central processing unit(13) for evaluating the data as per pre- defined parameters. Ref. Fig 1



(22) Date of filing of Application :30/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : DECONTAMINATION OF CHEMICAL WAREFARE AGENT SIMULANTS USING ZEOLITE LTL AND ITS METAL OXIDES

(51) International classification	C01B0039320000, F01N0003100000, B01D0053040000, B01J0020180000	(71)Name of Applicant:  1)Jiwaji University, Gwalior, (M.P.) India Address of Applicant: JIWAJI UNIVERSITY, GWALIOR - 470011, M.P., INDIA Madhya Pradesh India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Radha Tomar
(32) Priority Date	:NA	2)Arvind Kumar Gupta
(33) Name of priority country	:NA	3)Kumari Meenu
(86) International Application No	:NA	4)Neeraj Kumar
Filing Date	:NA	5)Kautily Rao Tiwari
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract:

ABSTRACT DECONTAMINATION OF CHEMICAL WARFARE AGENT SIMULANTS USING ZEOLITE LTL AND ITS METAL OXIDES • The present invention relates to a system and process of decontamination of chemical warfare agent simulant using environmentally safe Zeolite LTL and/or its metal oxide composites of alkali and alkaline earth metals. More particularly the system and process comprise the synthesis of Zeolite LTL and/or its metal oxide composites of alkali and alkaline earth metals and using these environmentally safe materials for decontamination of chemical warfare agent simulants of blister and nerve agents.

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: POWER GENERATION THROUGH PUMP-TURBINE RIG.

	D.C.I.D.	
(51) International classification		(71)Name of Applicant:
	17/24	1)JAYESH RAJESH SONTAKKE
(31) Priority Document No	:NA	Address of Applicant :D. Y. PATIL COLLEGE OF
(32) Priority Date	:NA	ENGINEERING, D. Y. PATIL EDUCATIONAL COMPLEX,
(33) Name of priority country	:NA	SECTOR 29, NIGDI PRADHIKARAN, AKURDI, PUNE-411
(86) International Application No	:NA	044, MAHARASHTRA, INDIA. Maharashtra India
Filing Date	:NA	2)TAPOBRATA DEY
(87) International Publication No	: NA	3)SANDEEP S SARNOBAT
(61) Patent of Addition to Application Number	:NA	(72)Name of Inventor:
Filing Date	:NA	1)JAYESH RAJESH SONTAKKE
(62) Divisional to Application Number	:NA	2)TAPOBRATA DEY
Filing Date	:NA	3)SANDEEP S SARNOBAT

#### (57) Abstract:

Environmental friendly power generation is established with high velocity and pressure outlet by irrigation pump using mini turbine. Water from outlet of irrigation pump is directed on specially designed buckets of mini turbine which is connected with a generator to produce mechanical and electrical power.



(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: SELF-LEARNING BASED MECHANISM FOR VEHICLE UTILIZATION AND OPTIMIZATION

(51) International classification	G06Q0050000000, G06Q0010060000, G06Q0010040000,	,
(31) Priority Document No	:NA	1)LODHA, Kritika
(32) Priority Date	:NA	2)SHAH, Pranav
(33) Name of priority country	:NA	3)POOJARY, Sudhakara Deva
(86) International Application No	:NA	4)VISHWAKARMA, Neelesh
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

There is no mechanism for vehicle utilization and optimization through continuous and incremental planning which ensures that transportation plans are based on real-time conditions. The present invention discloses systems and methods for vehicle utilization and optimization based on self-learning mechanism. A machine learning model for dynamic association of users to vehicles is provided that learns previously clubbed patterns of users with their corresponding locations. The learnt previously clubbed patterns are utilized for determining association between previously clubbed locations which is further utilized to obtain an optimal set of locations. The users are dynamically associated to vehicles allocated for the obtained optimal set of locations by honoring one or more social and vehicle constraints. The proposed system has self-learning capability which ensures effective vehicle utilization and optimization in real time.



(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: COMPRESSOR HAVING OLDHAM KEYS

(51) International classification	:F04C0018020000, F04C0023000000, F04C0029000000, F04C0027000000, F04C0029120000	· /
(31) Priority Document No	:NA	1)NAGULPELLI, Vinayak N.
(32) Priority Date	:NA	2)KNAPKE, Brian J.
(33) Name of priority country	:NA	3)KNOTH, Daniel J.
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(57) Abstract		I

#### (57) Abstract:

A compressor may include a non-orbiting scroll, an orbiting scroll, a bearing housing and first and second discrete keys. The non-orbiting scroll may include a first end plate having a first spiral wrap extending therefrom. The orbiting scroll may include a second end plate having a second spiral wrap extending therefrom and meshingly engaged with the first spiral wrap of the non-orbiting scroll. The bearing housing may support the orbiting scroll. Each of the first and second keys may be slidably engaged in first slots formed in the second end plate of the orbiting scroll and slidably engaged in second slots formed in the first end plate of the non-orbiting scroll or third slots formed in the bearing housing.



(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A METHOD AND SYSTEM FOR ASSISTING IN EXPORT LOGISTICS BY MEANS OF SEA TRANSPORT

(51) International classification	G06Q0050280000, G06Q0010060000,	
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Mr. Pradeep Abasaheb Diwate
(33) Name of priority country	:NA	-
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(55) A1		•

#### (57) Abstract:

A method and system for assisting in export logistics by means of sea transport for the potential user is described in the present invention. It comprises the steps of receiving logistics related requirements from the user, forwarding the requirements to various service providers for export logistics and obtaining a number of different quotations from them. The system then analyses and calculates the suitable logistics options from the quotations and ranks the quotations for the user to choose from. The logistics related requirements are origin point of export, destination point of export, travel time, delivery schedule, cost of logistics, payment method or term, shipping terms, accreditation of a service provider, and level of operational performance of a service provider. Using this system, the user gets multiple quotes and best service providers and also has the total transparency of the services provided and the costs by the service providers.

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A METHOD AND SYSTEM FOR ASSISTING IN IMPORT LOGISTICS BY MEANS OF SEA TRANSPORT

(51) International classification	G06Q0050280000, G06Q0010060000,	
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Mr. Pradeep Abasaheb Diwate
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(55) 11		

#### (57) Abstract:

A method and system for assisting in import logistics by means of sea transport for the potential user is described in the present invention. It comprises the steps of receiving logistics related requirements from the user, forwarding the requirements to various service providers for import logistics and obtaining a number of different quotations from them. The system then analyses and calculates the suitable logistics options from the quotations and ranks the quotations for the user to choose from. The logistics related requirements are origin point of import, destination point of import, travel time, delivery schedule, cost of logistics, payment method or term, accreditation of a service provider, and level of operational performance of a service provider. Using this system, the user gets multiple quotes and best service providers and also has the total transparency of the services provided and the costs by the service providers.

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: A METHOD AND SYSTEM FOR ASSISTING IN TRANSPORTATION MANAGEMENT.

(51) International classification	:G06Q0010080000, G06Q0010020000, G06Q0010060000, G06Q0050300000, G06Q0050280000	(71)Name of Applicant:  1)Mr. Pradeep Abasaheb Diwate  Address of Applicant:1602, Kailash Tower, Shiv-Shrishti Complex, Mulund Goregaon Link Road, Nahur, Mulund(West), Mumbai- 400080 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Mr. Pradeep Abasaheb Diwate
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A method and system for assisting in transportation management for the potential user is described in the present invention. It comprises the steps of receiving transport related requirements from the user, forwarding the requirements to various transport service providers and obtaining a number of different quotations from them. The system then analyses and calculates the suitable transportation options from the quotations and ranks the quotations for the user to choose from. The transport related requirements are origin point of transport, destination point of transport, travel time, delivery schedule, cost of transportation, mode of transportation, payment method, transport terms, accreditation of a service provider, and level of operational performance of a service provider. Using this system, the user gets multiple quotes and best service providers and also has the total transparency of the services provided and the costs by the service providers.

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: A METHOD AND SYSTEM FOR ASSISTING IN WAREHOUSE MANAGEMENT

(51) International classification	G06Q0050280000, B66F0009075000,	(71)Name of Applicant:  1)Mr. Pradeep Abasaheb Diwate  Address of Applicant:1602, Kailash Tower, Shiv-Shrishti  Complex, Mulund Goregaon Link Road, Nahur, Mulund(West),  Mumbai- 400080 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Mr. Pradeep Abasaheb Diwate
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

A method and system for assisting in warehouse management for the potential user is described in the present invention. It comprises the steps of receiving warehouse related requirements from the user, forwarding the requirements to various warehouse service providers and obtaining a number of different quotations from them. The system then analyses and calculates the suitable transportation options from the quotations and ranks the quotations for the user to choose from. The warehouse related requirements are storage schedule, type of warehouse, location of warehouse; warehouse capacity, inward and outward logistics, payment method or term, warehouse storage terms, accreditation of a service provider and the level of operational performance of a service provider. Using this system, the user gets multiple quotes and best service providers and also has the total transparency of the services provided and the costs by the service providers.

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A METHOD AND SYSTEM FOR ASSISTING IN EXPORT LOGISTICS BY MEANS OF AIR TRANSPORT.

(51) International classification	:G06Q0010080000, G06Q0010060000, G06Q0050280000, G06Q0030000000, G06Q0040040000	(71)Name of Applicant: 1)Mr. Pradeep Abasaheb Diwate Address of Applicant:1602, Kailash Tower, Shiv-Shrishti Complex, Mulund Goregaon Link Road, Nahur, Mulund(West), Mumbai- 400080 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Mr. Pradeep Abasaheb Diwate
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A method and system for assisting in export logistics by means of air transport for the potential user is described in the present invention. It comprises the steps of receiving logistics related requirements from the user, forwarding the requirements to various service providers for export logistics and obtaining a number of different quotations from them. The system then analyses and calculates the suitable logistics options from the quotations and ranks the quotations for the user to choose from. The logistics related requirements are origin point of export, destination point of export, travel time, delivery schedule, cost of logistics, payment method and term, shipping terms, accreditation of a service provider, and level of operational performance of a service provider. Using this system, the user gets multiple quotes and best service providers and also has the total transparency of the services provided and the costs by the service providers.

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A METHOD AND SYSTEM FOR ASSISTING IN IMPORT LOGISTICS BY MEANS OF AIR TRANSPORT.

(51) International classification	G06Q0050280000, G06Q0010060000,	Address of Applicant :1602, Kailash Tower, Shiv-Shrishti
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)Mr. Pradeep Abasaheb Diwate
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(F7) A1		

#### (57) Abstract:

A method and system for assisting in import logistics by means of air transport for the potential user is described in the present invention. It comprises the steps of receiving logistics related requirements from the user, forwarding the requirements to various service providers for import logistics and obtaining a number of different quotations from them. The system then analyses and calculates the suitable logistics options from the quotations and ranks the quotations for the user to choose from. The logistics related requirements are origin point of import, destination point of import, travel time, delivery schedule, cost of logistics, payment method and terms, shipping terms, accreditation of a service provider, and level of operational performance of a service provider. Using this system, the user gets multiple quotes and best service providers and also has the total transparency of the services provided and the costs by the service providers.

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: SOLID CRYSTALLINE FORM OF BEMPEDOIC ACID

	:C07F0005020000, C07H0011000000,	(71)Name of Applicant: 1)LUPIN LIMITED
(51) International classification	C07D0405140000,	1 '
	C07J00090000000,	Western Express Highway, Santacruz (East) Mumbai Maharashtra
	C07C0229300000	India 400 055 Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)KADAM, Navnath, Ambadas
(33) Name of priority country	:NA	2)SULAKE, Rohidas, Shivaji
(86) International Application No	:NA	3)SIYAN, Rajinder, Singh
Filing Date	:NA	4)BHISE, Nandu, Baban
(87) International Publication No	: NA	5)SINGH, Girij, Pal
(61) Patent of Addition to Application Number	er :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

The present invention relates to novel pharmaceutically acceptable salts of Bempedoic acid, novel intermediates of Bempedoic acid, novel crystalline form of Bempedoic acid and novel processes for the preparation of Bempedoic acid or its intermediates thereof.



(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: AN OMNI-CHANNEL CHAT PLATFORM

	:H04M0003510000,	(71)Name of Applicant:
	G06N0020000000,	1)ZENSAR TECHNOLOGIES LIMITED
(51) International classification	B33Y0030000000,	Address of Applicant :ZENSAR KNOWLEDGE PARK,
	G06F00160000000,	PLOT # 4, MIDC, KHARADI, OFF NAGAR ROAD, PUNE-
	G06F0003048200	411014, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)JAMBHALE, Sanjay Ramchandra
(33) Name of priority country	:NA	2)DISALE, Madhuri Sadashiv
(86) International Application No	:NA	3)BOLABANDI, Aditya Ashokkumar
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application	:NA	
Number	:NA	
Filing Date	.INA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(55) 11 ·		•

#### (57) Abstract:

ABSTRACT AN OMNI-CHANNEL CHAT PLATFORM The present disclosure relates to the field for an omni-channel chat platform. The platform (100) receive a conversation associated with a first chat session in order to interpret context of the conversation and stores a log of the conversation associated with the first chat session in a database (106). The platform (100) retain and display the context and the conversation of the first channel when the user switches from the first channel to the second channel. The platform (100) build responses to complete the retained conversation on the second channel and transmit the build responses to the second chat session, thereby facilitating seamless communication between the user and the bot. The platform (100) enable retention and transition of customer conversation when customer switches between channels.



(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

## (54) Title of the invention: A SYSTEM AND METHOD FOR TRACKING ENTERPRISES ASSEST

(51) International classification	G06Q0040060000, G06Q0010080000, G06Q0010060000, H04N0021488000	Address of Applicant :ZENSAR KNOWLEDGE PARK, PLOT # 4, MIDC, KHARADI, OFF NAGAR ROAD, PUNE- 411014, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)CHAUDHARY, Mayuresh Shantaram
(33) Name of priority country	:NA	2)AJMERA, Juhi Dineshchandra
(86) International Application No	:NA	3)PARAKH, Nilesh Prakash
Filing Date	:NA	4)BADJATYA, Paridhi Jitendra
(87) International Publication No	: NA	5)SAMDARE, Vikram
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT A SYSTEM AND METHOD FOR TRACKING ENTERPRISE ASSETS The present disclosure envisages the field of asset tracking. The system for tracking enterprise assets (100) comprises a plurality of first tags (102) associated with a user, a plurality of second tags (104) associated with an enterprise asset, a scanning unit (106) and a server (108). The scanning unit (106) capture biometric of the user, decode unique user ID and unique asset ID. The server (108) generates at least one alert based on evaluation of the decoded asset ID, the decoded user ID and the biometric information received from the scanning unit (106) with the asset allocation details and the asset allocation details stored in the repository (110). The system (100) generates alerts to notify the manager and user about any invalid tracking of the asset. The system (100) enhances security of assets by preventing theft and analyzes effectively the movement of assets and employees.



(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A SYSTEM AND METHOD FOR COHESIVE TEAM SELECTION BASED ON THERE INTERACTION

	:G06F0017270000, G06Q0010100000,	(71)Name of Applicant: 1)ZENSAR TECHNOLOGIES LIMITED
(51) International classification	G06N00200000000,	· ·
	H04W0084040000,	PLOT # 4, MIDC, KHARADI, OFF NAGAR ROAD, PUNE-
	H04W0088060000	411014, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)KULKARNI, Sumant
(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 Num	ber:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A SYSTEM AND METHOD FOR COHESIVE TEAM SELECTION BASED ON THEIR INTERACTION Methods and system for cohesive team selection is described. The method includes receiving a request for performing a task, identifying a set of entities, from a plurality of entities, for handling the task, analyzing at least one of verbal communication parameters and written communication parameters of each entity with other entities of the set the entities by using at least one of a natural language processing (NLP) technique and a text analytics technique, determining a collaboration level of each entity with other entities of the set the entities based on the analyzing, and forming a team of two or more entities of the set of entities in such a manner that a cumulation of corresponding two or more collaboration levels, associated with the two or more entities, results in an optimal collaboration level. FIG. 2



No. of Pages: 31 No. of Claims: 10

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A SYSTEM AND A METHOD FOR MANAGING OPPORTUNITIES AND DETERMINING HEALTH OF OPPORTUNITIES

(51) International classification	G06F0017240000, G10L0015080000, G06Q0010060000,	Address of Applicant :ZENSAR KNOWLEDGE PARK, PLOT # 4, MIDC, KHARADI, OFF NAGAR ROAD, PUNE-
(31) Priority Document No	G06Q0030020000 :NA	411014, MAHARASHTRA, INDIA Maharashtra India (72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	1)KISHORE, Sandeep
(33) Name of priority country	:NA	2)DESHPANDE, Aditya Nitin
(86) International Application No	:NA	3)SARAWAGI, Nishant Sanjay
Filing Date	:NA	4)BANKA, Rohit
(87) International Publication No	: NA	5)GUPTA, Shivam Ashokkumar
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

ABSTRACT A SYSTEM AND A METHOD FOR MANAGING OPPORTUNITIES AND DETERMINING HEALTH OF OPPORTUNITIES The present disclosure relates to the field of natural language processing (NLP) and discloses a system (100) and a method for automatically managing opportunities in a core back end sales engine (30) and for determining health of the opportunities. The system (100) comprises a server (102) communicating with at least one user interface (20) and configured to receive an audio recording of a client meeting, associated with an opportunity, from a user (10) via the user interface (20). The server (102) comprises a transcription module (104) and an NLP processing engine (106). The transcription module (104) generates a transcript of the received recording. The processing engine (106) traverses through the transcript to identify a pre-determined set of keywords in the transcript, identify opportunity and manage data fields associated with the identified opportunity in said customer management engine (30), and evaluate the health of the opportunity based on the identified keywords.



No. of Pages: 34 No. of Claims: 11

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: A SYSTEM FOR CANCELLATION OF NOISE IN A WORKSPACE AND A METHOD THEREOF

(51) International classification	H04R0001100000, H03F0001260000,	(71)Name of Applicant:  1)ZENSAR TECHNOLOGIES LIMITED  Address of Applicant: ZENSAR KNOWLEDGE PARK, PLOT # 4, MIDC, KHARADI, OFF NAGAR ROAD, PUNE- 411014, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)KULKARNI, Sumant
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

A SYSTEM FOR CANCELLATION OF NOISE IN A WORKSPACE AND A METHOD THEREOF The present disclosure provides a noise cancellation device (120) and a method for cancelling noise in a work environment (100). The device (120) comprises a memory (250), a processor (252), one or more sensors (260) configured to monitor a first set of noise signals and a noise cancellation unit (272). The processor (252) determines a current session efficiency score of a user in the work environment, compare the current session efficiency score with a historical session efficiency score to determine a change in the efficiency score of the user and identify a second set of noise signals from the first set of noise signals upon detecting that the change in the efficiency score of the user is greater than a threshold. The noise cancellation unit (272) generates a noise cancellation signal to attenuate the identified second set of noise signals. [Figure 1]



No. of Pages: 28 No. of Claims: 10

(22) Date of filing of Application :31/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : METHOD AND SYSTEM FOR PREDICTION OF CORRECT DISCRETE SENSOR DATA BASED ON TEMPORAL UNCERTAINTY

		(71)Name of Applicant:
	A61B0005000000,	1)Tata Consultancy Services Limited
(51) International classification	G06F0021310000,	Address of Applicant :Nirmal Building, 9th Floor, Nariman
	G09B0019040000,	Point Mumbai 400021 Maharashtra, India Maharashtra India
	H04W0004380000	(72)Name of Inventor:
(31) Priority Document No	:NA	1)GHOSE, Avik
(32) Priority Date	:NA	2)BHOWMICK, Brojeshwar
(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	:NA	
Number	:NA	
Filing Date	*1 17 1	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(57) 11	<u> </u>	<u> </u>

### (57) Abstract:

This disclosure relates generally to a method and system for prediction of correct discrete sensor data, thus enabling continuous flow of data even when a discrete sensor fails. The activities of humans/subjects, housed in a smart environment is continuously monitored by plurality of non-intrusive discrete sensors embedded in living infrastructure. The collected discrete sensor data is usually sparse and largely unbalanced, wherein most of the discrete sensor data is "NoTM and comparatively only a few samples of "YesTM, hence making prediction very challenging. The proposed prediction techniques based on introduction of temporal uncertainty is performed in several stages which includes pre-processing of received discrete sensor data, introduction of temporal uncertainty techniques followed by prediction based on neural network techniques of learning pattern using historical data.



No. of Pages: 27 No. of Claims: 8

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : METHOD AND SYSTEM FOR MACHINE LEARNING BASED ITEM MATCHING BY CONSIDERING USER MINDSET

	:G06F0016245700,	(71)Name of Applicant :
	G06Q0030000000,	1)Tata Consultancy Services Limited
(51) International classification	G06F0016260000,	Address of Applicant :Nirmal Building, 9th Floor, Nariman
	G06Q0040020000,	Point Mumbai 400021 Maharashtra, India Maharashtra India
	G06F0001329600	(72)Name of Inventor:
(31) Priority Document No	:NA	1)THIRUNAVUKKARASU, Jeisobers
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

Existing approaches for item matching that are used for retail strategies are based on similarity matching, however, do not consider user mindset, magnitude present across quantitative AVs and segment specific customer interest on certain qualitative AVs. Embodiments of the present disclosure provide a method and system for Machine Learning (ML) based item matching by considering user mindset, magnitude present across quantitative AVs and segment specific customer interest on certain qualitative AV. The item matching approach disclosed, performs data analytics at the AV level to identify possible close matching items from the list of available partially matching as well as non-matching items. The method disclosed primarily performs Attribute (AT) enrichment by quantizing all the qualitative AVs to be analyzed. Weights are assigned to all the quantized AVs based on a Demand Transfer (DT) value provided by a Customer Decision Tree (CDT), wherein the CDT captures the user mindset.



No. of Pages: 38 No. of Claims: 10

(22) Date of filing of Application :31/12/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention : METHOD AND SYSTEM FOR TARGETED ADVERTISING IN AN OVER-THE-TOP (OTT) ECOSYSTEM

(51) International classification	G06Q0030020000, H04N0021810000,	, ,
(31) Priority Document No	:NA	1)DASGUPTA, Punyabrota
(32) Priority Date	:NA	2)BHADADA, Kamal
(33) Name of priority country	:NA	3)GOYAL, Sanjeev
(86) International Application No	:NA	4)SARKAR, Titash
Filing Date	:NA	5)TRIPATHI, Ritika
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
(57) A1		•

### (57) Abstract:

This disclosure relates generally to a system and method to recommend a targeted advertisement to a user. The system is configured to receive and pre-processes a plurality of data from various sources based on a set of predefined business rules. A set of training data is extracted from the pre-processed plurality of data to develop a machine learning model to identify a set of attributes of personality of the user. A neural network is trained to identify at least one classifier to define one or more needs of the user. It would be appreciated that the one or more needs of the user are mapped with the set of attributes of the personality. Finally, the recommendation module of the system recommends at least one advertisement to a media service provider to share the same over OTT to the user. [To be published with FIG. 2]



No. of Pages: 21 No. of Claims: 10

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: SYNTHESIS OF NANO PARTICLES

(51) International classification	:B82Y0030000000, G01N0015020000, G01N0001380000, C04B0040000000, B01J0020280000	(71)Name of Applicant:  1)Tata Consultancy Services Limited Address of Applicant: Nirmal Building, 9th Floor, Nariman Point Mumbai - 400021 Maharashtra, India Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)DAWARE, Santosh Vasant
(32) Priority Date	:NA	2)RAI, Beena
(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 Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

A method for synthesis of nanoparticles are described. The method includes dispersing metal oxide powder in a mixture of a base liquid and a surfactant to form a primary mixture, grinding the primary mixture using a grinding media by periodically adding a surfactant solution to form a slurry, extracting a predetermined amount of sample from the slurry at periodic time intervals to obtain a testing solution to assess particle size of in the slurry using a particle size analyzer; and systematically adding the surfactant solution and the grinding media to the slurry based on the assessed particle size in the testing solution until a mean particle size of the nanoparticles is achieved. [To be published with FIG. 1]



No. of Pages: 25 No. of Claims: 15

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : SYSTEM AND METHOD FOR PRODUCT DEMAND TRANSFER ESTIMATION THROUGH MACHINE LEARNING

(51) International classification	G06N0020000000, G06Q0030020000,	(71)Name of Applicant:  1)Tata Consultancy Services Limited Address of Applicant: Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)THIRUNAVUKKARASU, Jeisobers
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

This disclosure relates to a system and method to estimate demand transfer of a product while considering performance of all the products of a category simultaneously. It would be appreciated that the demand of a removed product transfers to other products of same category in a store. In addition the demand transfer is influenced by sales drivers such as product level promotion and competitor prices, store location, weather and seasonality. By considering these factors the proposed approach provides a method to estimate demand transfer of a product. It is addressed by creating multivariate multi structure machine learning models and estimating demand transfer values by using suitable scenario generator for product availability. It enables to estimate more holistic demand transfer values by simultaneous consideration of individual product behaviors with respect to other products availability and other sales drivers.



No. of Pages: 29 No. of Claims: 10

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: A WINDOW WIPING SYSTEM OF A VEHICLE

(51) International classification	B60S0001520000, B60S0001400000,	(71)Name of Applicant:  1)TATA MOTORS LIMITED  Address of Applicant: Bombay house, 24 Homi Mody Street, Hutatma Chowk, Mumbai 400 001, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)ISHA PATHAK
(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	r :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The problem to be solved is to provide a wiping system hat efficiently cleans the window of the sde doors to overcome the impaired vision due to foggy window glases during rain and to provide a proper vision ORVM (Outer Rear View Mirror) during rain, and can be packaged within the door assembly without increasing the overall width of the vehicle, and the problem is solved in the present invention by the window wiping system of a vehicle (10), which includes a wiping assembly (20) comprsing of a wiper arm (24) and a wiper blade (22) pivotally connected with the wiper arm (24), the wiper assembly (20) is mounted on the inner door assembly (50) of the side door, such that the actuating unit (40) extends and retracts the wiper assembly (20) from within the inner door assembly 50), without increasing he width of the vehicle. Fig. 2a is the representative gure.



No. of Pages: 21 No. of Claims: 8

(22) Date of filing of Application :31/12/2018 (43)

(43) Publication Date: 03/07/2020

# (54) Title of the invention : SYSTEMS AND METHODS FOR EXTENDING REASONING CAPABILITY FOR DATA ANALYTICS IN INTERNET-OF-THINGS (IOT) PLATFORM

<ul><li>(51) International classification</li><li>(31) Priority Document No</li></ul>	:G06N0005020000, G06F0016245000, H04L0029080000, G06F0008510000, G06F0008410000	(71)Name of Applicant:  1)Tata Consultancy Services Limited    Address of Applicant: Nirmal Building, 9th Floor, Nariman Point, Mumbai - 400021, Maharashtra, India Maharashtra India (72)Name of Inventor:  1)BANERJEE, Snehasis
(32) Priority Date	:NA	2)CHANDRA, Mariswamy Girish
<ul> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number</li> </ul>	:NA :NA :NA :NA : NA :NA	
Filing Date (62) Divisional to Application Number Filing Date	:NA :NA	

### (57) Abstract:

Systems and methods for extending reasoning capability for data analytics in Internet of Things (IoT) platform(s) are provided. Traditional systems and methods for executing IoT analytics tasks suffer as IoT analytics techniques are generated in different programming language platforms, and this leads to a manual intervention or an asynchronous and sequential analysis of IoT analytics task(s). Embodiments of the method disclosed provide for overcoming the limitations faced by the traditional systems and methods by dynamically creating procedural functions from a plurality of programming languages upon determining an absence of pre-defined procedural functions, and extracting, using the dynamically created procedural functions, one or more semantic rules in a real-time, wherein the one or more semantic rules extend a reasoning capability for executing the one or more data analytics tasks in a plurality of IoT platforms.



No. of Pages: 36 No. of Claims: 10

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: AN ON-SHELF INVENTORY MANAGEMENT SYSTEM AND A METHOD THEREOF

(51) International classification	:G06Q0010080000, G06K0009000000, G06Q0010060000, G08B0005360000, H04N0007180000	· ·
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)SAMDARE, Vikram Shrimantrao
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

ABSTRACT AN ON-SHELF INVENTORY MANAGEMENT SYSTEM AND A METHOD THEREOF The present disclosure relates to the field of on-shelf inventory management systems and comprises a server (108) and an interactive tool (114). The acquisition unit (106) receives image data from at least one image capturing device (102) and sensor data from a plurality of sensors (104). The server (108) analyses the received data to generate a display signal and values relating to product items and notification signals based on received values. The interactive tool (114) installed in a customerTMs device (116) receives display signal, values, and notification signal from the server (108), and displays a virtual image of the shelf having the product items, information relating to the product items, and at least one notification based on the received display signal, values, and notification signal. The system (100) provide a digital store that informs the customers about a productTMs availability, quantity and information such as productTMs colour and size.



No. of Pages: 25 No. of Claims: 7

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: A SYSTEM AND METHOD FOR SCHEDULING TASK ON THE BASIS OF CIRCADIAN RHYTHM

(51) International classification	G06K0009000000, G06F0011300000,	· /
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)KULKARNI, Sumant
(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	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

A SYSTEM AND METHOD FOR SCHEDULING TASK ON THE BASIS OF CIRCADIAN RHYTHM Systems and methods for assigning tasks to entity are disclosed. The system comprises sensors for monitoring entity behavioural parameters, during office timing, including entity availability at workstation, entity facial expressions, and entity gestures. The system comprises determining unit to determine, based on the monitoring, plurality of focus levels of the entity at a plurality of time slots during the office timing. The system comprises extracting unit to extract a plurality of tasks associated with the entity, wherein each of the plurality of task has an importance level associated therewith. Further, the assigning unit assigns the plurality of tasks to the entity based on the importance level associated with each of the plurality of task and the plurality of focus level determined for the entity. Thus, the present disclosure provides a technical effect by analysing the entity behavior using their physical and emotional parameters and accordingly assigning the task to them. FIG. 1



No. of Pages: 27 No. of Claims: 12

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention : A COMPUTER IMPLEMENTED SYSTEM AND METHOD FOR MANAGING PRODUCTS IN A RETAIL ENVIRONMENT

(51) International classification	:G06Q0010080000, G06Q0030020000, G06Q0030060000, G06F0016957000, G06Q0050160000	· ·
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)AJMERA, Juhi Dineshchandra
(33) Name of priority country	:NA	2)CHAUDHARY, Mayuresh Shantaram
(86) International Application No	:NA	3)SAMDARE, Vikram
Filing Date	:NA	4)NAMBIAR, Ullas Balan
(87) International Publication No	: NA	5)CHAWLA, Ritika Deepak
(61) Patent of Addition to Application Number Filing Date	:NA :NA	6)SURJEY, Urvashi Pradeep
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

ABSTRACT A COMPUTER IMPLEMENTED SYSTEM AND METHOD FOR MANAGING PRODUCTS IN A RETAIL ENVIRONMENT The present disclosure relates to the field of retail environment management and discloses a system (100) for managing products in a retail environment. The system (100) comprises a product tracking tool (102) and a server (106). The product tracking tool (102) facilitates a user to provide a product type to be located. The server (106) is communicatively coupled to tags (104) secured on each of the products, and user device receives the product type and identifies the shelf where the product type is located. Further, the server (106) analyses the rate of sales values corresponding to each of the product types to determine the product type with the highest rate of sales and periodically compares expiry dates of each of the products with a current date to generate a comparison value. The server (106) generates notifications based on comparison value and analysis, and help manager to manage product placement.



No. of Pages: 24 No. of Claims: 9

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: STRESS-MANAGED OPTICAL FIBER

(51) International classification	:G02B0006020000, G02B0006440000, G02B0006036000, G02B0006100000, C03B0037027000	(71)Name of Applicant:  1)Sterlite Technologies Limited    Address of Applicant: E-1, E-2, E-3 Bajaj Nagar MIDC Waluj, Aurangabad, Maharashtra, India,431136 Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Pramod Watekar
(32) Priority Date	:NA	2)Annesha Maity
(33) Name of priority country	:NA	3)Manoj Mittal
(86) International Application No	:NA	4)Sandeep Gaikwad
Filing Date	:NA	5)Sham Nagarkar
(87) International Publication No	: NA	6)Bhalchandra Pathak
(61) Patent of Addition to Application Numb	er:NA	7)Sathis Ram
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present disclosure provides an optical fiber (100). The optical fiber (100) includes a core (106). The core (106) has high compressive stress. The compressive stress of the core (106) is in a range of about 20 to 60 MPa. The optical fiber (100) includes a cladding (112). The cladding (112) is divided into a first cladding layer (108) and a second cladding layer (110). The second cladding layer (110) has a high residual stress. The high residual stress of the second cladding layer (110) is in a range of about 20 to 60 MPa. The optical fiber (100) enables reduction of particle related breaks. Further, the optical fiber (100) has elevated LLT strength. The LLT strength is about 6 Kg. The optical fiber (100) has high proof test yield. Furthermore, the optical fiber (100) is highly sensitive to micro-bending of the optical fiber (100).



No. of Pages: 19 No. of Claims: 18

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: METHOD FOR MODIFICATION OF SURFACE OF OPTICAL FIBER PREFORM

	:C03B0037014000,	(71)Name of Applicant:
	C03B0037012000,	1)Sterlite Technologies Limited
(51) International classification	C04B0035800000,	Address of Applicant :E-1, E-2, E-3, Bajaj Nagar, MIDC
	C03C0013040000,	Waluj, Aurangabad, Maharashtra431136 Maharashtra India
	G01L0001240000	(72)Name of Inventor:
(31) Priority Document No	:NA	1)Pramod Watekar
(32) Priority Date	:NA	2)Annesha Maity
(33) Name of priority country	:NA	3)Manoj Mittal
(86) International Application No	:NA	4)Sandeep Gaikwad
Filing Date	:NA	5)Sham Nagarkar
(87) International Publication No	: NA	6)Bhalchandra Pathak
(61) Patent of Addition to Application Numb	er:NA	7)Sathis Ram
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	
		1

### (57) Abstract:

The present disclosure provides a method for modification of surface of an initial optical fiber preform (102). The initial optical fiber preform (102) is manufactured using at least one preform manufacturing process. The surface of the initial optical fiber preform (102) is treated with 50-70 liters of chlorine per square meter of the surface of the initial optical fiber preform (102). The surface of the initial optical fiber preform (102) is flame polished using a flame polishing module (106). The treatment of the surface of the initial optical fiber preform (102) with chlorine and flame polishing of the surface of the initial optical fiber preform (102) collectively converts the initial optical fiber preform (102) into a modified optical fiber preform (108).



No. of Pages: 26 No. of Claims: 19

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: DISINTEGRATED SOFTWARE DEFINED OPTICAL LINE TERMINAL

(51) International classification	:H04Q0011000000, H04B0010250000, H04L0012280000, H04J0014020000, B41J0002145000	(71)Name of Applicant:  1)Sterlite Technologies Limited    Address of Applicant: E-1, E-2, E-3, Bajaj Nagar, MIDC Waluj, Aurangabad, Maharashtra431136 Maharashtra India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Badri Gomatam
(32) Priority Date	:NA	2)Saurabh Chattopadhyay
(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 Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present disclosure relates to an optical line terminal device (100). The optical line terminal device (100) includes a data center point of presence module (102), one or more access point of presence module (104) and one or more aggregation point of presence module (106). The data center point of presence module (102) includes a first region and a second region. The first region includes a leaf and spine fabric (108) and a top-of-rack architecture (110). The second region includes compute infrastructure (112) and storage infrastructure (114). Further, the one or more access point of presence module (104) includes optical line terminal-Gigabit Passive Optical Networks access input/output (116) and Metro Ethernet Access input/output (118). The one or more aggregation point of presence module (106) includes access input/output hardware abstraction (122), limited compute infrastructure (124) and multi-protocol label switching transfer router (120).



No. of Pages: 32 No. of Claims: 20

(22) Date of filing of Application :31/12/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: APPLICATION MANAGEMENT SERVICE INCIDENT RESOLUTION METHOD

(51) International classification	:G06Q0030020000, G06F0003048400, G05B0019418000, G06Q0010060000, G06F0009448000	(71)Name of Applicant: 1)ATOS GLOBAL IT SOLUTIONS AND SERVICES PRIVATE LIMITED Address of Applicant: Building No. 3, 7th Floor, Gigaplex Special Economic Zone, IT Plot No. 5, Airoli Knowledge Park,
(31) Priority Document No	:NA	Airoli, Navi Mumbai, District: Thane, PIN Code 400708
(32) Priority Date	:NA	Maharashtra, India Maharashtra India
(33) Name of priority country	:NA	(72)Name of Inventor:
(86) International Application No	:NA	1)SEN Rudreshwar
Filing Date	:NA	2)RAO Prashant
(87) International Publication No	: NA	
<ul><li>(61) Patent of Addition to Application</li><li>Number</li><li>Filing Date</li></ul>	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

This invention relates to an application management service incident resolution method comprising, for at least a first category of complex incidents: selecting, from a library, an incident resolution workflow which is relevant for a given specific complex incident having occurred and which comprises a succession of activities: said activities being categorized as either automated or manual, automated activities proposing at least one or more robotic process automation agents and/or one or more automation scripts to be activated by user, manual activities proposing at least one or more contextual video clips to be displayed by user, performing effective incident resolution: by user at least selecting and combining, preferably and/or preferably amending and/or preferably adding and/or preferably removing, at least part of said activities among said succession of activities, said automated activity(ies) or part of them being simply activated by user, said manual activity(ies) being manually performed by user based on at least said one or more contextual video clips teaching(s), this effective incident resolution performance, if successful, being possibly converted to a new alternative incident resolution workflow then included in said library. Fig. 1



No. of Pages: 19 No. of Claims: 12

(22) Date of filing of Application :28/02/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: EYE PROJECTION SYSTEM AND METHOD

(51) International classification	:G02B 27/00, G02B 27/01	(71)Name of Applicant: 1)EYEWAY VISION LTD.
(31) Priority Document No	:241033	Address of Applicant :3B Jonathan Netanyahu Street 6037602
(32) Priority Date	:02/09/2015	Or Yehuda Israel
(33) Name of priority country	:Israel	(72)Name of Inventor:
(86) International Application No	:PCT/IL2016/050953	1)GREENBERG Boris
Filing Date	:01/09/2016	
(87) International Publication No	:WO 2017/037708	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

An eye projection device is provide comprising an eye projection system configured for projecting a light beam to propagate along a propagation path to an eye. The eye projection system comprises: an optical assembly defining a general optical path of light in said optical assembly the optical assembly comprising a deflector arrangement comprising one or more adjustable optical deflectors arranged along said general optical path and configured to define an adjustable propagation path of the light beam from the optical assembly to the eye; wherein said one or more optical deflectors are configured with at least three adjustable deflection parameters affecting deflection of said propagation path to provide at least three degrees of freedom in adjusting the propagation path of said light beam towards said eye; wherein two of said at least three degrees of freedom are associated with two angular orientations of the propagation path to the eye for compensating over angular changes in a gaze direction of the eye and at least one of said at least three degrees of freedom are associated with a lateral deflection of the propagation path for compensating over variations in a relative lateral position of said projection system relative to the eye.



No. of Pages: 67 No. of Claims: 43

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201827012056 A

(19) INDIA

(22) Date of filing of Application :30/03/2018 (43) Publication Date : 03/07/2020

# (54) Title of the invention: OPTICAL DEVICE

(51) International classification	:G02F 1/01, G02F 1/19	(71)Name of Applicant: 1)OXFORD UNIVERSITY INNOVATION LIMITED
(31) Priority Document No	:1518371.8	Address of Applicant :Buxton Court 3 West Way Oxford
(32) Priority Date	:16/10/2015	Oxfordshire OX2 0JB U.K.
(33) Name of priority country	:U.K.	(72)Name of Inventor:
(86) International Application No	:PCT/GB2016/053196	1)HOSSEINI Peiman
Filing Date	:14/10/2016	2)BHASKARAN Harish
(87) International Publication No	:WO 2017/064509	3)BROUGHTON Ben
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

An optical device comprising a stack of the following layers: a capping layer (16) having a high refractive index for guiding incident light; a layer of light absorber material (10) preferably a phase changing material; and a reflective layer (12) wherein the refractive index of the capping layer is at least 1.6.



No. of Pages: 19 No. of Claims: 28

(22) Date of filing of Application :05/06/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention: OPTICAL RANGING METHOD AND OPTICAL RANGING APPARATUS

(51) International classification	:G01B 11/22, G01C 3/06, G01S 17/48	(71)Name of Applicant: 1)SHENZHEN GOODIX TECHNOLOGY CO., LTD.
(31) Priority Document No	:NA	Address of Applicant :Floor 13, Phase B, Tengfei Industrial
(32) Priority Date	:NA	Building, Futian Free Trade Zone Shenzhen, Guangdong 518045
(33) Name of priority country	:NA	China
(86) International Application No	:PCT/CN2017/099408	(72)Name of Inventor:
Filing Date	:29/08/2017	1)YANG, Mengta
(87) International Publication No	:WO 2019/041116	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Disclosed is an optical ranging method comprising: according to a plurality of first parameters determining an expression of a first measured distance (202); according to a flight time calculating a flight time measured distance (204); according to the expression of the first measured distance and the flight time measured distance calculating optimal values of the plurality of first parameters and an optimal value of a flight time error corresponding to the flight time measured distance (208); and according to the flight time measured distance the optimal values of the plurality of first parameters and the optimal value of the flight time error obtaining image depth information (210) wherein the plurality of first parameters comprises an angle of pitch corresponding to an object reflection point an azimuth angle and a distance between a light-emitting module and a photosensitive module.



No. of Pages: 15 No. of Claims: 14

(22) Date of filing of Application :08/06/2018

(43) Publication Date: 03/07/2020

# (54) Title of the invention: TARGETING PEPTIDES FOR DIRECTING ADENO-ASSOCIATED VIRUSES (AAVS)

(51) International classification	:C12N 15/86, C07K 7/06, C07K 14/005	(71)Name of Applicant: 1)CALIFORNIA INSTITUTE OF TECHNOLOGY
(31) Priority Document No	:62/266184	Address of Applicant :Office Of Technology Transfer 1200 E.
(32) Priority Date	:11/12/2015	California Blvd., Mail Code 6-32 Pasadena, CA 91125 U.S.A.
(33) Name of priority country	:U.S.A.	(72)Name of Inventor:
(86) International Application No	:PCT/US2016/065969	1)DEVERMAN, Benjamin, E.
Filing Date	:09/12/2016	2)GRADINARU, Viviana
(87) International Publication No	:WO 2017/100671	3)CHAN, Ken, Y.
(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 peptide sequences capable of directing adeno-associated viruses (AAV) to target specific environments for example the nervous system and the heart in a subject. Also disclosed are AAVs having non-naturally occurring capsid proteins comprising the disclosed peptide sequences and methods of using the AAVs to treat diseases.



No. of Pages: 80 No. of Claims: 56

(22) Date of filing of Application :01/01/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention : A GASIFIER SYSTEM CONTAINING WATER VAPOR/MOISTURE CONDENSING SYSTEM AND TAR COLLECTING SYSTEM

(51) International classification	C10J0003840000, C10J0003000000, G02B0006420000,	(71)Name of Applicant:  1)Dr. Shailesh Vallabhdas Makadia Address of Applicant: Plot no. 2621/2622, Gate NO. 1, Road D/2, Lodhika GIDC, Kalawad Road, PO Metoda, Dist. Rajkot. (Gujarat), India Gujarat India
(31) Priority Document No (32) Priority Date	:NA :NA	(72)Name of Inventor: 1)Dr. Shailesh Vallabhdas Makadia
<ul><li>(33) Name of priority country</li><li>(86) International Application No Filing Date</li></ul>	:NA :NA :NA	
(87) International Publication No (61) Patent of Addition to Application Number	: NA	
Filing Date (62) Divisional to Application Number Filing Date	:NA :NA :NA	

### (57) Abstract:

The present invention relates to the Gasifier system. The present invention more particularly relates to water vapor/moisture condensing system and tar collecting system (6) for removing moisture/water vapor and tar from the producer gas/syngas after filtration process. The water vapor/moisture condensing system and tar collecting system (6) removes moistures or water vapor and tarry vapors from the producer gas after filtration process. The condensed tar is collected in the tar collection chamber (15) having seal to prevent leakage to the environment. The producer entering in the rotary kiln is free from any moisture and tarry waste. Fig.1 and Fig.5



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

(22) Date of filing of Application :01/01/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: TOOL HOLDER FOR MACHINE TOOLS

		(71)Name of Applicant:
(51) International classification	F16K0035060000, B23B0029040000,	1)MAKARE, Ganesh Vishwanath Address of Applicant :Room No. 6, Sant Dnyaneshwar Sadan,
(-, -, -, -, -, -, -, -, -, -, -, -, -, -	· · · · · · · · · · · · · · · · · · ·	Ramchandra Nagar No.1, ESIS Hospital Road, Thane (W) - 400
	B24B0023040000	604, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor:
(32) Priority Date	:NA	1)MAKARE, Ganesh Vishwanath
(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	er :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

The present disclosure relates to a tool holder of machine tool for holding and gripping of a working tool. The tool holder 102includes a first holding portion 202 and second holding portion 204. The first holding portion 202 removably grips and holds a first part of accessories of power tool 102. The second holding portion 204 has a cavity to accommodate a second part of the accessories. The first end of the second holding portion is fixed in a generally perpendicular orientation to a body of the first holding portion 202, and a second end of the second holding portion 204 incorporates the ejection button 206 to eject the accessories 106 removably gripped by the first holding portion 202 and the second holding portion 204. The fixing part 208 rotatably fixed using a rotatable connector 210, with the second holding portion 204, and fixed to the power tool 104.



No. of Pages: 29 No. of Claims: 10

(22) Date of filing of Application :02/01/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention: SYNERGISTIC NUTRITIONAL COMPOSITIONS FOR PAIN MANAGEMENT.

<ul><li>(51) International classification</li><li>(31) Priority Document No</li></ul>	:A23L 33/20 :NA	(71)Name of Applicant:  1)Celagenex Research (India) Pvt. Ltd.  Address of Applicant:801, Emerald-B, Dosti Planet North,
(32) Priority Date	:NA	Old Mumbai Pune Road, Shill, Thane-400612, Maharashtra, India
(33) Name of priority country	:NA	Maharashtra India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)DHAMANE, DHIRAJ
(87) International Publication No	: NA	2)T.PRASAD RAJENDRA
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

Abstract: The present invention discloses a synergistic nutritional composition(s) for pain management. Particularly, the invention relates to synergistic nutritional composition comprising specific combination of palmitoylethanolamide (PEA) and standardized red spinach extract enriched with nitrate content, present in the ratio of 1:0.1 to 1:5 along with pharmaceutically acceptable carriers /excipients. More particularly the invention discloses synergistic nutritional composition comprising combination of PEA and nitrate of the red spinach extract, which are present in the ratio of 1: 0.01 to 1: 0.5. Further the instant synergistic composition is useful for treating neuropathic pain, particularly in the treatment of subject suffering with diabetic peripheral neuropathy and/or small fiber neuropathy. Fig: 2



No. of Pages: 54 No. of Claims: 17

(22) Date of filing of Application :02/01/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention : POTENT SYNERGISTIC COMPOSITIONS OF VASOACTIVE MEDIARTORS ENHANCERS FOR IMPROVING VASCULAR ENDOTHELIAL FUNCTION

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No</li> </ul>	:A61K 38/00 :NA :NA :NA :NA	(71)Name of Applicant:  1)Celagenex Research (India) Pvt. Ltd.  Address of Applicant:801, Emerald-B, Dosti Planet North, Old Mumbai Pune Road, Shill, Thane-400612, Maharashtra, India Maharashtra India (72)Name of Inventor:
Filing Date (87) International Publication No	:NA : NA	1)DHAMANE, DHIRAJ 2)T. PRASAD RAJENDRA
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number Filing Date	:NA :NA	

#### (57) Abstract:

The present invention herein discloses potent synergistic compositions of vasoactive mediators enhancers for improving vascular endothelial function. Particularly, the invention relates to synergistic nutritional composition comprising exogenous blend of N1-methyl nicotinamide chloride and standardized red spinach extract enriched with nitrate content along with pharmaceutically acceptable excipients, wherein N1-methyl nicotinamide salt and standardized red spinach extract enriched with nitrate content are present in the ratio of 1: 0.5 to 1: 8; and N1-methyl nicotinamide chloride and nitrate of standardized red spinach extract, are present in the ratio of 1: 0.1 to 1: 1. The present synergistic composition is useful for treating endothelial dysfunction such as hypertension, atherosclerosis, thrombosis, myocardial infarction, heart injury.

No. of Pages: 53 No. of Claims: 19

(22) Date of filing of Application :02/01/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention : A SYSTEM FOR REMOTELY TRACKING THE EVENTS INSIDE A OFFICE AND COMMUNICATING THE VITAL INPUTS FOR EFFECTIVE MANAGEMENT OF THE OFFICE

st),
a

# (57) Abstract:

The present invention act as a simple reckoner to personnel's by flashing real-time status of activities taking place at remote locations. This platform is time efficient and eliminates dependency on the other modes of communication currently used and will be very effective in both urban and rural areas. It works on both on-line and off-line network modes. This provides an upper hand while implementing this remote activity management solution.



No. of Pages: 7 No. of Claims: 2

(22) Date of filing of Application :02/01/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention : PULSED POWER TRANSMISSION USING SEGMENTED INPUT GEAR WITH ONE WAY SEGMENTED OUTPUT GEAR

(51) International classification	:F03G0007100000, B60K0006547000, F16H0003091000, F16D0063000000, H02M0003280000	(71)Name of Applicant:  1)CHAUDHARI SAURABH VIKAS Address of Applicant: CHAUDHARI SAURABH VIKAS Indian S/O Vikas Kisan Chaudhari, 1341, Near Swaminarayan Temple, Savda, Tal Raver, Distt. Jalgaon (Maharashtra) -42 55
(31) Priority Document No	:NA	02 Maharashtra India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)CHAUDHARI SAURABH VIKAS
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	oer:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

PULSED POWER TRANSMISSION USING SEGMENTED INPUT GEAR WITH ONE WAY SEGMENTED OUTPUT GEAR Pulsed power transmission method and its device is completely different from conventional i.e. continuous power transmission we are using today. In pulsed power transmission power is transmitted from one shaft to another shaft in the form of power pulses in order to harness gravitational energy in power receiving shaft. Pair of segmented input gear 103 and one way segmented output gear 104 is designed to transmit power from input shaft 102 to output shaft 105 in the form of power pulses. One way segmented output gear 104 enables output shaft 105 to keep rotating even during the pause in power transmission, resulting into continuous output power from output shaft 105. Due harnessing of gravitational energy in output shaft 105, pulsed power transmission becomes more efficient than conventional power transmission we are using today. Most Illustrative Diagram: Fig 2



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

(22) Date of filing of Application :02/01/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention: PULSED POWER TRANSMISSION USING ONE WAY INTERNAL GENEVA WHEEL

(51) International classification	:F03G0007100000, B60K0006547000, F16H0027060000, B60K0006365000, H02J0007020000	(71)Name of Applicant:  1)CHAUDHARI SAURABH VIKAS Address of Applicant: CHAUDHARI SAURABH VIKAS. Indian S/O Vikas Kisan Chaudhari H. N. 1341, Near Swaminarayan Temple, Savda, Tal Raver, Distt. Jalgaon,
(31) Priority Document No	:NA	(Maharashtra) -425502 Maharashtra India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)CHAUDHARI SAURABH VIKAS
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

PULSED POWER TRANSMISSION USING ONE WAY INTERNAL GENEVA WHEEL Pulsed power transmission method and its device is completely different from conventional i.e. continuous power transmission we are using today. In pulsed power transmission input shaft 102 transmits power received from prime mover 101 to an output shaft 109 in the form of power pulses in order to harness a gravitational energy in output shaft 109. A said one way internal Geneva wheel 105 is designed such that output shaft 109 keeps rotating even when a driving crank 103 is not transmitting power to a said one way internal Geneva wheel 105 due to one way mechanism 107 assembled with wheel hub 108. Due harnessing of gravitational energy in an output shaft 109 during power transmission, a pulsed power transmission becomes more efficient than conventional power transmission. Most Illustrative Diagram: Fig 1



No. of Pages: 15 No. of Claims: 10

(22) Date of filing of Application :02/01/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention : PULSED/ INTERMITTENT/ IMPULSIVE POWER TRANSMISSION PROCESS TO HARNESS GRAVITATIONAL ENERGY IN OUTPUT SHAFT

(51) International classification	F16C0009040000, H02N0011000000,	II
	H01J0037340000 H01J0037340000	Indian S/O Vikas Kisan Chaudhari H. N. 1341, Near Swaminarayan Temple, Savda, Tal Raver, Distt. Jalgaon,
(31) Priority Document No	:NA	(Maharashtra) -425502 Maharashtra India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)CHAUDHARI SAURABH VIKAS
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

A pulsed power transmission method and its device is completely different from the conventional i.e. continuous power transmission we are using today. A pausing connecting rod 104 is designed to transmit power in the form of power pulses. In a pulsed power transmission system, the rotational motion of an input crankshaft 102 is first converted to reciprocating motion by means of assembly of slider axle 105A and slider 105, and again a reciprocating motion of slider axle 105A get converted to rotational motion. A pausing connecting rod 104 is designed to create power pulses during power transmission in order to harness gravitational energy in output crankshaft 108, makes pulsed power transmission more efficient than conventional power transmission. Most Illustrative Diagram: Fig 3



No. of Pages: 24 No. of Claims: 10

(22) Date of filing of Application :02/01/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention : PULSED POWER TRANSMISSION USING ONE WAY GEAR WITH RECIPROCATING RACK GEAR

(51) International classification	F03G0007100000, H02J0007020000,	(71)Name of Applicant:  1)CHAUDHARI SAURABH VIKAS  Address of Applicant: CHAUDHARI SAURABH VIKAS Indian S/O Vikas Kisan Chaudhari. H. N. 1341, Near Swaminarayan Temple, Savda, Tal Raver, Distt. Jalgaon,
(31) Priority Document No	:NA	(Maharashtra) -425502 Maharashtra India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)CHAUDHARI SAURABH VIKAS
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

#### (57) Abstract:

PULSED POWER TRANSMISSION USING ONE WAY GEAR WITH RECIPROCATING RACK GEAR A pulsed power transmission method and its device is completely different from conventional i.e. continuous power transmission we are using today. In a pulsed power transmission power is transmitted from crank shaft 102 to output shaft 110 in the form of power pulses in order to harness gravitational energy in power receiving output shaft. An output shaft 110 keeps rotating even when segmented rack gear 107 is not transmitting power, due to one way mechanism 109 assembled with first one way gear 108A and second one way gear 108B. Harnessing of gravitational energy in output shaft 110 during power transmission, pulsed power transmission becomes more efficient than conventional power transmission. Most Illustrative Diagram: Fig 1



No. of Pages: 15 No. of Claims: 10

(22) Date of filing of Application :02/01/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: PULSED POWER TRANSMISSION USING PULSE PULLEY

(51) International classification	:F16H0003093000, H02K0016000000, F16H0001140000, F16H0003080000,	Address of Applicant :CHAUDHARI SAURABH VIKAS. Indian S/O Vikas Kisan Chaudhari. H/N. 1341, Near
(31) Priority Document No	B25J0009100000 :NA	Swaminarayan Temple, Savda. Taluka: Raver, Distt.: Jalgaon. Maharashtra 425 502 Maharashtra India
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)CHAUDHARI SAURABH VIKAS
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

Pulsed power transmission method and its device is completely different from conventional power transmission i.e. continuous power transmission we are using today. In pulsed power transmission method a first pulse pulley 104 and second pulse pulley 104B are designed to transmit power from input shaft 103 to two independent output shafts; first output shaft 108A and second output shaft 108B alternately in the form of power pulses in order to harness gravitational energy in first output shaft 108A and second output shaft 108B. Due to the harnessing of gravitational energy in first output shaft 108A and second output shaft 108B during power transmission process, pulsed power transmission becomes more efficient than conventional power transmission. Most Illustrative Diagram: FIG. 3



No. of Pages: 25 No. of Claims: 12

(22) Date of filing of Application :02/01/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: TAMPING ASSSEMBLY FOR CAPSULE FILLING MACHINE

(51) International classification	E01B0027170000, F04B0001320000, B64C0025420000,	
(31) Priority Document No	:NA	2)ACG Pam Pharma Technologies Pvt. Ltd.
(32) Priority Date	:NA	(72)Name of Inventor:
(33) Name of priority country	:NA	1)SINGH, Karan
(86) International Application No	:NA	2)DESHMUKH, Prakash
Filing Date	:NA	3)PRAJAPATI, Manish
(87) 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 tamping assembly for a capsule filling machine, the tamping assembly (1) comprising: a plurality of tamping pistons (5) arranged in at least one set of tamping pistons, the at least one set having one or more of the plurality of tamping pistons (5); at least one servo motor (10) operatively coupled with the at least one set of tamping pistons, the at least one servo motor (10) being configured to actuate each of the one or more of the plurality of tamping pistons (5), wherein the actuation by the at least one servo motor (10) linearly displaces the one or more of the plurality of tamping pistons (5) of the respective at least one set of tamping pistons.



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

(22) Date of filing of Application :20/05/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: MOBILE DEVICE AND COMPUTER DEVICE STAND

(51) International classification	F16M0013000000,	(71)Name of Applicant: 1)SOLUTION EXPERT 33 INTERNATIONAL CO., LTD. TAIWAN BRANCH (B.V.I.) Address of Applicant: 3F., NO.261, ZHONGXIAO RD., BANQIAO DIST., NEW TAIPEI CITY, TAIWAN
(31) Priority Document No	:201822224087.7	2)DONGGUAN SOLUTION 33 ELECTRONIC
(32) Priority Date	:27/12/2018	TECHNOLOGY CO., LTD.
(33) Name of priority country	:China	3)SENSEAGE CO., LTD.
(86) International Application No	:NA	4)SOLUTION EXPERT 33 INTERNATIONAL CO., LTD.
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)BEN-TIEN LIN
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

### (57) Abstract:

A mobile device and computer device stand (1) used for a mobile device/ computer device (2) includes a second platy body (11), a first platy body (12), and a support piece (13). One end of the first platy body (12) is connected to one end of the second platy body (11). The middle portion of the first platy body (12) is formed with a hole (121). A support portion (122) is disposed on the first platy body (12). The support portion (122) is located at one end of the first platy body (12) opposite to the end connected to the second platy body (11). The support piece (13) is disposed in the hole (121). The support piece (13) has a fold line (131). The support piece (13) is divided into a first portion (132) and a second portion (133) by the fold line (131). The second portion (133) is connected to the support portion (122).



No. of Pages: 27 No. of Claims: 14

(22) Date of filing of Application :05/12/2019

(43) Publication Date: 03/07/2020

# (54) Title of the invention : NEURAL NETWORK SYSTEM FOR PREDICTING POLLING TIME AND NEURAL NETWORK MODEL PROCESSING METHOD USING THE SAME

(51) International classification	:G06N0003040000, G06N0003080000, G06F0009480000,	(71)Name of Applicant:  1)SAMSUNG ELECTRONICS CO., LTD.  Address of Applicant: 129, Samsung-ro Yeongtong-gu
	H03M0013290000, G06F0011340000	Suwon-si Gyeonggi-do 16677, Republic of Korea Republic of Korea
(31) Priority Document No	:10-2018-0174269	(72)Name of Inventor :
(32) Priority Date	:31/12/2018	1)Seungsoo Yang
(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	
7.7.		

# (57) Abstract:

A neural network system for predicting a polling time and a neural network model processing method using the neural network system are provided. The neural network system includes a first resource to generate a first calculation result obtained by performing at least one calculation operation corresponding to a first calculation processing graph and a task manager to calculate a first polling time taken for the first resource to perform the at least one calculation operation and to poll the first calculation result from the first resource based on the calculated first polling time.



No. of Pages: 63 No. of Claims: 20

(22) Date of filing of Application :26/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: OPTICAL MEMBER DRIVING MECHANISM

		(71)Name of Applicant:
	H02K0041035000,	1)TDK TAIWAN CORP.
(51) International classification	G02B0007080000,	Address of Applicant :159, Sec. 1, Zhung Shan N. Rd.,
	G03B0021220000,	Yangmei Taoyuan, Taiwan
	E04H0012220000	(72)Name of Inventor:
(31) Priority Document No	:62/785,593	1)Chih-Wei WENG
(32) Priority Date	:27/12/2018	2)Chao-Chang HU
(33) Name of priority country	:U.S.A.	3)Yueh-Lin LEE
(86) International Application No	:PCT//	4)Chen-Hsien FAN
Filing Date	:01/01/1900	5)Chien-Yu KAO
(87) International Publication No	: NA	6)Chia-Ching HSU
(61) Patent of Addition to Application Numb	er:NA	7)Sung-Mao TSAI
Filing Date	:NA	8)Sin-Jhong SONG
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

# (57) Abstract:

An optical member driving mechanism is provided. The optical member driving mechanism includes a movable portion and a fixed portion. The movable portion includes a holder for holding an optical member with an optical axis. The movable portion is movable relative to the fixed portion. The fixed portion has a housing and a base. The housing is disposed on the base, and includes a top surface and a side surface. The top surface extends in a direction that is parallel to the optical axis. The side surface extends from an edge of the top surface in a direction that is not parallel to the optical axis. The side surface has a rectangular opening.



No. of Pages: 508 No. of Claims: 20

(21) Application No.201924054053 A

(19) INDIA

(22) Date of filing of Application :26/12/2019 (43) Publication Date : 03/07/2020

# (54) Title of the invention: DRIVING MECHANISM

!	
G02B0007182000, G02B0007020000, G03F0007200000,	(71)Name of Applicant:  1)TDK TAIWAN CORP.  Address of Applicant:159, Sec. 1, Zhung Shan N. Rd., Yangmei Taoyuan, Taiwan (72)Name of Inventor:
:62/785,593	1)Kai-Jing FU
:27/12/2018	2)Chao-Chang HU
:U.S.A.	3)Min-Hsiu TSAI
:NA	4)Mao-Kuo HSU
:NA	5)Juei-Hung TSAI
: NA	
:NA	
:NA	
:NA	
:NA	
	G02B0007182000, G02B0007020000, G03F0007200000, G02B0007000000 62/785,593 27/12/2018 U.S.A. NA NA NA NA

# (57) Abstract:

A driving mechanism is provided, including a fixed part, a movable part for holding an optical element, a driving assembly, and a positioning structure. The movable part is connected to the fixed part. The driving assembly is configured to drive the movable part to move relative to the fixed part. The positioning structure is formed on the movable part or the fixed part for positioning the optical element or at least one part of the driving assembly.

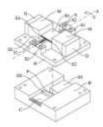


FIG. 1

No. of Pages: 90 No. of Claims: 20

# **CONTINUED TO PART-2**

(21) Application No.2021410	30130 A
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(12) PATENT APPLICATION PUBLICATION

(43) Publication Date: 16/07/2021

3)N R Mythreyi

4)Dr. S Sridhar

6)M Sivaraj

5)V Kishor Kumar

:C09K0017320000. Address of Applicant :S/o, P RENGAS MA G01N0033240000. Address ... APARTMENTS. KRISHNAPURAM STRILL C05F0011020000. APARTMEDU. CHENNAI 600004 TRUIT A01N0043160000. C12Q0001683700 (51) International classification 2)Dr. N K Rajan 3)N R Mythrevi :NA 4)Dr. S Sridhar ·NA (31) Priority Document No 5)V Kishor Kumar ·NA (32) Priority Date (33) Name of priority country 6)M Sivaraj ·NA (86) International Application No (72) Name of Inventor : :NA :NA 1)Dr. R Arivazhagan Filing Date (87) International Publication No 2)Dr. N K Rajan (61) Patent of Addition to Application :NA

:NA

:NA

:NA

PATE APPLICATION PUBLICATION Dak of filing of Application :05/07/2021

(21) Application No.202141030173 A

(43) Publication Date: 16/07/2021

One invention: SYSTEM AND METHOD FOR MANAGING TARGETED EVENTS

And the state of t	H04N0005445000, G06F0016600000 F24F0011300000 :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant: I)STEVE NATHANIEL SAN Address of Applicant #410, SRI ADUTYA NU BHERESWARA LAYOUT, LAKE BED ROAD, CHANASANDRA, HORAMAYU, BANGALOE KARNATAKA, INDIA Karmataka India (72)Name of Inventor: I)STEVE NATHANIEL SAN 2)DEEPAK SHANKARAPPA
Filme		

Filing Date

Filing Date

Number

Organic compounds to due to waxes, lignin, plant roof execute one or more events identified into one or more event organic coatings may be due to waxes, lignin, plant roof execute organic more event organic may be due to waxes, lignin, plant roof execute organic more event organic may be due to waxes, lignin, plant roof execute organic more event organic may be due to waxes, lignin, plant roof execute organic more event organic may be due to waxes, lignin, plant roof execute organic more event organic may be due to waxes, lignin, plant roof execute organic more event organic may be due to waxes, lignin, plant roof execute organic more event organic may be due to waxes, lignin, plant roof execute organic more event organic may be due to waxes, lignin, plant roof execute organic more event organic may be due to waxes, lignin, plant roof execute organic more event organic may be due to waxes, lignin, plant roof execute organic more event organic may be due to waxes, lignin, plant roof execute organic more event organic more ev the soil. Surface water repellency (SWR) is phenomenon to water repellency as it takes less hydropholic many module (140) generates a customized reminder corresponding to each of the one or more surface. Soils with a small surface area (e.g. sand) are more prone to water repellency as it takes less hydropholic many module (150) creates at least one plan corresponding to each of the one or more event categories. Soils with a small surface area (e.g. sand) are more prone to water repellency as it takes less hydropholic many module (150) creates at least one plan corresponding to each of the one or more event categories. Soils with a small surface area (e.g. sand) are more prone to water repellency as it takes less hydropholic many module (160) determines one or more preferences of the one or more event categories. surface. Soils with a small surface area (e.g. sand) are more runoff and is sensitive to erosion hazard. Various to appare a planning module (160) determines one or more preferences of the user associated with execution of individual particles, compared to silt or clay. This soil creates more runoff and is sensitive to erosion hazard. Various to appare a planning module (160) determines one or more preferences of the user associated with execution of individual particles, compared to silt or clay. individual particles, compared to silt or clay. This soil states and every methodologies has their own limitation to conventional methods are available, but each and every methodologies has their own limitation to conventional methods are available, but each and every methodologies has their own limitation to conventional methods are available, but each and every methodologies has their own limitation to convention to convention to the one or more recommendations for expending to each of the one or more relevant offers corresponding to the one or more recommendations for expending to each of the one or more relevant offers corresponding to the one or more recommendations for expending to each of the one or more event categories. alternative to above mentioned approach is bio-based treatment using enzymatic cocktails.

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

(62) Divisional to Application Number

(57) Abstract:

Organic compounds released during various manmade processes into the soil have made soil hydrophobic and water (100) for managing targeted events is discussed. An event data collection module (110) collects one or more events of the control of t (57) Abstract:

Organic compounds released during various manimate processing states associated with a user. An event organization module (130) identifies the one or more events organic compounds released during various manimate processing states associated with a user. An event organization module (130) identifies the one or more events organize more events associated with a user. An event organization module (130) identifies the one or more events organize more events associated with a user. An event organization module (130) identifies the one or more events organization module (130) identifies the one or more events organize more events associated with a user. An event organization module (130) identifies the one or more events organization module (130) identifies the one or more events organize more events organize more events associated with a user. An event organization module (130) identifies the one or more events organize more events associated with a user. An event organization module (130) identifies the one or more events organize more events organized more events organi aspects one or more relevant offers corresponding to the one or more recommendations. FIG. 1

of Pages: 28 No. of Claims: 10