(21) Application No.202241070811 A

(19) INDIA

(22) Date of filing of Application :08/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention : BIOMETRIC CONTROLLER WITH SOFT TURN-ON/TURN-OFF FOR SWITCHING APPLICATIONS

(51) International classification :G07C0009370000, G06F00213200000, G07C00090000000,

G06K0009000000

(86) International Application No Filing Date :PCT// :01/01/1900

(87) International Publication No (61) Patent of Addition to Application Number: NA Filing Date: NA

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant:
1)Presidency University

Address of Applicant :Presidency University. Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru ---

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Sreenivasappa B V

Address of Applicant :Presidency University, Itgalpur,

Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru ---

(57) Abstract:

ABSTRACT Biometric Controller with Soft Turn-on/Turn-off for Switching Applications A biometric controller to switch on/switch off electrical load is disclosed. The invention uses fingerprint recognition mechanism to activate or deactivate an electrical load such as a motor driving system. A sensor device, a controller, a power semiconductor switch (with isolator and driver), and a database are the four fundamental parts that make up the biometric access control system. FIG. 1

No. of Pages: 15 No. of Claims: 5

(21) Application No.202241071850 A

(19) INDIA

(22) Date of filing of Application: 13/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: RETESTING OF IMPERFECTION TESTED YARN USING WINDING DEVICE

(51) International classification :B65H0018260000, C09D0175040000, G01R0031340000, B65H0051220000,

A61F0002460000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

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

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant : 1)Presidency University

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Itagi A Ashok

Address of Applicant :Presidency University, Head of the Department, School of Design Itgalpur, Rajanakunte, Bengaluru,

Karnataka – 560 064, India. Bengaluru -----

(57) Abstract:

ABSTRACT RETESTING OF IMPERFECTION TESTED YARN USING WINDING DEVICE The present invention relates to textile design and technology, more particularly to textile testing. To enable retesting of the yarn after an imperfection test, it is disclosed here a winding device equipped with the imperfection machine. This winding device collects the yarn delivered by the imperfection tester machine. This winding device has smooth cylinder surface with 7" length and 3" diameter clasped in between two stationary support stands forming a support frame. This device is hand operated with driving handle at one end. The cylinder is rotated by the handle to take-up the delivery yarn coming out of the testing device. The yarn on the cylinder is evenly distributed on the surface of the cylinder by the operating a metal ring by hands continuously till the completion of the trial.

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



(19) INDIA

(22) Date of filing of Application :13/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: AN IRRIGATION SYSTEM

:A01G0025160000, G06Q0050020000, (51) International A01G0025000000, A01G0025090000.

classification A01G0022220000

(86) International :PCT// Application No :01/01/1900 Filing Date

(87) International : NA Publication No

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

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant: 1)Presidency University

(21) Application No.202241071853 A

Address of Applicant : Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

Name of Applicant: NA Address of Applicant : NA (72) Name of Inventor: 1)SHIVAM KUMAR

Address of Applicant : Presidency University, Associate Professor Chemistry, SOE, Itgalpur, Rajanakunte, Bengaluru, Karnataka -

560 064, India. Bengaluru -----

2)Dr.Divya Rani

Address of Applicant : Presidency University, Asst. Professor ECE, Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064,

India. Bengaluru -----

(57) Abstract:

ABSTRACT AN IRRIGATION SYSTEM The instant invention generally relates to water management system, more particularly an agricultural water irrigation system. The instant invention consists of two main units such as switching systems and linear level indicators. The switching system is utilized for indication of depth of water. The linear level indicators unit (height management system) adapt a gear motor mounted with spur gear for managing the level of switching system. The present invention is based on the principle of the Hall effect for its function. The water management system can be used in the crop fields as a low-cost automated irrigation system in terms of water productivity, water management, labour force, and economic feasibility of crop. FIG.3

No. of Pages: 18 No. of Claims: 2



(19) INDIA

(22) Date of filing of Application :13/12/2022

(21) Application No.202241071851 A

(43) Publication Date : 30/12/2022

(54) Title of the invention: A VEHICLE DETECTION AND ALERT SYSTEM

:G08G0001140000, G08G0001017000,

G01S0015931000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition to Application Number: NA

Filing Date

(62) Divisional to

Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Jagdish H Godihal

Address of Applicant :Presidency University, Department of Civil Engineering, Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560

064, India. Bengaluru -----

2)Prem Je Kalister

Address of Applicant :Presidency University, Department of CSE, Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India.

Bengaluru -----

3)Vineeth R C

Address of Applicant :Presidency University, Department of CSE, Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India.

Bengaluru -----

(57) Abstract:

ABSTRACT A VEHICLE DETECTION AND ALERT SYSTEM The present invention generally relates to a vehicle parking detection system, more particularly relates to a security system for invasive vehicle detector. Parking the vehicles in areas with heavy traffic, in front of gates, narrow roads often lead to traffic congestion and driver frustration. Inefficient and improper parking behaviour is caused due to the lack of information and monitoring of such areas. Therefore, there is a need for developing a smart parking-detection system for solving the above-mentioned issue. The instant invention utilizes the ultrasonic sensor which detects the presence of vehicle within the target area by transmitting and receiving ultrasonic waves with its transducer. The invasion vehicle detection system is simple, affordable device that can be used to reduce manual labour.

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



(21) Application No.202241072189 A

(19) INDIA

(22) Date of filing of Application: 14/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: GEOPOLYMER BRICKS WITH CUSTOM BLEND OF REDMUD AND MINERAL ADMIXTURES

:C04B0028000000, C04B0111000000, (51) International C04B0028040000, C04B0012000000, classification

C04B0018080000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA to Application Number :NA

Filing Date

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

(71)Name of Applicant: 1)Presidency University

Address of Applicant : Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

Name of Applicant: NA Address of Applicant : NA (72) Name of Inventor: 1)Sowmyashree T

Address of Applicant : Presidency University, Assistant Professor, Civil Engineering, Itgalpur, Rajanakunte, Bengaluru, Karnataka -

560064, India. Bengaluru -----

(57) Abstract:

ABSTRACT Geopolymer Bricks with Custom Blend of Redmud and Mineral Admixtures The present invention relates to a geopolymer brick composition and method of preparation thereof. The geopolymer brick composition comprises a solid and liquid component. The solid component is a mineral mixture of 60-75% red mud, 0-10% fly ash, 0-10% silica fume and 10-25%, whereas the liquid composition comprises a solution of 2M concentration of NaOH and 2M concentration of NaO s ion is mixed in the ratio of 1: 2.5 respectively and also serves as chemical activator. The method of preparation of geopolymer brick includes hand mixing of all solid components and mixing the liquid component which is approximately about 3kg solid mix to 1kg liquid mix. The resultant brick mixture is casted into moulds, demoulded, sundried and hydrated for 24 hours before use. The geopolymer bricks meet the requirement of IS 3495 1992 with respect to wet compressive strength, water absorption and physical characteristics as well.

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



(19) INDIA

(22) Date of filing of Application :21/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: AN ENERGY CONSERVING WATER PUMPING SYSTEM AND A METHOD THEREOF

(51) International :F24H0009200000, F04B0049060000, F04D0013060000, F24F0011300000,

classification G01F0023263000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

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

(62) Divisional to Application Number :NA :NA

Filing Date ...

(71)Name of Applicant:

1)Presidency University

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)V JOSHI MANOHAR

Address of Applicant :Presidency University, Itgalpur,

 $Rajanakunte,\,Bengaluru,\,Karnataka-560064,\,India.\,\,Bengaluru---$

2)DR. JAGDISH H GODIHAL

Address of Applicant :Presidency University, Itgalpur,

Rajanakunte, Bengaluru, Karnataka – 560064, India. Bengaluru ---

3)BHARAT KRISHNAN

Address of Applicant :Presidency University, Itgalpur,

Rajanakunte, Bengaluru, Karnataka – 560064, India. Bengaluru ---

(57) Abstract:

ABSTRACT AN ENERGY CONSERVING WATER PUMPING SYSTEM AND A METHOD THEREOF An energy conserving water pumping system and method are disclosed here. The system comprises of a capacitive type water level sensor, a triac based AC dimmer circuit that consists of a voltage divider circuit connected to the gate of the triac through a relay, an induction motor to simulate a water pump used to pump water to an overhead tank. When the sensor detected a predetermined water level, it switched on the relay which completed the circuit which causes the dimmer circuit to cut the voltage down and reduce the speed of the motor. Most illustrative figure is Fig.1

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

REGISTRAR Registrar

(19) INDIA

(22) Date of filing of Application :26/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: Gradient based Multi Focus Image Fusion using Foreground and Background Pattern Recognition with Weighted Anisotropic Diffusion Filter

(51) International :G06T0005500000, G06T0005000000, G06T0007110000, H04N0001387000,

classification G06T0007110000, G06T0007194000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

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

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:
1)Presidency University

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru ------

Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor :

1)Mr. G. TIRUMALA VASU

Address of Applicant :Department of Electronics & Communications Engineering, National Institute of Technology, Tiruchirapalli -620015, Tamil Nadu, India. Tiruchirapalli ------

2)DR. P. PALANISAMY

Address of Applicant :Department of Electronics & Communications Engineering, National Institute of Technology, Tiruchirapalli -620015, Tamil Nadu, India. Tiruchirapalli -------

- -----

(57) Abstract:

ABSTRACT Gradient based Multi Focus Image Fusion using Foreground and Background Pattern Recognition with Weighted Anisotropic Diffusion Filter The instant invention relates to digital image processing, more particularly to image fusion. To enhance the quality of the fused image, MFIF relies heavily on the precision of the detected focus area. The instant invention adapts a MFIF algorithm using weighted anisotropic diffusion filter (WADF) and a structural gradient. In photography, where it is required to separate foreground and background, multi-focus image fusion will be used. Major application areas in medical field are brain, lungs, prostate, breast, and other organs to improve the accuracy of clinical diagnosis. The exposition has been made better in terms of target recognition, object discovery, and human visual observation through the use of visible images (VI) and infrared (IR) image fusion.

No. of Pages: 13 No. of Claims: 1



(19) INDIA

(22) Date of filing of Application :26/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: Multi-Focus Image Fusion Using Anisotropic Diffusion Filter

(51) International :G06T0005500000, G06T0005000000, H04N0005225000, G06T0007110000,

classification G06T0005200000

(86) International Application No Filing Date :PCT// :01/01/1900

(87) International Publication No : NA

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

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Mr. G. TIRUMALA VASU

Address of Applicant :Department of Electronics & Communications Engineering, National Institute of Technology, Tiruchirapalli -620015, Tamil Nadu, India. Tiruchirapalli -------

- -----

2)DR. P. PALANISAMY

Address of Applicant :Department of Electronics & Communications Engineering, National Institute of Technology, Tiruchirapalli -620015, Tamil Nadu, India. Tiruchirapalli ------

- -----

(57) Abstract:

ABSTRACT Multi-Focus Image Fusion Using Anisotropic Diffusion Filter The instant invention relates to digital image processing, more particularly to image fusion. To enhance the quality of the fused image. In the instant invention, Anisotropic Diffusion Filter (ADF) based image fusion algorithm is proposed. Weight map layers are constructed through image smoothing using an edge-preserving method which is further processed by ADF before applying the fusion rule to obtain the final fused image. Fusing of medical images includes an expansive scope of methods from image fusion image fusion and general data combination that look into medical problems. Major application areas in medical field are brain, lungs, prostate, breast, and other organs. Fusion of visible images and infrared (IR) images has been utilized to improve the exhibition as far as target acknowledgement, object discovery and human visual observation. Fusion of multi-focus and multi-exposer images will be used in photography.

No. of Pages: 13 No. of Claims: 1



(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 23/12/2022

(54) Title of the invention: AUTOMATIC CONCRETE PILLAR CONSTRUCTION DEVICE

:E04G0021040000, B28C0005080000, (51) International E04C0003340000, E04G0013020000, classification

B28C0005140000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068546 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. Shrishail Anadinnni

Address of Applicant :Department of Civil Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

An automatic concrete pillar construction device comprises of a housing 1 mounted with multiple chambers 2 to store cement, sand, water and small rock, a touch enabled screen 3 to select a design and a color, a motorized iris lids 4 to dispense the decoded weight of the elements, a receptacle 5 to collect the dispensed elements, a motorized stirrer to mix the dispensed elements, an electronic nozzle 7 to dispense the concrete mixture, an elongated molding unit 10 to provide a hollow cylindrical shape, a conveyor 8 provided with multiple carving members 9 to carry the pillar, a direct current motor to turn the unit 10 near the carved members 9, an L-shaped telescopically operated pusher 12 to transfer the pillar, a vessel 13 for collecting the prepared pillar and a spraying unit 14 to spray the color.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 23/12/2022

(54) Title of the invention: PORTABLE RODENT ENTRAPPING DEVICE

(51) International classification :A01M0025000000, G01J0005000000, A01M0023000000, E01F0013020000,

A01M0001060000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition :NA

to Application Number: NA
Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068548 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. V Joshi Manohar

Address of Applicant :Department of Electrical and Electronics Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

The present invention relates to a portable rodent entrapping device comprises of a cuboidal body 1 maneuvered in multiple directions via wheels 2, a thermal imaging module 3 to detect presence of rodents in surrounding to maneuver body up to rodents, a square shaped chamber 4 configured with a fishing net 5, an air compressor 13 for exerting high pressurized gas to deploy net to entrap detected rodents, multiple suction units 6 to hold net 5 over ground surface to enable proper trapping of rodents, a telescopically operated gripper 7 to grip and uplift net 5 to provide a decided pathway for rodent to allow escaping of rodents only towards first portion of body, multiple motorized doors 8 to accommodate trapped rodents in a segregated manner and multiple weight sensors to detect presence of rodents, a motorized barrier 9 for avoiding escaping out of trapped rodents.

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

REGISTRAR REGISTRAR REGISTRAR

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 23/12/2022

(54) Title of the invention: PLANT GROWTH ASSISTIVE DEVICE

:G01N0033240000, A01G0025160000, (51) International G01N0027220000, H04N0005247000,

classification D06F0105580000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition:NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068544 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. S. Sivaperumal

Address of Applicant :Department of Electronics and Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

A plant growth assistive device, comprises of a body 1 developed to be positioned in proximity to a plant, a conduit 2 accessed by a user to connect with a water reservoir in order to fill water within body 1, a thermal image capturing module 3 for capturing and processing multiple images of plant, a motorized blade 4 for digging soil, a moisture sensor for detecting moisture content of soil around roots, multiple iris apertures 5 for opening to dispense water within soil, a user interface installed on a computing unit accessed by user to input details, an electronically operated valve 6 to dispense user-specified quantity of fertilizer within soil, a LDR (Light Dependent Resistor) sensor to detect intensity of sun light falling over body 1, a telescopic rod 7 configured with a canopy 8 to extend for positioning canopy 8 over plant to provide shade to the plant.

No. of Pages: 15 No. of Claims: 5

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 23/12/2022

(54) Title of the invention: STEERING PUMP TESTING DEVICE

(51) International :B62D0005060000, F04C0029020000, G02B0027010000, F04C0023000000,

classification B62D0005070000

:NA

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date
(62) Divisional to
Application Number

NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068545 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor :

1)Ravi Angadi

Address of Applicant :Department of Electrical and Electronics Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A steering pump testing device, comprises a housing 1 having an inlet 2 on which steering pump 3 is placed which to be tested, an electronic valve 4 is placed on oil reservoir 5 to allow oil discharge, multiple primary conduits 6 connected between oil reservoir 5 and pump 3 for transferring oil, a motorized belt 7 drive placed between housing 1 and pulley 9 to actuate the pump 3 via expandable plate 10 that maintains tension on the belt 7, a touch interactive display panel 11 to provide input details regarding pump 3 by the user, multiple of secondary conduits 12 are connects between the pump 3 and steering box 13 to transfer pumped oil, a leak detection module which detect the leakage of oil from the pump 3, a tachometer 15 used to find RPM and a DC motor to provide energy to the steering box 13.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 23/12/2022

(21) Application No.202241068549 A

(54) Title of the invention: AUTOMATED COIL WINDING DEVICE FOR MOTORS

:H02K0015095000, H02K0001140000, (51) International H02K0015040000, F21S0008020000, classification

B65D0083140000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition:NA

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

:NA **Application Number** :NA Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor:

1)Dr. A. M. Surendra Kumar

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

The present invention relates to an automated coil winding device for motors, comprising a housing 1 developed to be placed over a ground surface utilized to accommodate a stator 8 of motor, a touch interactive display panel 2 mapped on the housing 1 that enables a user to input, an acuity laser sensor embedded in the housing 1 for detecting diameter of the stator 8, a pair of motorized spools 4 wrapped with winding wires attached at ceiling of the housing 1 for aiding winding of the stator 8, a pair of clippers 5 gripped with the wires installed on each of the spools 4 with the wire to perform winding of the stator 8, a rotatable circular platform 10 arranged between the clamping unit 9 and the slider 13, the rotatable circular platform 10 used for performing winding over stator 8 followed by reciprocation of the clippers 5.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 23/12/2022

(54) Title of the invention: POOL-SIDE RESTING DEVICE

(51) International classification :H04N0005225000, H04N0021450000, G03B0017560000, B65G0023080000,

B25J0015060000

(86) International Application No :PCT///:01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition:NA

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068550 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. C. Kalajarasan

Address of Applicant :Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A pool-side resting device comprises of a rectangular platform 1 for placing an item, plurality of C-shaped units 2 to provide comfort to the user, an adjustable strap 3 to enable sitting of a user, an artificial intelligence image capturing module to capture images of the user's leg, a motorized roller wrapped with the strap 3 to enable adjustment of the straps 3, a pressure sensor for detecting the pressure on the strap 3, plurality of telescopically operated rod 6 to position the platform 1 and multiple suction cups 7 to enable gripping of the platform 1 above the bottom surface of the water reservoir.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022

(21) Application No.202241068547 A

(43) Publication Date : 23/12/2022

(54) Title of the invention: PEDAL RUBBER MANUFACTURING DEVICE

(51) International classification :C04B0028040000, B29C00440400000, B29B0007220000, B05B0015250000,

A01K0005020000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition

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

Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Dr. Ramesh Chinnakurli Suryanarayana

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A pedal rubber manufacturing device comprises a housing 1 installed on ground surface, a touch display panel 2 for entering the details of pedal rubber, multiple chambers 3 for storing raw materials, an electronically operated valve 4 for exiting out materials, a mixing container 5 for mixing materials accordingly, an AI(Artificial Intelligence) based image capturing module 6 for capturing the surrounding images, a motorized stirrer 7 for stirring materials for preparing a mixture, a motorized iris lid 8 for exiting out materials, a pair of calendar rollers 9 for forming paste, a Peltier unit 10 for controlling heat of paste, a robotic gripper 11 for reinserting paste in the rollers 9, a conveyor 12 with a telescopically operated blade 13 for cutting the flattened paste, a motorized circular slider 14 configured with multiple pneumatically operated blocks 15 for extending to caste material.

No. of Pages: 14 No. of Claims: 4

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 23/12/2022

(54) Title of the invention: DRAWING ASSISTIVE DEVICE

(51) International :G03H0001220000, B25J0011000000, F16M0011180000, G06F0003010000,

classification B61B0001020000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068551 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Udaya Rayi Mannar

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A drawing assistive device, comprising a platform 1 with multiple motorized clippers 2 to restrict any movement of sheet on platform 1, a display panel 4 installed on platform 1 to specify the image to be drawn, a motorized hinge joint 5 supplied with a display screen 6 to tilt the screen 6 at a pre-defined angle and display the user-specified image, a motorized pivot joint provided with a glass slab 7 and integrated in proximity to the screen 6 to refract the image over the sheet, a writing tool to be used by the user to draw the image, a robotic arm 8 fabricated with an iris lid 9, mounted on the platform 1 to detect the expressions of the user and a holographic projector 11 attached on the platform 1 to aid the user in drawing.

No. of Pages: 15 No. of Claims: 5

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: DRAWING ASSISTIVE DEVICE

(51) International :A63B0021000000, B43L0001000000, G07F0017320000, A47K0017020000,

classification G07F0017320000, G01B0011250000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068567 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Satish Babu Boppana

Address of Applicant: Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A drawing assistive device, comprises of a platform 1 positioned on a writable surface, multiple omnidirectional wheels 2 are configured underneath platform 1 for providing movement to platform 1 over surface, a display panel 3 mapped on platform 1 for allowing a user to input details regarding type and dimension of shape that user desires to draw, a motorized roller 4 wrapped with a measuring tape 5 for unrolling tape 5 on surface upto user specified dimension, a suction unit 6 integrated on an end portion of tape 5 for affixing with surface in order to restrict movement of tape 5, a slot 7 is carved over end portion for allowing user to place a writing tool within slot 7 to draw a line and an arc over surface and a speaker 8 for generating voice alerts to notify user to relocate platform 1 on surface.

No. of Pages: 14 No. of Claims: 4

(12) THERY THE ELECTROST CONDUCTION

(21) Application No.202241068568 A

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: PORTABLE FERTILIZER PREPARATION DEVICE

(51) International classification :B65F0001140000, B65F0001160000, B30B0009300000, E01H0001120000, B65F0001060000

(86) International Application No :PCT//

Filing Date :01/01/1900

Publication No
(61) Patent of Addition
to Application Number :NA
:NA

(87) International

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

Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Prashanth S P

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A portable fertilizer preparation device, comprising a platform 1 installed with a cavity 2 utilized by a user for attaining a sitting posture for nature's call, telescopic rods 3 for positioning platform 1 at a pre-defined height, a display panel 4 to input details regarding required height of platform 1 and attachment of a compostable bag, a motorized sliding arrangement 5 with multiple motorized clippers 6 for attaching bag, multiple L-shaped bars 7 to stretch bag, a weight sensor for measuring weight of waste collected in bag, a chamber 8 for collecting the bag filled waste, a primary ultrasonic sensor for detecting presence of bag in proximity to chamber 8, a motorized lid 9 to dispose bags within chamber 8, multiple container 10 for storing fragrant solution, an iris lid 11 for dispensing fragrant solution, an odor sensor for determining smell generated from waste within container 10.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022

(21) Application No.202241068564 A

(43) Publication Date: 02/12/2022

(54) Title of the invention: PORTABLE EGG PEELING DEVICE

(51) International classification :G06F0003041000, A47J0043140000, G01N0001440000, G06F0001160000,

A61M0005200000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

to Application Number :NA Filing Date

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor :

1)Aravinda T

Address of Applicant: Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

The present invention relates to a portable egg peeling device, comprising a housing 1 arranged with a touch interactive display panel 2 for allowing a user to provide input regarding boiling/peeling of eggs, an electronic nozzle 3 integrated with a chamber 4 for dispensing salt, an inlet 5 fabricated on the housing 1 to insert eggs and water, a heating unit 6 for heating water, plurality of iris lids 7 integrated at the housing 1 for dispensing water, a plate 9 that acts as a supporting structure, an artificial intelligence-based imaging unit for monitoring eggs, a telescopic pusher 10 arranged within the housing 1 for pushing eggs, a conduit 11 connected with a slot 12 for receiving eggs, a circular sliding unit 15 arranged with a motorized cutter 16 for cracking the egg shell and a container 18 arranged underneath the housing 1 for receiving separated components.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(21) Application No.202241068569 A

(54) Title of the invention: CLOTHES ACCOMODATION DEVICE FOR DONATION

(51) International classification :G06F0003044000, G06F0003041000, D06F0058200000, D06F0058100000,

B65F0001140000

(86) International :PCT//

Application No :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

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

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Sandeep GM

Address of Applicant: Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A clothes accommodation device for donation comprising of a housing 1 crafted with an opening 13 that is developed to be positioned on the ground surface for donating the clothes, a push button 4 is mapped on the housing 1 for opening the motorized door 7, a tray 11 is installed in the housing 1 that is aligned with the opening 13 that is used by user for put donated clothes into it, a motorized rack is arranged between the tray 11 and the walls of the opening 13 to slide the tray 11 out of the housing 1, a touch sensor is integrated in the tray 11 for detecting the touch of the clothes, a primary artificial intelligence based imaging module 9 in synchronization with the odour sensor for detecting the size, condition and smell of the clothes.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 02/12/2022

(54) Title of the invention: SECURED COMMODITY STORAGE DEVICE

:G06F0003042000, G06F0021320000, (51) International B65F0001160000, B65D0021020000, classification

:01/01/1900

A47J0031560000

(86) International :PCT// Application No

Filing Date

(87) International : NA Publication No

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

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

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068570 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. Abdul Sharief

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A secured commodity storage device, comprising a hollow body 1 with a handle 2 attached to the body 1 to carry the body 1 by the user, a biometric sensor 3 installed on the handle 2 to enter the finger impressions of the user, multiple chambers 4 to store various commodities each supplied by an iris lid 5 to allow the user to withdraw the commodities present within the chambers 4, a touch interactive display panel 7 mapped on the body 1 to allow the user to enter details regarding the commodity the user wants to withdraw, an image capturing module 6 to identify the commodities stored within the chambers 4, a temperature sensor 8 mapped within each of chambers 4 to detect the temperature of commodities and a Peltier unit 9 installed on the chambers 4 to maintain a prespecified temperature of commodities.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 02/12/2022

(54) Title of the invention: BOOK HOLDING DEVICE

:G10L0015220000, G06F0003160000, (51) International G06F0001160000, G06F0021310000,

classification G06T0007000000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068565 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. Rajiv Ranjan Singh

Address of Applicant :Department of Electronics and

Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

The present invention relates to a book holding device, comprising a wearable component 1 equipped by user over chest portion and configured with a pair of straps 2 for securing component 1 on chest portion, an electromagnetic fluid filled within the component 1 that hardening component 1 when user press a push button 11 installed on component 1 to provide a solid structure that is accessed by user for placing a book that wants to read, an artificial intelligence based imaging unit 3 installed on component 1 captures and detects successful positioning of book, a pair of motorized clipping unit 4 installed on component 1 hold the book, a microphone 5 installed on component 1 accessed by user for providing voice command regarding flipping of book pages along with clarification of content printed on book, and a speaker 8 installed on component 1 produces voice commands to utter content.

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

(19) INDIA

(22) Date of filing of Application: 29/11/2022 (43) Publication Date: 02/12/2022

(54) Title of the invention: COOKING ASSISTIVE DEVICE

(51) International classification :A47J0027080000, G06F0003041000, B67D0001080000, C01B0003560000,

A47J0027090000

(86) International :PCT//

Application No :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date

(62) Divisional to

Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068566 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Shilpa Mehta

Address of Applicant :Department of Electronics and Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

A cooking assistive device, comprising of a C-shaped frame 1 developed to be positioned on a fixed surface, a platform 2 to position a pressure cooker, a user interface integrated on a computing unit 3 for enabling user to input details regarding type of food to be cooked, a touch sensor 4 for detecting presence of pressure cooker over platform 2, a Peltier unit 5 for heating platform 2 up to evaluated temperature in order to cook food, an artificial intelligence based image capturing module 6 for capturing images of cooker, a suction unit 7 for collecting steam in order to prevent vapors from damaging device, and a pressure sensor 8 for measuring pressure developed over whistle 9, a robotic gripper for lifting a whistle 9 configured on cooker in order to release steam developed within cooker to prevent bursting of cooker.

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

(19) INDIA

(22) Date of filing of Application: 29/11/2022 (43) Publication Date: 02/12/2022

(54) Title of the invention: ADAPTABLE BEVERAGE FILTERING DEVICE

(51) International classification :A47J0031060000, B67D00010000000, B65D0051280000, A47J0031360000,

:01/01/1900

G06K0019070000

(86) International Application No :PCT//

Filing Date

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date
(62) Divisional to
(A. Divisional to SNA

Application Number :NA :NA

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068649 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Renuka Manish Bhagwat

Address of Applicant :Department of Electronics and

Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

An adaptable beverage filtering device, comprises of a perforated hemi-spherical body 1 developed to be placed on an auxiliary container in which a user desires to transfer a beverage, an expandable hollow member 2 for securing body 1 over a mouth portion of container, an image capturing module 3 for capturing and processing multiple images of container in order to detect dimension of mouth portion, an expandable pulley mechanism for adjusting member 2 over mouth portion, a display panel 4 for enabling user to input quantity of beverage that is to be transferred and type of material of container, multiple iris lids 5 for allowing passage of user-specified quantity of beverage within container while retaining impurities present within beverage, a suction unit 6 for collecting impurities within chamber 7, a weight sensor for measuring weight of impurities and an audio unit 8 for alerting a user to empty chamber 7.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: URINARY CATHETERIZATION DEVICE

(51) International :A61B0005200000, A61F0005453000, A61F0005440000, B67D0007020000,

classification A61G00090000000 A61G00090000000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068650 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Sreenivasappa B V

Address of Applicant :Department of Electronics and Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

The present invention relates to urinary catheterization device comprises of, a wearable unit 1 worn by patient is installed with a primary flexible bag 2, a conduit 3 arranged having a first end 4 connected with male reproductive organ and second end 5 attached with primary bag 2, an iris lid 6 installed at first end 4 for convenient accommodation, a cushion pad 7 embedded in lid 6 for providing comfort after accommodating conduit 3, a flow sensor associated for determining flow of urine, a level sensor for detecting level of urine, a speaker 8 for notifying patient to expel out urine, a secondary flexible bag 9 installed in wearable unit 1 and segregated in a pair of partitions filled with a scented solution and an antibacterial liquid, an ECV 10 configured with each of partitions for dispensing solution and liquid inside primary bag 2 for aid of cleaning.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: COOKING ASSISTIVE DEVICE

(51) International :H05B0006640000, A47J0043280000, A47J0036320000, A23L0005100000,

classification A4730030320000, G01K0001024000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

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

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068652 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor :

1)Dr. Devendra Singh Dandotiya

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A cooking assistive device comprising of a an elongated L-shaped frame 1 developed to be held by a user while performing a cooking/baking activity , a handle 2 for provide a comfortable grip to the user while performing the activity, a microphone 3 for enabling the user to input voice commands regarding type of operation, multiple oval shaped rings 4 for deploying the rings 4 in a manner to provide a straining surface in order to allow said user in performing the frying operation, an image capturing module 5 for capturing multiple images of a food item strained by the rings 4 , a suction unit 6 for withdrawing excess oil from the food, a temperature sensor 7 for detecting temperature of the food item being cooked by the user and an audio unit 8 mapped on the frame to generate audio notifications for alerting the user .

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 02/12/2022

(54) Title of the invention: POSTURE MAINTAINING DEVICE DURING STUDYING

:G02B0013000000, A47C0009020000, (51) International B23K0026700000, H04N0001120000, classification

A63B0022000000

(86) International :PCT/// Application No :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition:NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068656 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. Zafar Ali Khan N

Address of Applicant :Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A posture maintaining device during studying comprises of a platform 1 established on a table that is assembled with multiple of suction cups 2 to secure the platform 1 to secure on table, an artificial intelligence (AI) based image capturing module 3 mounted on the platform 1 for determining width of user's chest, a sliding arrangement 4 configured in between a pair of telescopic bars 5 and platform 1 for sliding the vertical telescopic bars 5 over the platform 1 as per the width of user's chest, a horizontal telescopic rod 6 is assembled between the vertical telescopic bar 5 for extending itself in accordance to the width of the user's chest, an optical character recognition (OCR) module synchronized with the image capturing module 3 for determining alphabetical characters of book, a laser emitter 7 assembled on the horizontal telescopic rod 6 for highlighting user's mistake.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 02/12/2022

(54) Title of the invention: MOLEHILL LEVELING DEVICE

:G06F0003160000, H01Q0001320000, (51) International H04N0005232000, H01L0041090000,

classification A01M0029160000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition:NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068647 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. Ramachandra C G

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

The present invention relate to a molehill leveling device comprising a body 1 developed to be positioned on a ground surface, plurality of omnidirectional wheels 2 arranged underneath the body 1 for maneuvering the body 1 over surface, a thermal based imaging unit 3 installed on the body 1 to detect presence of a rodent in mole hill, a slider 4 with a sound generating unit 5 underneath body 1 for deploying sound generating unit 5 in mole hill, a vibration module integrated with sound generating unit 5 for generating vibrations, plurality of chambers 7 in the body 1 for storing various solutions, iris lid 8 on chamber 7 for dispensing solutions, a telescopic rod 9 with a flap 10 on body 1 for extending in order to deploy flap 10 over ground and a motorized hinge 11 connected in between the flap 10 and rod 9 to provide movement to flap 10.

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

(21) Application No.202241068648 A

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: THERMOFORMED PLASTIC SHEET MANUFACTURING DEVICE

(51) International classification :B29C0065000000, B65C00070000000, B29C0051440000, H05B00061000000,

A47F0009040000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date :N

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Privanka S Umarii

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

The present invention relates to a thermoformed plastic sheet manufacturing device, comprises of a housing 1 developed to be positioned on a fixed surface, a chamber 2 for storing waste plastic, a display panel 3 for enabling a user to input details regarding length, width, thickness and pattern of required sheet, an iris lid 4 for dispensing plastic within a container 5, a heating element 6 container 5 for heating plastic to convert the plastic into a molten form, an electronically controller valve 7 for dispensing liquefied plastic within a platform arranged underneath container 5, a motorized hinges 9 coupled between plates 8 for deploying plates 8 in a manner to form a close structure, a pair of robotic grippers 10 for translating sheet over a conveyor 11 arranged adjacent to platform, and a robotic cutting unit 12 for cutting the sheet into user-specified length and width.

No. of Pages: 15 No. of Claims: 5

(19) INDIA

(22) Date of filing of Application: 29/11/2022 (43) Publication Date: 02/12/2022

(54) Title of the invention: WORKPIECE BENDING DEVICE

(51) International :B61B0001020000, B21D00050000000, E21B0015020000, B23K0031020000,

classification E21B0013020000, B21D0005040000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

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

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068654 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

....

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Madhusudhan M

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A workpiece bending device, comprises of a platform 1 installed with multiple legs 2 for providing support to the platform 1, a pair of circular member 3 to place a work piece for performing bending, a display panel 4 mounted on the platform 1 to enter details regarding angle of bending, a sliding arrangement 5 linked with the members 3 for positioning the workpiece as per the requirement for operations, an artificial intelligence based imaging unit 6 arranged on the platform 1 to detect successful assembly of the workpiece and a telescopic pusher 7 with multiple bending units installed on the platform 1 to exert pressure on work piece to bend workpiece in user specified pattern.

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

(19) INDIA

(22) Date of filing of Application: 29/11/2022 (43) Publication Date: 02/12/2022

(54) Title of the invention: RESPIRATORY DISORDER TREATMENT DEVICE

(51) International classification :A61P0011060000, A61B00050000000, A61B0005080000, C02F00010000000,

A61H0007000000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date
(62) Divisional to

Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068651 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Gopinath Dhanasekaran

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

The present invention relates to a respiratory disorder treatment device comprising of a conical shaped body 1 to be worn by user via a pair of Velcro strap 2, a pair of hollow conduits 3 attached with the body 1 in order to assist treatment of disorder, a display panel 6 mapped over the body 1 accessed by user to input health problem as well as required medicine, a hollow L-shaped member 7 attached with conduits 3 installed with a circular ring 8 to accommodate an asthma pump 11, a mouthpiece 10 installed within body 1 attached with pump 11 to intake asthma medicine, a sprayer 13 installed in body 1 and attached with a primary container 12 dispenses antibiotic cough solution in user's mouth and a nozzle attached with secondary container dispenses oxygen in vapor form towards user's mouth as per the user requirements.

No. of Pages: 16 No. of Claims: 9

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: FOX NUT PROCESSING DEVICE

(51) International classification :G01N0035000000, A01C0001020000, A23N0005000000, H04N0007180000,

H01L0021670000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068655 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Ashish Srivastava

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A fox nut processing device, comprises of a housing 1 positioned on a fixed surface, a perforated plate 3 for placing fox nut seeds, a nozzle 4 for dispensing pressurized water, an image capturing module 6 for capturing and processing multiple images of inner surroundings of housing 1, a hinge for rotating plate 3 to dispense washed seeds within a container 7, an air blowing unit 8 for drying washed seeds, a L-shaped rod 9 installed with hammer 10 for cracking shell of seeds, a motorized iris lid 11 for dispensing seeds within a vessel 12, a heating element 13 to roast seeds, a pair of ball and socket joint 14 to dispense roasted seeds within a receptacle 15, a perforated base 16 for receiving roasted seeds, a hydraulic pusher 17 for hitting roasted seeds and a pivot joint to transfer fox nuts within an auxiliary box 18.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 02/12/2022

(21) Application No.202241068653 A

(54) Title of the invention: AUTOMATED STRING BINDING DEVICE

:A63B0021000000, A22C0011120000, (51) International E21B0019220000, G06N0007000000,

classification G10L0017240000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition:NA

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

:NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor:

1)Gangaraiu

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

An automated string binding device comprising of a platform 1 that is fabricated with vertical rods 3 placed on the surface, multiple spools 6 of colorful strings that is utilized by user, the pair of L-shaped supports 5 constructed for wrapping string around wrist, a touch interactive display panel 7 for giving input commands regarding length, color and number of turns of string, an artificial intelligence module 8 for detecting position of user's wrist, a acuity laser sensor for detecting diameter of user's wrist, a robotic arm for gripping the one end of string, a motorized clipper for wrapping the string on the user's hand, a motorized slider for providing movement to the clipper, a knot making assembly 10 via a pair of robotic clamp 13 for knotting string, a telescopic gripper 12 for gripping the end of string in order to make a string.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 23/12/2022

(54) Title of the invention: PAPER CUTTING ASSISTIVE DEVICE

:G01B0011250000, H04N0021475000, (51) International G06F0003160000, A61B0090000000, classification

G06F0003030000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068572 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr Shilpa Mehta

Address of Applicant :Department of Electronics and Communication Engineering, Presidency University, Bangalore,

Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

A paper cutting assistive device, comprises of a frame 1 having a pair of blades 2 pivoted to each other and arranged with a pair of finger braces 3 that are accessed by a user to facilitate sliding movement of blades 2, a user interface installed within a computing unit associated with device for enabling user to input details, an image capturing module 4 for capturing and processing multiple images of sheet, a laser projection unit 5 for projecting a laser beam depicting a path that user is required to follow while performing a cutting operation, a laser sensor for detecting thickness of sheet, an electromagnetic strip 6 for generating a magnetic field to aid user in performing operation, an angle sensor for detecting angle of frame 1 while performing operation on curved projected path and an audio unit 7 for generating audio notifications to alert user regarding inappropriate angle.

No. of Pages: 14 No. of Claims: 4

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 23/12/2022

(54) Title of the invention: CASHEW PROCESSING DEVICE

(51) International :A23N000500000, A23L0025000000, A61K0036220000, F16C0011060000,

classification H04N0005225000

:NA

(86) International Application No :PCT//

Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number: NA

Filing Date

(71)Name of Applicant :

1)Presidency University, Bangalore

(21) Application No.202241068576 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. R Mahalakshmi

Address of Applicant :Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A cashew processing device, comprising a housing 1 installed with multiple motorized omnidirectional wheels 2 for maneuvering over surface, an artificial intelligence based image capturing module 3 captures and detects cashew fruits presence over cashew tree, a pair of telescopic clamps 6 installed on housing 1 separate raw cashew from fruits and transfer over a plate 7 attached within housing 1, a primary motorized ball and socket joints 8 attached between plate 7 and housing 1 for flipping plate 7 in a manner to transfer dried raw cashews within a heating section 9, multiple primary iris lids 10 attached within heating section 9 for dispensing roasted cashew within a de-shelling section 11, multiple secondary iris lids 13 attached within de-shelling section 11 for dispensing cashew nuts within base 16, a robotic gripper 14 grip and separate nuts, and a peeler 18 attached within hollow poles 17 peels cashews.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 23/12/2022

(54) Title of the invention: COMPRESSOR CLEANING DEVICE FOR AIR-CONDITIONERS

(51) International classification :G06K0007100000, F04B0027100000, H04N0005225000, G03G0021000000,

G01N0035100000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition to Application Number: NA

Filing Date
(62) Divisional to

NA

NA

NA

Application Number :NA :NA

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068577 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Kondreddy Sreekanth Reddy

Address of Applicant :Department of Electrical and Electronics Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A compressor cleaning device for air-conditioners comprises of a housing 1 for mounting all component on to it, a omnidirectional wheels 2 for providing movement to housing 1, an imaging unit 3 for capturing and processing images, a pair of L-shaped telescopic rod 4 for extending to position the body 15, a touch interactive display panel 5 for allowing a user to enter details, a robotic arm 6 for positioning body 15, a slider arrangement for aligning the wrench 14, a robotic gripper 8 for removing a covering plate of the compressor, an electronic nozzle 10 for dispenses water, a water reservoir 11 for holding water, a motorized brush 12 for cleaning, a multiple electronic valves 13 for dispensing the soap solution, telescopic bars for extending and a pair of overlapping blade for aid in collection of waste.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 23/12/2022

(21) Application No.202241068580 A

(54) Title of the invention: STONE SHEET MACHINING DEVICE

:G06F0003010000, H04N0009804000, (51) International G06K0007140000, H04W0004020000,

classification H04N0007180000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition:NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor:

1)Dr. A. M. Surendra Kumar

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A stone sheet machining device, comprising a housing 1 developed to be positioned by a user over a stone sheet and arranged with plurality of motorized omnidirectional wheels 2 for providing movement to housing 1 on stone, a multi-sectioned chamber 3 for storing different type of tools, a motorized lid 4 hinged with chamber 3 for opening/closing a mouth portion of chamber 3 to allowing withdrawing of tools from chamber 3, a touch interactive display panel 5 for allowing user to input details regarding type of operation and point of operation, a robotic arm 6 for withdrawing an appropriate tool from chamber 3, a machining unit 7 configured with an electromagnetic link for placing tool on machining unit 7, and an artificial intelligence based imaging unit 8 for capturing and processing images of stone sheet respectively, to detect positioning of point of operation.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 23/12/2022

(54) Title of the invention: FLOATING ASSISTIVE DEVICE FOR TODDLER

:B60N0002900000, B60R0022100000, (51) International A63G0009000000, A61H0003000000, classification

A61H0001020000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition:NA

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

:NA **Application Number** :NA Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068571 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Prashanth S P

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A floating assistive device for toddler includes a C-shaped plate 1 having a first portion 2 placed over a water surface and second portion 3 is arranged with a seat 4 utilized for accommodating toddler, a C-shaped balloon bag 5 for providing means of floating to Cshaped plate 1 on water surface, an artificial intelligence module 6 for detecting surrounding of the toddler, a pair of motorized rollers 7 wrapped with elastic straps 8 utilized for gripping the torso region of toddler's body, a shade panel 10 for preventing the toddler from sunlight, a rectangular sheet 9 hinged with plate 1 for lifting toddler's leg out of water, a motorized flap 13 for protecting toddler from water splashing, C-shaped cushioned pad 14 for providing comfort to toddler, and a telescopic rod 11 attached with shade panel 10 via a motorized ball joint 12 for angular movement of telescopic rod 11.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022

(21) Application No.202241068579 A

(43) Publication Date: 23/12/2022

(54) Title of the invention: AMBIENCE CONTROL DEVICE

:F16D0027105000, G06Q0020320000, (51) International C10G0001080000, G03B0005000000, classification

G07F0013100000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition :NA

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

:NA **Application Number** :NA Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor:

1)Aravinda T

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

The present invention relates to an ambience control device, comprises of a body 1 developed to be positioned on a fixed surface, multiple suction cups 2 for affixing the body 1 with surface, a display panel 3 for enabling a user to input details regarding color, thickness and duration of vapor rings desired by the user, a chamber 4 for storing water, an electronically operated valve 5 for dispensing a user-specified color stored inside container 6, a Peltier unit 7 for heating colored water up to a pre-fed temperature to form water vapors, a plate 9 configured with an iris aperture 10 connected to base 8 via an electromagnetic spring 11 for providing space for trapping vapors, a pressure sensor for detecting pressure of trapped vapors, a spring 11 for compressing to strike plate 9 on base 8 to generate user-specified vapor rings.

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: FISH FARMING MANAGEMENT DEVICE

(51) International classification :A01K0063040000, G01S0007481000, G01S0015960000, G01S0017931000,

G01S0017890000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068578 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Rajiv Ranjan Singh

Address of Applicant :Department of Electronics and

Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

The present invention relates to an fish farming management device, comprises of a hemispherical frame 1 developed to be immersed within an artificial pond utilized for rearing of fishes, a perforated sheet 2 for allowing passage of water within the frame 1, a capturing module 3 for detecting school of fish present within water body, a propeller 4 for transporting the frame 1 towards the school, a user interface for enabling the user to input details regarding quantity of fish food that is to be fed to the fish, an electronically controlled valve 5 for dispensing user-specified quantity of food, a LiDAR (Light Detection And Ranging) sensor frame 1 for creating a 3D mapping of school and an iris lid 7 for allowing fish to enter frame 1.

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

(12) FATENT AFFLICATION FUBLICATION

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: CHALKBOARD MANAGEMENT DEVICE

:B08B0001000000, G06F0003041000, (71)Name of Applicant: (51) International 1)Presidency University, Bangalore G06F0003035400, B43L0021000000, classification Address of Applicant: Itgalpur Rajanakunte, Yelahanka, G01J0005040000 Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition :NA 1)Dr. Sivaperumal S to Application Number :NA Address of Applicant :Department of Electronics and Filing Date Communication Engineering, Presidency University, Bangalore, (62) Divisional to Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-:NA **Application Number** 560064, India. Bengaluru -----:NA Filing Date

(21) Application No.202241068573 A

(57) Abstract:

(19) INDIA

A chalkboard management device, comprising an extendable board 1 fixed in an enclosure 2 for being utilized as a blackboard, a sensing module 3 installed on the board 1 to detect the dimension of the enclosure 2, an IR (Infrared)-based scanning unit 5 via a pair of L-shaped rods 6 to scan the written text, a pair of motorized sliders 7 for translating the scanning unit 5 along the length, a touch enabled screen 8 receives input command from the users to clean the board 1, a brush 9 to clean the board 1, an optic sensor 10 to detect the friction level of the board 1, an electronic nozzle 11 attached on each of the rods 6 for dispensing a cleaning solution on the board 1 and a pair of telescopically operated grippers 12 attached over the board 1 to wipe the board 1 by cloth.

No. of Pages: 15 No. of Claims: 10

REGISTRAR REGISTRAR

:NA

:NA

(21) Application No.202241068574 A

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 02/12/2022

(54) Title of the invention: VEHICLE ROOF RACK LOADING AND UNLOADING DEVICE

:F16C0011060000, B60R0009042000, (71)Name of Applicant: (51) International 1)Presidency University, Bangalore H01L0021677000, G01N0035040000, classification Address of Applicant: Itgalpur Rajanakunte, Yelahanka, B65H0029000000 Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition :NA 1)Dr. Udava Ravi Mannar

to Application Number :NA Address of Applicant :Department of Mechanical Engineering, Filing Date Presidency University, Bangalore, Itgalpur Rajanakunte, (62) Divisional to

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

Application Number

Filing Date

A vehicle roof rack loading and unloading device, comprising a first and second platform 2, 3 is arranged on a frame 1 for accommodating goods, a display panel 4 mapped on the frame 1 for provide input regarding number and sequence of goods to be loaded over the roof, a sliding unit 5 installed between the first platform 2 and frame 1 for providing reciprocating movement to the platform 2, ball and socket joints linked between the platform 2 and unit 5 for inclining the platform 2, an image capturing module 6 for capturing images of surroundings of the platform 2, robotic grippers 7 arranged on the platform 2 for gripping a good, sliders sandwiched between the grippers 7 and first platform 2 for providing upward/downward movement to the grippers 7 and a canopy mounted on the frame 1 to provide a protective layer to the goods.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 02/12/2022

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

:A61K0031125000, G01N0033460000, (51) International F23G0005160000, F24F0001004700,

classification G07F0011380000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition :NA

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

:NA **Application Number** :NA Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068575 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Dr. Ramesh Chinnakurli Suryanarayana

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

An automated camphor manufacturing device includes a housing configured with a primary chamber 2 stored with multiple of wooden logs, a touch display panel 3 that allows the user to input commands regarding quantity of camphor, shape and weight of camphor, a primary robotic arm 4 installed at ceiling of the housing 1 to pick and place one of log over platform 6, an air blower 5 installed on platform 6 for blowing hot-air on log to remove the moisture, shredding blades 7 integrated within a tray to shred the wooden log, a secondary chamber 8 placed below the tray to collect shreds of wooden logs, an ECV(electronic control valve) 9 configured with secondary chamber 8 to dispense the solution within a sieve 10, a rectangular base 12 crafted with multiple molds for filling the dispensed powder, and a telescopically operated pusher 15 mapped to evenly spread the powder.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022

(43) Publication Date: 23/12/2022

(21) Application No.202241068583 A

(54) Title of the invention: PORTABLE WATER STORAGE DEVICE

:A61B0005000000, A61B0005024000, (51) International F25D0023120000, A47K0003000000, classification

A47K0007020000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition:NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor:

1)Srivinav

Address of Applicant :Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A portable water storage device, comprises a cylindrical body is mounted with a cap 2 configured with a motorized hinge 10 for operating the discharge of the contained water, managed with the fingerprint sensor 3 database maintained by the device, a hollow telescopically operated rod 4 connected to a plurality of pneumatic bristles 5 attached within the body for cleaning and scrubbing of the body, a display 7 screen is mapped on the body for user to input temperature of the water desired and also providing user vital information about the nature of stored water, an AI (Artificial Intelligence) enabled camera 6 attached to the body triggers the suction cups 9 which adhere to the surface avoiding tumbling of the body and spillage of water.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 23/12/2022

(54) Title of the invention: BONE ALIGNMENT ASSISTIVE DEVICE

:A61B0005000000, A61F0005010000, (51) International A61F0007020000, A61F0007000000, classification

G16H0040630000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068586 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Renuka Manish Bhagwat

Address of Applicant :Department of Electronics and

Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

A bone alignment assistive device, comprises of a wearable body 1 adapted to be equipped by a user over a bone injury, a cushion pad 2 to provide comfort to user throughout a bone correction/healing process, a user interface embedded within a computing unit associated with device for enabling a medical practitioner to input details, a thermal imaging unit 3 for detecting location of injury, multiple pneumatic pins 4 to extend in order to apply entered amount of pressure over location in order to initiate process, a dolorimeter for measuring intensity of pain experienced by user, an electronic nozzle 5 for dispensing a pain relief solution over injured area in order to provide relief to user, a sweat sensor for detecting sweat produced over user's skin and a peltier unit 6 for cooling the pad 2 in order to provide comfort to user.

No. of Pages: 15 No. of Claims: 5

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43)

(21) Application No.202241068584 A

(43) Publication Date: 23/12/2022

(54) Title of the invention: VERMILION APPLICATION DEVICE

(51) International classification :A61K0033280000, A61M0016000000, B05B0013020000, B29L0031300000,

G01J0005000000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition

to Application Number :NA Filing Date

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Sandeep GM

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A vermilion application device, comprises of a body 1 developed to be positioned on fixed surface, multiple suction cups 2 to affix body 1 with surface, multiple chambers 3 each fabricated with an iris lid 4 for storing various shades of vermilion, a display panel 5 for enabling a user to input details, a container 6 integrated with an electrically controlled valve 7 for storing water, a mixing vessel 8 arranged with a motorized stirrer 9 for mixing dispensed vermilion and water, a LED 10 (light emitting diode) for alerting user regarding positioning of user's chin on a chin supporting member 11, an image capturing module 12 for capturing and processing images of user, an application unit for applying a user-specified pattern of vermilion on user's forehead, a non-contact moisture sensor to detect presence of moisture and an air blower 15 for blowing air on user's forehead.

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

REGISTRAR Registrar Registrar

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 23/12/2022

(54) Title of the invention: AUTOMATIC BUTTON STITCHING DEVICE

(51) International :A61B0017000000, A61B0017040000, A61B0034200000, G06N00200000000,

classification A63F0013240000 A63F0013240000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition
(62) Name of Name of NA

to Application Number :NA Filing Date

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068585 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor :

1)Dr. Ashok Anandappa Itagi

Address of Applicant :School of Design, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

(57) Abstract:

An automatic button stitching device comprising of a housing 1 installed with a platform 8 for placing shirt over it, a touch enabled screen 4 is mapped on housing 1 for giving input commands regarding type of button, chambers 5 are mapped on platform 8 for storing different button, a telescopic operated gripper 13 is installed on housing 1 for picking buttons from the chamber 5, an artificial intelligence module 2 is mounted on the housing 1 for capturing images of the button, a container 6 is mapped within the housing 1 for storing the needle, a primary robotic arm 12 is installed within the housing 1 for gripping needle from t container 6, multiple rollers 10 installed inside housing 1 for wrapping colors thread, a secondary robotic arm 11 is installed within the housing 1 for engaging thread into slot of needle in order to stitch button to shirt.

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 23/12/2022

(54) Title of the invention: WEARABLE EARPHONES MANAGEMENT DEVICE

:H04R0001100000, G06F0001160000, (51) International B05C0011100000, B26D0001547000, classification

H04R0005033000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068587 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. Sreenivasappa B V

Address of Applicant :Department of Electronics and

Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

A wearable earphones management device comprises of, a U-shaped wearable unit 1 accommodated around neck of a user, a pair of holes 3 carved at a first end 11 and second end 12 of unit 1 for accommodating earphones, an AI module 2 mounted on unit 1 for capturing multiple images of user ears, a motorized roller 4 equipped with each holes 3 for wrapping/unwrapping wire of earphone, an acuity laser sensor for detecting thickness of wire, a motorized iris lid 5 configured with each holes 3 close for gripping wire in a secured manner, a robotic arm 7 equipped with multiple pneumatic bristles 13 configured on wearable unit 1 for removing dust, an ECV 6 connected to a container 8 configured on unit 1 for dispensing cleaning solution, a telescopically operated rod 9 equipped an electronic nozzle 10 is configured on unit 1 for dispensing adhesive solution.

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

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(21) Application No.202241068594 A

(54) Title of the invention: UPPER-BODY EXERCISING DEVICE

(51) International classification :G06F0003041000, G06F0003010000, G06F0003030000, A61B0005110000,

A63B0021000000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

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

(62) Divisional to
Application Number :NA
:NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Dr. Devendra Singh Dandotiya

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

An upper-body exercising device, comprising of L-shaped platform 1 for performing an upper-body exercise, plurality of mace weights 2 arranged in an ascending order, a touch interactive display panel 3 for enabling user to input details regarding expertise level, an inbuilt microcontroller actuates a robotic gripper 4 for extending towards one of mace weights 2 in order to grip mace weight, an artificial intelligence based image capturing module 5 for capturing and processing images of user to detect height of user to align mace weight in proximity to user, a force sensor 6 for detecting grip of user over weights 2, an audio unit 7 to generate audio notification for alerting user, a thermal based imaging unit 8 for monitoring movement of user while performing exercise to detect posture of user, and a laser projector 9 for illuminating beam of lights to project an appropriate posture.

No. of Pages: 15 No. of Claims: 5

REGISTRAR REGISTRAR

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: NAVIGATION ASSISTIVE DEVICE FOR HIKING

(51) International :G01C0021200000, G01C0021360000, G06F0003010000, A01M0029180000,

classification G05D0001020000,

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068593 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. R Mahalakshmi

Address of Applicant :Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A navigation assistive device for hiking, comprises of a body 1 arranged with a motorized roller 2 wrapped with a strap for securing body 1 with user's hand, a push button 3 for enabling the user to gather navigational data regarding the user's surroundings during the activity, a spring 4 with an aerial unit 5 for expanding to launch the aerial unit 5 within the surroundings, an artificial intelligence based image capturing module 6 for capturing images of the surroundings, a display panel 7 for displaying the generated map in order to aid the user in following a route while performing the activity, an audio unit 8 to alert the user regarding a possible threat and an ultrasonic sound emitter installed on the body 1 for generating ultrasonic waves for repelling the animal in order to protect the user from being harmed.

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

REGISTRAR REGISTRAR REGISTRAR

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(21) Application No.202241068595 A

(54) Title of the invention: AUTOMATED SHEET METAL UNWRAPPING DEVICE

(51) International :A61L0031020000, A61F0002910000, H01B0007000000, H01L0027146000,

classification H04N0005225000

(86) International Application No :PCT//

Filing Date :01/01/1900

(87) International Publication No : NA

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

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Dr. Satish Babu Boppana

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

An automated sheet metal unwrapping device comprising a platform 1 arranged with multiple wheels 2 for maneuvering of the platform 1, an imaging module 3 positioned on the platform 1 for determining location of an object, a display panel 4 mounted on the platform 1 for entering command regarding unwrapping and length of wire/sheet, a telescopic frame 5 configured on the platform 1 and assembled with a shaft 6 to position a spool 7 over the shaft 6, an acuity laser sensor mapped on the frame 5 for detecting diameter/width of the wire/sheet, a pair of robotic arms 8 configured on the platform 1 to place an end of the wire/sheet over the spool 7, a speed sensor fabricated to the frame 5 for detecting rotational speed of the spool 7 and a pair of clippers 9 positioned on the platform 1 to support the wire/sheet.

(21) Application No.202241068589 A

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: AUTOMATED FASTENING AND UNFASTENING DEVICE FOR FASTENERS

(51) International classification :G01B0011060000, B25J0009000000, B61B0001020000, G06F0021880000,

G06F0003042000

(86) International Application No :PCT///:01/01/1900

Filing Date

(87) International Publication No : NA

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

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Abdul Sharief

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

The present invention relates to an automated fastening and unfastening device for fasteners comprising, a platform 1 attached with multiple omnidirectional wheels 2 for moving platform 1, a touch interactive display panel 3 accessed by user for inputting commands regarding location of object and type of operation, an AI module 4 mapped for detecting height of object, a cylindrical body 6 configured with multiple bolt-grips, a dual-axis motorized slider 7 installed at one end of body 6 for translating and positioning bolt-grip, a frustum-shaped socket 8 installed with multiple machining tools, a two-axis motorized lead screw 9 is mapped at one end of socket 8 for positioning tools, a dome-shaped member 10 installed with multiple screwdrivers, screwdrivers are attached to member 10 by means of a U-shaped motorized rack 11 for providing a linear motion to screwdrivers, and a telescopic shaft 12 installed on the platform 1 for positioning fasteners.

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

REGISTRAR REGISTRAL

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 02/12/2022

(54) Title of the invention: SURFING ASSISTIVE DEVICE

:A63B0069000000, G06F0003041000, (51) International G06F0003010000, F03D0007020000, classification

A63B0023120000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition :NA

to Application Number :NA Filing Date

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

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068597 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. Zafar Ali Khan N

Address of Applicant :Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

The present invention relates to a surfing assistive device, comprising a v-shaped board 1 having a first and second portion, the first portion 2 is used for accommodating a user and the second portion 3 to float on the water and acting as a base for portion 2, a pair of hollow pipes 4 with centrifugal pump 7 for discharging pressurized water, a pair of rectangular plates 8 for propelling the board 1, a telescopically operated handle 10 for providing a grip to the user, an artificial intelligence-based imaging module 14 for detecting posture and height of the user, a microphone 15 for providing access to the user to give input commands for performing different types of flips, a harness 11 for assisting the user in posture maintenance, multiple L-shaped bars 16 for propelling the surfing board 1, an elastic fiber 18 for controlling the wind flow.

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: MOBILITY ASSISTIVE DEVICE FOR DISABLED PERSONS

(51) International :A61H000300000, A63B0023035000, A61H0003040000, A61G0007100000,

classification A63B00210000000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition

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

Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068598 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Ravi V Angadi

Address of Applicant :Department of Electrical and Electronics Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A mobility assistive device for disabled persons comprising of a platform 1 attached with multiple wheels 2 to provide movement to the platform 1, a computing unit associated with the platform 1 accessed by the user to enter details regarding location and usability mode, a pair of extendable bars 3 attached over platform 1 installed with a seat 4 and a backrest 5 to allow user to sit, an imaging module 6 mapped over the platform 1 to detect height of bed over which user is lying, a slider 7 mapped between bars 3 and seat 4 to slide the seat 4 towards the user for convenient seating of user, a pair of telescopically operated handles 8 attached on side of the backrest 5 to extends towards user in order to grip user while seating, and a flap 9 attached with the seat 4 to provide support to user's back.

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

REGISTRAR REGISTRAR

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: AMUSEMENT BASED LOWER BODY EXERCISING SYSTEM

(51) International classification :G06F0001160000, A63B0069060000, A61B0034100000, A63B0071060000,

G09F0023000000

(86) International Application No :PCT//

Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

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

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Ramachandra C G

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

An amusement based lower body exercising system, comprises of a frame 1 arranged with a seating platform 2 accessed by a user for attaining a seating posture, a paddling unit 3 for allowing user to perform a cycling exercise, a track 4 associated with system, a body 5 attached with at least four wheel arrangement 6 for accommodating a person, a display panel 7 for enabling user to input details regarding an amount of calories that user desires to burn while performing exercise, a gear train arrangement 8 for translating rotational movement generated by user while paddling to a chain drive assembly 9, a telescopic rod installed with a stationary gear to allow coupling of gear with chain drives, a pressure sensor to detect gripping pressure applied by person over handle 10 and an IR (infra-red) based counter 11 for counting rotations of paddling unit 3.

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date : 02/12/2022

(54) Title of the invention: WOUND CARE DEVICE FOR FOOT

(51) International classification :A61B0005000000, A61F00130000000, B41J0002155000, A61F0013020000,

A61N0005060000

: NA

(86) International :PCT//

Application No Filing Date :01/01/1900

(87) International Publication No

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

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068596 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Srivinay

Address of Applicant :Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A wound care device for foot is comprising a body 1 that is manufactured to be worn by the user around the wound in user's foot, an artificial intelligence enabled image capturing module 2 mounted over the body 1 to capture images of the foot to detect exact position of wound in user's feet, a plurality of pneumatic pins integrated within the body to extend in such a way to maintain proper distance between the body and user's feet, a dolorimeter 3 mapped over the body 1 to detect pain in user's foot and on detection of pain more than the threshold value, and a nozzle 4 integrated over a chamber 7 attached with the body 1 dispenses ointment over the wound to provide relief to the user from pain.

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 02/12/2022

(54) Title of the invention: AUTOMATIC EGG PROCESSING DEVICE

:A01K0043000000, A47J0029000000, (51) International A01K0045000000, B65B0023080000, classification

A23L0015000000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition :NA

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

:NA **Application Number** :NA Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068591 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. Kalaiarasan C

Address of Applicant :Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

An automatic egg processing device comprising of a body 1 assembled with a platform 2, multiple slots 3 arranged over platform 2 to accommodate eggs, a touch enabled screen 4 mounted over the body 1 accessed by the user to input amount of eggs to be utilized, an image capturing module 5 mounted over the body 1 to detect dimensions of eggs, a plurality of telescopically operated rods 7 equipped with a suction cup 8 attached with body 1 to cover those eggs that needs to be boiled, a chamber 9 stored with water and configured with heating unit 10 to boil the water, iris pores 11 installed within the cups 8 connected with chamber 9 to dispense steam over the eggs for boiling, a pneumatic pin 12 attached with cups 8 to penetrate shell of egg, and an air blower 13 to blow off the shell

No. of Pages: 15 No. of Claims: 5

(19) INDIA

(22) Date of filing of Application :29/11/2022 (43) Publication Date: 02/12/2022

(54) Title of the invention: WIRE BENDING SYSTEM

:B21F0001000000, B61B0001020000, (51) International G01J0003460000, E01F0001000000, classification

B21D0005020000

(86) International :PCT// Application No

:01/01/1900 Filing Date

(87) International : NA Publication No

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

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241068592 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Privanka S Umarii

Address of Applicant :Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A wire bending system, comprising a platform 1 installed with multiple supporting legs 2 for providing support over ground surface, an artificial intelligence based imaging unit 3 installed on platform 1 for capturing and detecting position of wire over surface, a pair of robotic arms 5 configured on a motorized sliding unit 4 installed on periphery of platform 1 maneuvers towards wires to grip and place wire on platform 1, a touch interactive display panel 6 installed on platform 1 accessed by user for entering data details regarding a pattern that is to be formed, an ultrasonic sensor installed on platform 1 for detecting thickness and length of wire, a pair of bending tools 11 associated with system for bending wire in user specified angle, and a color sensor installed on platform 1 detects electrical configuration of a MCB (Miniature Circuit Breaker) box attached in proximity to platform 1.

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: FOOD QUALITY MONITORING DEVICE

(51) International classification :G01N0027220000, G01N0033020000, G01N0033000000, G06Q0010080000,

G01N0027120000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition:NA

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

Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072831 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Syed Abrar Ahmed

Address of Applicant : Assistant Professor, Department of Electronics and Communication, School of Engineering, Presidency University Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A food quality monitoring device, comprises of a body 1 utilized to place with a food item whose quality is to be monitored, a pH (power of hydrogen) sensor 2 configured with the body 1 for detecting pH level of the food item, a buzzer 3 mounted on the body 1 for notifying a user regarding abnormal pH of the food item, a moisture sensor 4 fabricated within the body 1 for detecting moisture content of the food item, a temperature and humidity sensor 5 embedded within the body 1 for detecting temperature and humidity level of the food item, a gas sensor 6 fabricated within the body 1 for detecting alcohol content of the food item, and a display panel 7 mounted on the body 1 for displaying the sensor's detected value.



(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: WEARABLE EMERGENCY ALARMING DEVICE

(51) International :A61B0005000000, H04W0004900000, H04W0004800000, G08B0021020000,

classification H04W0004800000 H04B0001040000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition to Application Number: NA

Filing Date
(62) Divisional to

Application Number Filing Date :NA 1)Sunil Kumar
Address of Applicant : Assistant Professor, Department of

Computer Science and Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Address of Applicant: Itgalpur Rajanakunte, Yelahanka,

Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(21) Application No.202241072838 A

1)Presidency University, Bangalore

(71)Name of Applicant:

Name of Applicant: NA

(72) Name of Inventor:

Address of Applicant: NA

(57) Abstract:

A wearable emergency alarming device, comprises of a wearable body 1 developed to be equipped by a user, a latch 2 mapped with the body 1 for enabling the user to wear the body 1 on a wrist portion, a push button 3 mounted on the body 1 for enabling the user to call for help in case of emergency, a RF (Radio Frequency) transmitter integrated within the body 1 for transmitting an emergency signal in a form of EM (Electromagnetic) waves, a RF (Radio Frequency) receiver coupled with an inbuilt microcontroller for receiving the transmitted signal on behalf of which the microcontroller transmits an emergency message along with the user's real-time location coordinates via a communication module paired with the microcontroller on a computing unit associated with the device.



(21) Application No.202241072830 A

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: ACCIDENT DETECTION AND RESCUE ASSISTIVE SYSTEM

:G08G0001010000, G08B0025010000, (51) International G07C0005080000, G05D0001000000, classification

G06F0003010000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition:NA

to Application Number :NA Filing Date

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

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Anupama Sindgi

Address of Applicant : Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

An accident detection and rescue assistive system, comprising of a wearable body 1 developed to be accommodated face portion of a user while driving a vehicle 3, an blink sensor 7 for detecting frequency of blinking eye by user, a buzzer 2 for notifying user to stop driving vehicle 3 in order to prevent any chances of accidents, an alcohol detection sensor 8 for detecting alcohol content in user's breathe, a communication module for establishing a wireless connection between microcontroller and a computing unit 4 of concerned authorities, an impact sensor detects impact on vehicle with another vehicle/obstacle, and a GPS (Global Positioning System) module 5 for fetching exact location coordinates of user for enabling concerned authorities to locate user.



(21) Application No.202241072835 A

(19) INDIA

(22) Date of filing of Application: 16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: ANTI-THEFT SYSTEM FOR ELECTRONIC GADGET

(51) International :A45C0011000000, A45C0013100000, H04W0076100000, A45F0005000000,

classification G01S0019510000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Amrutha V Nair

Address of Applicant : Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

An anti-theft system for electronic gadget, comprising a motion sensor 1 installed on an electronic gadget 2 detects change in position of gadget 2 of a user, an IoT (internet of things)-based communication module for establishing a wireless connection between microcontroller and a computing unit 3 of user, a buzzer 4 in case user via computing unit 3 gives input commands for triggering buzzer 4, microcontroller activates buzzer 4 for alerting people in surroundings of gadget 2 regarding unauthorized access of gadget 2, and a GPS (Global Positioning System) 5 for fetching real-time location coordinates of gadget 2 and fetched location is displayed on the computing unit 3 for allowing the user to track the gadget 2.



(21) Application No.202241072832 A

(19) INDIA

(22) Date of filing of Application: 16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: AUTOMATED MEDICINE DISPENSING DEVICE

(51) International :A61J0007040000, B65D0081320000, H04N0021410000, G16H0020130000,

classification G08B0021240000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Jisha L K

Address of Applicant : Assistant Professor, Department of Electrical and Electronics Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

An automated medicine dispensing device, comprising a body 1 developed to be positioned on a ground surface and is configured with at least two chambers 2 for storing two different types of medicines, a user-interface installed on a computing unit associated with the device for enabling a user to input details regarding a time interval of taking medicines, a buzzer 3 mounted on the body 1 for generating an audio notification for alerting the user regarding medicine consumption time, a keypad 4 is connected to the body 1 for enabling the user to specify the type of medicine required to be dispensed, a pair of motorized shafts 5, 6 connected with the chambers for rotating in order to dispense the medicines, a DC (direct current) motor 10 linked with one of the shafts 5, 6 for dispensing the user specified medicine.



:NA

:NA

(21) Application No.202241072829 A

(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: RUBBER-BASED CONCRETE COMPOSITION AND METHOD FOR SYNTHESIS THEREOF

:C04B0028020000, C04B0028040000, (71)Name of Applicant: (51) International 1)Presidency University, Bangalore C04B0028000000, C04B0024260000, classification C04B0111200000 Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition :NA 1)Santhosh M B

to Application Number: NA
Filing Date

The Address of Applicant: Assistant Professor, School of Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

(62) Divisional to

Application Number

Filing Date

A rubber-based concrete composition and method for synthesis thereof comprises of: i) cement in the range of 10-15%, ii) fine aggregate in the range of 35-45%, iii) coarse aggregate in the range of 25-35%, iv) silica fumes in the range of 10-15%, v) superplasticizer in the range of 1-2%, and vi) rubber aggregates in the range of 10-15%. A method for synthesis of composition comprising the steps: i) mixing cement, fine aggregate, coarse aggregate, silica fumes, superplasticizer, and rubber aggregates in order to prepare concrete composition by partially replacing fine aggregate, coarse aggregates and cement with varying proportions of rubber aggregates of different sizes in order to obtain concrete.



(12) FATENT AFFLICATION FUBLICATION

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: IRRIGATION MANAGEMENT DEVICE

(51) International classification :A01G0025160000, B60S00010800000, A01G0009240000, A01G00250000000,

A01G0025020000

(86) International Application No :PCT// :01/01/1900

Filing Date

(19) INDIA

(87) International : NA

Publication No
(61) Patent of Addition
NA

to Application Number :NA Filing Date

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072837 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Joshi Manohar V

Address of Applicant :Professor, Department of Electrical and Electronics Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka,

Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

(57) Abstract:

An irrigation management device comprises of an extendable H-shaped frame 1 arranged with multiple telescopic rods for positioning frame 1 at an optimum height on a crop field, a rain sensor 2 for detecting presence of rain in proximity to frame 1, a DC (direct current) motor attached with a shaft 3 wrapped with a sheet 4 for unwrapping sheet 4 in a manner to cover crops in order to prevent damaging of crops from rain, a user-interface installed on a computing unit for enabling the user to input details regarding operation of an electric pump 5 connected with a water source 6 for pumping water towards crop field in order to water crops, a solar panel 7 for transducing solar energy received from sunlight incident on panel 7 into electric charge and a battery for storing transduced charge that is further used by electric and electronic components of device.



(21) Application No.202241072833 A

(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

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

:E04B0002020000, C04B0033130000, (71)Name of Applicant: (51) International 1)Presidency University, Bangalore C05C0003000000, C11D0003370000, classification Address of Applicant: Itgalpur Rajanakunte, Yelahanka, E04C0001400000 Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT/// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International

Address of Applicant: NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition :NA 1)Gopalakrishnan N to Application Number :NA Address of Applicant :Department of Civil Engineering, School of

Filing Date Engineering, Presidency University, Bangalore, Itgalpur (62) Divisional to Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. :NA

Bengaluru -----

(57) Abstract:

Application Number

Filing Date

The present invention relates to a brick composition comprises of: i) clay soil in the range of 70-80% w/w, and ii) shredded plastic in the range of 20-30% w/w. A method for preparation of the brick comprises of following steps: a) mixing the clay soil and shredded plastic in order to obtain a mixture, followed by pouring the obtained mixture in GI moulds in order to obtain cubes, b) leaving the obtained cubes for sun drying for a time duration in the range of 3-8 days, followed by placing the cubes in oven at a temperature in the range of 80-120oC for a time duration in the range of 3-8 days in order to obtain the bricks.

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

:NA

(19) INDIA

(22) Date of filing of Application:16/12/2022

(43) Publication Date: 30/12/2022

(21) Application No.202241072836 A

(54) Title of the invention: FIRE ACCIDENT PREVENTION SYSTEM

:G08B0017060000, G06F0003010000, (51) International G08B0017113000, B60Q0005000000, classification

G06Q0050220000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition:NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Sowmvashree T

Address of Applicant :Department of Civil Engineering, School of

Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A fire accident prevention system, comprising multiple bodies associated with the system and installed at equidistant from each other within an enclosure, a sensing module embedded with multiple sensors for detecting any fire outbreak within the enclosure, a microcontroller connected with the sensing module for receiving and processing data received from the sensing modules, multiple motorized fan for blowing air in vicinity to the bodies in order to extinguish the fire outbreak, a lamp for illuminating various lights in order to notify persons present within the enclosure.

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

(21) Application No.202241072834 A

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: GLASS POWDER BASED CONCRETE COMPOSITION AND METHOD FOR SYNTHESIS **THEREOF**

:C04B0028020000, C04B0028000000, (51) International C04B0028040000, C04B0041000000, classification

C04B0041500000

(86) International :PCT// Application No :01/01/1900 Filing Date

(87) International : NA Publication No (61) Patent of Addition :NA to Application Number :NA

Filing Date

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

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Divya Nair

Address of Applicant : Assistant Professor, Department of Civil Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -----

(57) Abstract:

The present invention relates to a glass powder based concrete composition comprises of: I) cement in the range of 10%w/w-15% w/w, ii) fine aggregate in the range of 35% w/w- 45% w/w, iii) coarse aggregate in the range of 25% w/w- 35% w/w, iv) chemical admixtures in the range of 10%w/w- 15%w/w, v) mineral admixtures in the range of 1%w/w- 2%w/w, and glass powder in the range of 3%w/w- 8%w/w. A method for synthesis of the glass powder-based concrete comprises of following steps: a) mixing the cement, fine aggregate, coarse aggregate, chemical admixtures, mineral admixtures and glass powder in order to prepare the concrete composition by partially replacing the cement with the glass powder in order to obtain the concrete.

No. of Pages: 10 No. of Claims: 4

(19) INDIA

(22) Date of filing of Application :16/12/2022

(21) Application No.202241072844 A

(43) Publication Date: 30/12/2022

(54) Title of the invention: FAULTY PRODUCT SEGREGATION DEVICE

(51) International classification :B65G0043020000, B67D00010800000, A23L00033600000, H04L0067109500,

G06F0003035400

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA

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

Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor :

1)R. Jothi Basu

Address of Applicant: Associate Professor, Department of Mechanical Engineering, School of Engineering, Presidency University, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru

(57) Abstract:

A faulty product segregation device, comprises of a conveyer belt 1 installed within an enclosure 2 associated with the device, wherein the conveyer belt 1 is utilized by a user to accommodate plurality of similar products that the user segregate, a touch interactive display panel 3 mapped within the enclosure 2 for enabling the user to input commands regarding default specifications of the product, an artificial intelligence-based imaging module 4 synced with a set of sensors mapped on a frame 7 of the conveyer belt 1 for detecting the default specifications of the products to determine faults within the products, a pneumatic pusher 8 installed on the frame 7 for pushing the faulty products within a container placed adjacent to the conveyer belt 1.



(21) Application No.202241072846 A

(19) INDIA

(22) Date of filing of Application: 16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention : GRANULATED POLYPROPYLENE BASED CONCRETE COMPOSITION AND METHOD FOR SYNTHESIS THEREOF

(51) International classification :C04B0028020000, C04B00280000000, A23L0029300000, C04B00410000000,

H01L0023310000

(86) International Application No :PCT// :01/01/1900

Filing Date
(87) International
Publication No
: NA

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

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Ajay H A

Address of Applicant: Assistant Professor, Department of Civil Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru

(57) Abstract:

A granulated polypropylene based concrete composition and method for synthesis thereof comprises of: i) cement in the range of 13-18%, ii) fine aggregate in the range of 30-35%, iii) coarse aggregate in the range of 37-42%, iv) granulated polypropylene in the range of 2-3%, and v) water in the range of 7-10%. A method for synthesis of the composition comprises of following steps: i) mixing the cement, fine aggregate, coarse aggregate, granulated polypropylene and water in order to obtain the concrete composition by partially replacing the cement with the granulated polypropylene.

No. of Pages: 10 No. of Claims: 4

REGISTRAR REGISTRAR

(21) Application No.202241072849 A

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: COLLISION PREVENTION DEVICE FOR VISUALLY IMPAIRED

(51) International :G09B0021000000, G06F0001160000, A61H0003060000, H04M0019040000,

classification G02B0027010000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition NA

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Deepjyoti Mech

Address of Applicant : Assistant Professor, Department of Petroleum Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

The present invention relates to a collision prevention device for visually impaired, comprises of a wearable body 1 developed to be equipped by a visually impaired user over a wrist portion, a latch 2 for enabling user to secure body 1 over wrist portion, an ultrasonic sensor 3 for detecting distance between user and an obstacle approaching towards user, a buzzer 4 for generating an alert sound in order to notify user regarding approaching obstacle, a vibrating motor 5 for generating vibrations in order to notify user to halt/stop moving towards obstacle and a two-way switch 6 is integrated on body 1 for enabling user to turn on/off device.

No. of Pages: 10 No. of Claims: 2

REGISTRAR Registrar

(21) Application No.202241072853 A

(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: ASSISTIVE MOBILITY SYSTEM FOR PHYSICALLY IMPAIRED

:G06F0003010000, A41D0019000000, (51) International A63C0017000000, A61H0003040000, classification

A61H0003000000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition :NA

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

:NA **Application Number** :NA Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor:

1)Shine V.J

Address of Applicant : Assistant Professor, Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru,

Karnataka Pin-560064, India. Bengaluru -----

(57) Abstract:

An assistive mobility system for physically impaired, comprising an L-shaped seating platform 1 to be utilized by a physically impaired person to attain a sitting posture, a cushioned member 2 fabricated on the platform 1 to provide comfort to person, a wearable component 5 worn by user over hand portion, a hand-gesture module 6 arranged within component 5 to determine movement of hand, a RF (Radiofrequency) transmitter 7 configured with module 6 to transmit the determined movement to a RF (Radiofrequency) receiver 3 mapped on the platform 1 wherein based on data received by receiver 3, the microcontroller computes the desired direction of person and a pair of wheels 4 arranged under the platform 1 to commute the person in desired direction.



(21) Application No.202241072847 A

Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru,

Karnataka Pin-560064, India. Bengaluru -----

(19) INDIA

(22) Date of filing of Application: 16/12/2022 (43) Publication Date: 30/12/2022

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

:H02J0007000000, H01F0038140000, (71)Name of Applicant: (51) International 1)Presidency University, Bangalore H02J0050100000, F02P0017120000, classification Address of Applicant: Itgalpur Rajanakunte, Yelahanka, H01F0027240000 Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition :NA 1)Dr. C. Kalaiarasan to Application Number :NA Address of Applicant : Professor, Department of Computer Science Filing Date and Engineering, School of Engineering, Presidency University,

Application Number :NA :NA

Filing Date

(57) Abstract:

(62) Divisional to

A wire power transmission device, comprising a step-down transformer associated with the device for transferring a high primary voltage (220-230 V) AC into a low secondary voltage (12 V) AC that is further supplied to a primary coil, wherein a secondary coil is associated with the device for conducting the secondary voltage through EMI (Electromagnetic Induction) generated between the coils, an inverter connected with the secondary coil for converting the secondary voltage to DC (Direct Current) output supply (12 V DC) that powers an inbuilt microcontroller associated with the device, wherein a rechargeable battery is manually connected by a user that desires to recharge the battery and a display panel integrated with the device and linked with the microcontroller, wherein the microcontroller monitors a real-time battery percentage and synchronously the microcontroller actuates the panel for displaying the percentage.

No. of Pages: 10 No. of Claims: 2

REGISTRAR REGISTRAR

(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: SECURED ENTRANCE PREVENTION SYSTEM

(51) International classification :H04N0007180000, G07C0009380000, G08B0013080000, B60R0025310000, H04M0011020000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

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

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072850 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor :

1)Natya.S

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka,

Bengaluru, Karnataka Pin-560064, India. Bengaluru -----

(57) Abstract:

A secured entrance prevention system comprises an artificial intelligence enabled camera 1 mounted on a door of an entrance for capturing the plurality of images of a person standing in vicinity of the door, a microcontroller 2 to compare the captured images with pre-saved images to determine the authorized person, a database to fetch pre-saved images, a servo motor 3 assembled with a handle 4 of the door to open the handle 4 to allow the user for accessing the entrance and a buzzer 5 mounted on the door to alert the individuals in surroundings of the door relating the unauthorized person.

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

REGISTRAR REGISTRAT

(21) Application No.202241072845 A

(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: LIGHT-INTENSITY-REGULATED STREET LIGHTING SYSTEM

(51) International classification :F21W0131103000, F21Y0115100000, F21S0008080000, G06T0003400000,

H05B0047210000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

|----

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Rakesh Chowdhury

Address of Applicant : Assistant Professor, Department of Electronics and Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka,

Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

(57) Abstract:

A light-intensity-regulated street lighting system, comprises of multiple poles 1 installed along a street at equal distance from each other equipped with an LED (Light Emitting Diode) 2 for glowing the street, an LDR (Light Dependent Resistor) 3 mounted on each of the poles 1 for detecting light intensity in surroundings of the poles 1, an IR (Infrared) sensor 4 mapped on each of the poles 1 for detecting density of the vehicles on the street, and an AI (Artificial Intelligence) enabled camera 5 mounted on each of the poles 1 for continuously capturing multiple images of the street.

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



(21) Application No.202241072851 A

(19) INDIA

(22) Date of filing of Application: 16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: PORTABLE COLLISION PREVENTION DEVICE FOR VISUALLY IMPAIRED

(51) International classification :G09B0021000000, A61H0003060000, F21Y0115100000, G01S0015931000,

G01S0007521000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date
(62) Divisional to
NA
Signature NA
Signature NA

Application Number :NA :NA

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. R. Mahalakshmi

Address of Applicant: Professor, Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Velabanka, Bengaluru, Karnataka Pin-560064, India

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -----

(57) Abstract:

The present invention relates to a portable collision prevention device for visually impaired, comprising a frame 1 developed to be held by a visually impaired user, an ultrasonic sensor 2 installed on the frame 1 for detecting the distance between the user and an obstacle, a buzzer 3 mounted on the frame 1 for generating an alert sound in order to notify the user regarding the obstacle, a LED (Light Emitting Diode) 4 installed on the frame 1 for illuminating lights in order to notify the people present in proximity to the user regarding the approaching obstacle, a two-way switch 5 configured on the frame 1 for allowing the user to turn on/off the device, and a battery associated with the device for providing power to all the electrically and electronically operated components associated with the device.

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



(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: HEALTH MONITORING SYSTEM

(51) International :A61B000500000, A61B0005024000, A61B0005010000, A61B0005110000,

classification A61B0005010000 A61B0005020500

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition

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

Application Number Filing Date :NA (72)Name of Inventor:1)Dr. Joseph Anthony Prathap

Name of Applicant: NA

Address of Applicant: NA

(71)Name of Applicant:

(21) Application No.202241072852 A

1)Presidency University, Bangalore

Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka,

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Bengaluru, Karnataka Pin-560064, India. Bengaluru -----

(57) Abstract:

A health monitoring system, comprises of a wearable body 1 developed to be worn by a user a heart rate sensor 2 is fabricated with body 1 for detecting heart rate of user a buzzer 3 mounted on body 1 for notifying user regarding abnormality in detected heart rate of user a temperature sensor 4 embedded within body 1 for detecting temperature of user's body 1, a GPS (Global Positioning System) module 5 integrated with body 1 for fetching exact location coordinates of user a display panel 6 accessed by concerned authorities for allowing authorities to tract user an LED (Light Emitting Diode) 7 is installed on body 1 to glow upon pressing of a push-button 8 crafted on body 1, and a battery is associated with system for supplying power to electrical and electronically operated components associated with system.

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

REGISTRAR REGISTRAR

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: CONTROLLED MOBILE CHARGING DEVICE

(51) International classification	:H02J0007000000, H02J0050100000, G06F0001260000, G07F0017320000, H02J0007020000	(71)Name of Applicant: 1)Presidency University, Bangalore Address of Applicant: Itgalpur Rajanakunte, Yelahanka,
(86) International Application No Filing Date	:PCT// :01/01/1900	Bengaluru, Karnataka Pin-560064, India. Bengaluru Name of Applicant: NA
(87) International Publication No	: NA	Address of Applicant : NA (72)Name of Inventor :
(61) Patent of Additior to Application Number Filing Date	:NA :NA	1)Dr. Zafar Ali Khan N Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Presidency University,
(62) Divisional to Application Number Filing Date	:NA :NA	Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru

(21) Application No.202241072848 A

(57) Abstract:

A controlled mobile charging device, comprising a body 1 developed to be installed on a public place, a push button 2 for enabling a user to turn on the device, a display panel 3 for displaying a welcome message in order to allow the user to insert a coin insert a coin insertion unit 4 integrated on the body 1, a converter for converting a 220V AC (Alternate Current) into a 12V DC (Direct Current), a multi-pin charging adapter 5 connected with the relay for enabling the user.

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

REGISTRAR Registrar Registrar

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: CRIME DETECTION SYSTEM

(51) International :H04N0021431000, H04N0021470000, H04N0021462000, G08B0021020000,

classification H04L0067060000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition to Application Number: NA

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

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072868 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Mohamed Shakir

Address of Applicant: Department of Computer Science and Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru

(57) Abstract:

The present invention relates to a crime detection system, comprises of a user interface installed in a computing unit of a user and associated with the system for enabling the user to access a portal associated with the system, a processing unit associated with a server for fetching the entered details from the portal, a mapping module linked with the processing unit for determining the type of crime happened at that particular location and a communication module is paired with the computing unit for allowing a two-way communication between the computing unit, server and portal.

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



(22) Date of filing of Application :16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: MEDICAL RECORD MANAGEMENT DEVICE

:G16H0010600000, G16H0040670000,

(71)Name of Applicant: (51) International 1)Presidency University, Bangalore G16H0040200000, G06F0021320000, classification A61B0005010000 Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72) Name of Inventor:

(21) Application No.202241072869 A

(61) Patent of Addition:NA 1)Dr. Muthupandi G to Application Number :NA Address of Applicant : Associate Professor, Department of

Filing Date Electronics and Communication Engineering, Presidency (62) Divisional to University, Bangalore, Itgalpur Rajanakunte, Yelahanka, :NA **Application Number** Bengaluru, Karnataka Pin-560064, India. Bengaluru ------:NA

(57) Abstract:

Filing Date

(19) INDIA

A medical record management device, comprises a body 1 mapped with a biometric scanner 2 to be accessed by a user to input fingerprint impressions for accessing corresponding pre-medical details, a central database to accommodate a pre-stored data regarding impressions, a display panel 3 to display the health issues of the user, a LED (light emitting diode) 4 for illuminating a green-colored light to provide a visual indication to the user regarding successful authentication and illuminates the red light during unsuccessful authentication of the user, a database to store the medical details of various users, a computing unit 5 consisting of a user interface to allow log-in to a concerned authority of the medical hospital on the database to access the medical details for proposing suitable medications and check-ups to stabilize health conditions of the user.

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

REGISTRAR

(19) INDIA

(43) Publication Date : 30/12/2022

(21) Application No.202241072863 A

(22) Date of filing of Application :16/12/2022

(54) Title of the invention: HEART ATTACK PREDICTION DEVICE

(51) International classification :A61B0005000000, A61B0005024000, A61B0005110000,

A61B0005282000

:NA

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date
(62) Divisional to
Application Number

NA

NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Srilakshmi K H

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka,

Bengaluru, Karnataka Pin-560064, India. Bengaluru -----

(57) Abstract:

A heart attack prediction device, comprising a wearable member 1 associated with the device to be worn by a user over wrist portion, a heartbeat sensor 2 embedded in the member 1 to detect heartbeat of the user, a microcontroller 4 linked with the heartbeat sensor 2 to process the detected data, a communication module embedded in microcontroller 4 to fetch details of range of normal heartbeat, a display panel 3 linked with the microcontroller 4 mapped on the member 1 to direct the display for illustrating the notification regarding health parameter of the user.

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

REGISTRAR REGISTRAT

(21) Application No.202241072865 A

(19) INDIA

(22) Date of filing of Application: 16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: DRIVING ASSISTIVE DEVICE FOR MOTOR VEHICLES

:B60R0011020000, G02F0001133500, (71)Name of Applicant: (51) International G06T0007130000, G06T0007000000, 1)Presidency University, Bangalore classification B41J0011000000 Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition :NA 1)G. Swetha to Application Number :NA Address of Applicant : Assistant Professor, Department of Filing Date Electronics and Communication Engineering, Presidency (62) Divisional to University, Bangalore, Itgalpur Rajanakunte, Yelahanka, :NA **Application Number** Bengaluru, Karnataka Pin-560064, India. Bengaluru ------:NA Filing Date

(57) Abstract:

A driving assistive device for motor vehicles, comprises of a body 1 associated with device developed to be positioned over a dashboard of a motor vehicle, motor vehicle is preferably a four-wheeler vehicle, a pair of locking units 2 configured with body 1 accessed by a user to fix body 1 over dashboard, an imaging module 3 synced with RGB (Red Green Blue) sensor 4 for capturing multiple images of surrounding of vehicle to detect conditions of signboards along with color-scale of signboard, a canny edge detector 5 for extracting features from captured images for performing color scale conversion and pixel recognition of image of the board, a display panel 6 mapped on body 1 for showing a correct indication of signboard, a speed sensor 7 installed within device for detecting driving speed of vehicle, and a speaker 8 mapped on body 1 to alert user to reduce speed.

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

(54) Title of the invention: FLEXIBLE PLANAR ROBOT

:PCT//

: NA

:NA

:NA

:01/01/1900

G05B0019414000

(19) INDIA

(51) International

(86) International

(87) International

Publication No

Filing Date

Filing Date

Application Number

Filing Date

(62) Divisional to

(61) Patent of Addition:NA

to Application Number :NA

Application No

classification

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

:B25J0009000000, G06F0003010000,

A61B0017000000, G06F0003035400,

(21) Application No.202241072867 A

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Ajay Kumar Mishra

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

The present invention relates to a flexible planar robot, comprises of a body 1 configured with plurality of C-shaped links 2 developed to be positioned over a ground surface, each of the links 2 are joined together by means of a primary servo actuator 3 to provide motion to each of the links 2, multiple servo-wheels 4 assembled with secondary servo actuators 5 installed at base of the links 2 for providing motion to the body 1, a clamping unit 6 is secured at base of each of the links 2 for clasping the secondary actuators 5 with the links 2 and a remote-controller associated with the robot for enabling the user to input commands regarding motion along with direction of the body 1.

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



(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: GESTURE BASED ROBOTIC DEVICE

:G06F0003010000, G06F0003044000, (71)Name of Applicant: (51) International G06F0003160000, B25J0009160000, 1)Presidency University, Bangalore classification G06F0003030000 Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition:NA 1)Neeraj Singh to Application Number :NA Address of Applicant : Assistant Professor, Department of Filing Date Mechanical Engineering, Presidency University, Bangalore, (62) Divisional to Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-:NA **Application Number** 560064, India. Bengaluru -----:NA Filing Date

(21) Application No.202241072870 A

(57) Abstract:

A gesture based robotic device, comprising a body 1 configured with plurality of links 2 are joined together via motorized hinge in a manner to form a claw like structure, a wearable member 3 associated with the device and linked with the body 1 via a communication module, a flex sensor 4 synced with an accelerometer 5 installed within the member 3 for detecting hand gestures performed by the user along with speed of the gestures, a servomotor coupled with each hinges to provide the user-desired motion.

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

REGISTRAR REGISTRAT

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: WORKPIECE JOINING DEVICE

(51) International :B23K0011110000, H01H0009000000, F02P0009000000, H01M0010420000,

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

Publication No
(61) Patent of Addition
NA

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

Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072866 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Yuvaraja Naik

Address of Applicant : Assistant Professor, Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

A workpiece joining device, comprises of a resistance spot welding unit developed characterized in that a frame 1 having a first and a second portion 2,3, a platform 4 crafted with a cavity is installed on the first portion 2, a touch interactive display panel 5 accessed by a user to input commands regarding workpiece to be joined, a motorized lead screw 6 to translate the platform 4, a primary and secondary electrode 7, 8 configured at the first and second portion 2,3 within the unit, a motorized slider 9 configured with the secondary electrode 8 to make contact with the secondary electrode 8, a step down transformer configured with a secondary coil connected to each of electrodes 7,8 to supply current in order to generate spark resulting in joining of the workpiece.

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



(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: WORKPIECE CUTTING DEVICE

:B23K0026060000, B23K0026380000, (51) International G05D0023190000, H01L0027146000,

classification B29C0064153000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA

Publication No

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

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072861 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. Satish Babu Boppana

Address of Applicant : Associate Professor and Head of Department (I/C), Department of Mechanical Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A workpiece cutting device, comprising a frame 1 having first and second portion 2,3, a platform 4 is installed in device to accommodate a workpiece, a touch interactive display panel mapped 5 accessed by the user to input parameters details of workpiece to be cut, a motorized clamping unit 6 to clasp the workpiece, a pair of spools 7 wrapped with a brass wire installed at the second portion 3, a two-axis motorized slider 8 to move the platform 4 in proximity of the wire, and a power supplying unit having a positive and negative terminal to supply electrical power in workpiece to generate heat in order to melt the workpiece thereby resulting in cutting of the workpiece.

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



(12) PATENT APPLICATION PUBLICATION

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: AUTOMATED COLOR DETECTION DEVICE

:G06F0003035400, G01J0003500000, (71)Name of Applicant: (51) International G01J0003020000, G01J0003460000, 1)Presidency University, Bangalore classification G01J0003510000 Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition to Application Number :NA 1)Shruthi U Address of Applicant : Assistant professor, Department of Filing Date Computer Science and Engineering, Presidency University, (62) Divisional to Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, :NA **Application Number** Karnataka Pin-560064, India. Bengaluru -----:NA Filing Date

(21) Application No.202241072864 A

(57) Abstract:

(19) INDIA

An automated color detection device, comprises of a body 1 positioned on a ground surface, a push button 2 is installed on the body 1 for enabling a user to activate the device, a color sensor 3 installed on the body 1 for detecting color of an object positioned near the sensor 3, a microcontroller is linked with sensor 3 for processing the detected color, a display panel 4 mounted on the body 1 for displaying the detected color in order to allow a user to identify color of the object.

No. of Pages: 10 No. of Claims: 2

N

(21) Application No.202241072862 A

(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: IOT BASED SECURED ELECTRONIC VOTING SYSTEM

:G07C0013000000, G06F0003010000, (71)Name of Applicant: (51) International 1)Presidency University, Bangalore G06K0009000000, G07C0009000000, classification H04N0005225000 Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant : NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition:NA 1)Dr. Ashutosh Anand to Application Number :NA Address of Applicant : Assistant Professor, Department of Filing Date Electronics and Communication Engineering, Presidency (62) Divisional to University, Bangalore, Itgalpur Rajanakunte, Yelahanka, :NA **Application Number** Bengaluru, Karnataka Pin-560064, India. Bengaluru ------:NA Filing Date

(57) Abstract:

The present invention relates to an IOT based secured electronic voting system, comprises of a touch interactive display panel mapped in an enclosure for displaying a form having multiple columns, an artificial intelligence based camera installed in proximity to panel for capturing multiple images of user like facial recognition while accessing panel, a finger print scanner that is accessed by user for casting user's vote for a particular candidate and a microcontroller linked with camera processes captured images, user specified identity number and finger print by fetching pre-saved data stored in a database for authenticating user.

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

(21) Application No.202241072873 A

(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: AUTOMATED ELECTRIC APPLIANCE CONTROLLING SYSTEM

(51) International classification :G05B0019042000, G10L0015220000, H04L0067120000, G06F0016930000,

H02J0050500000

(86) International Application No :PCT//

Filing Date :01/01/1900

(87) International Publication No : NA

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

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Srivinay

Address of Applicant: Assistant Professor, Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------------

(57) Abstract:

The present invention relates to an automated electric appliance controlling system, comprising a user-interface installed on a computing unit 1 associated with the system for allowing a user to input command regarding actuation/deactivation of an electric appliances 2, a communication module 3 linked with the computing unit 1 for establishing a wireless connection between the computing unit 1 and the system, a microcontroller 4 associated with the system for processing the received command, a relay module 5 electrically coupled with the microcontroller 4 for performing the user-specified operation, and a 220V AC (Alternating Current) 6 input power supply for supplying the power to the relay module 5.

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



(21) Application No.202241072875 A

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: IMAGE FUSION TECHNIQUE-BASED BRAIN TUMOR DIAGNOSIS SYSTEM

:A61B0006030000, G06T0005500000, (71)Name of Applicant: (51) International 1)Presidency University, Bangalore A61B0006000000, G06T0007000000, classification G16H0030400000 Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition:NA 1)Maitraivee Konar to Application Number :NA Address of Applicant : Assistant Professor, Department of Filing Date Electronics and Communication Engineering, Presidency (62) Divisional to University, Bangalore, Itgalpur Rajanakunte, Yelahanka, :NA **Application Number** Bengaluru, Karnataka Pin-560064, India. Bengaluru ------:NA Filing Date

(57) Abstract:

The present invention relates to an image fusion technique-based brain tumor diagnosis system, comprising a user-interface installed in a computing unit that is accessed by a user for uploading CT (computed tomography) scan images and MRI (Magnetic Resonance Imaging) scans of a patient's head portion, a processor linked with the computing unit that processes the uploaded images, wherein the processed images are fused by the processor by implementing a series of protocols and a classifier associated with the processor that fetches the fused image from the processor for analyzing and classifying the fused image as normal or abnormal which is then accessed by a medical practitioner via the computing unit for diagnosing brain tumor in the patient.

No. of Pages: 10 No. of Claims: 2



(12) FATENT AFFLICATION FUBLICATION

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: MONITORING SYSTEM FOR FLOATABLE BODY

(51) International classification :A61B0005000000, G16H0040670000, H04N0005232000, A61B0005110000,

G08B0021040000

(86) International Application No :PCT// :01/01/1900

Filing Date

(19) INDIA

(87) International : NA

Publication No
(61) Patent of Addition
to Application Number: NA

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

Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072876 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Dr. Sumantra Chaudhuri

Address of Applicant: Assistant Professor, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

(57) Abstract:

A monitoring system for floatable body, comprising a GPS module installed over the body for detecting location of the body within the water body and transmits acquired data to a microcontroller electrically paired with the module, wherein the microcontroller sends live location to a concerned authority, a set of sensors integrated with the body for detecting different parameters of the body and surrounding and sends data to the microcontroller, wherein case the microcontroller detects inappropriate parameters, the microcontroller sends alert to the concerned authority and an emergency button installed on the body, wherein in case of the inappropriate parameters of the body, wherein the button is accessed by a user for sending alert to the concerned authority via a communication module linked with the microcontroller and computing unit of the concerned authority.

No. of Pages: 10 No. of Claims: 4

REGISTRAR REGISTRAR

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: PARKING MANAGEMENT SYSTEM

(51) International classification :G08G0001140000, G06N0005040000, B62D0015020000, G07B0015040000,

G06Q0050300000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

Publication No (61) Patent of Addition:NA

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072877 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor :

1)Akshatha K

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka,

Bengaluru, Karnataka Pin-560064, India. Bengaluru -----

(57) Abstract:

A parking management system comprising of multiple artificial intelligence enabled camera for capturing multiple images of the parking space, an IoT (internet of Things)-based communication module integrated with microcontroller for establishing a wireless communication between the server and a computing unit of the user, an RFID (Radio Frequency Identification) receiver installed at an entrance of parking space that works in collaboration with an RFID transmitter installed on the vehicle for detecting time duration for parking of vehicle, a display panel installed at entrance of parking space for displaying the amount along with a QR (Quick Response) code, a motorized door is installed at the entrance that allows the user to exit from the parking space.

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



(12) PATENT APPLICATION PUBLICATION

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: MULTI-DIMENSIONAL DISPLAYING DEVICE

:G06F0003010000, G06F0001160000, (71)Name of Applicant: (51) International G02F0001133300, E05B0047000000, 1)Presidency University, Bangalore classification Address of Applicant: Itgalpur Rajanakunte, Yelahanka, H01L0051000000 Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition:NA 1)Dr. Preethi to Application Number :NA Address of Applicant : Assistant Professor, Department of Filing Date Computer Science and Engineering, Presidency University, (62) Divisional to Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, :NA **Application Number** Karnataka Pin-560064, India. Bengaluru -----:NA

(21) Application No.202241072878 A

(57) Abstract:

Filing Date

(19) INDIA

A multi-dimensional displaying device, comprising of a cuboidal body 1 having a first 2 and second portion 3 and adapted to be positioned on a ground surface, a hinge joint 4 embedded between the first 2 and second portion 3 for enabling a user to control movement of the first portion 2 in order to open the body 1, and a display panel 7 integrated on the first portion 2 for display various images as pre-programmed by a user within an inbuilt microcontroller 6, where the panel 7 is arranged on a matrix (8x8x8) 8 for providing a 3-D (Dimensional) illusion.

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

(21) Application No.202241072882 A

(19) INDIA

(22) Date of filing of Application: 16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: EMG BASED PROSTHETIC LIMB FOR AMPUTEE

:A61B0005000000, A61F0002500000, (71)Name of Applicant: (51) International 1)Presidency University, Bangalore A61F0002600000, A61F0002300000, classification Address of Applicant: Itgalpur Rajanakunte, Yelahanka, A61F0002700000 Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition :NA 1)Dr. Divvarani M S to Application Number :NA Address of Applicant : Assistant Professor, Department of Filing Date Electronics and Communication Engineering, Presidency (62) Divisional to University, Bangalore, Itgalpur Rajanakunte, Yelahanka, :NA **Application Number** Bengaluru, Karnataka Pin-560064, India. Bengaluru ------:NA Filing Date

(57) Abstract:

An EMG based prosthetic limb for amputee, comprises of plurality of 3D printed body parts 1 assembled by means of multiple fishing lines to form a limb like structure, wherein the structure is fitted in place of amputated limbs of an amputee by a medical practitioner, plurality of servo motors 2 integrated at every joint of the structure, wherein a muscle sensor 3 is fabricated on the structure in a manner that the sensor is in contact with the amputee's muscle for determining electrical activity of the amputee's muscle and a microcontroller 4 linked with the sensor processes the electrical activity of the amputee's muscles and accordingly regulates actuation of the servo motors 2, wherein upon movement of the motor, the fishing lines are stretched or contracted for imparting required movement to part of the structure for aiding the amputee in turning or moving parts of the structure.

No. of Pages: 9 No. of Claims: 3

(22) Date of filing of Application :16/12/2022 (43) Publication Date: 30/12/2022

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

:G08G0001140000, G08G0001017000, (51) International G06Q0010100000, G09G0003360000, classification

G08G0001040000

(86) International :PCT// / Application No :01/01/1900

Filing Date

(19) INDIA

(87) International : NA Publication No

(61) Patent of Addition:NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072879 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. C. Kalaiarasan

Address of Applicant : Professor, Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

The present invention relates to a vehicle parking management system, comprising a cuboidal body developed to be installed on an entrance of a parking lot, a primary IR (Infrared) sensor 1 arranged on the body for detecting arrival of a vehicle, multiple secondary IR (Infrared) sensors 3 configured on each of the parking slot constructed within the parking lot, a LCD (Liquid Crystal Display) panel 4 arranged on the body for displaying number of slots available for parking, a servo motor 5 coupled with a barrier attached with the body for providing movement to the barrier, and an I2C module 6 arranged between the microcontroller 2 and the panel 4 for translating the output signals.

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



(21) Application No.202241072880 A

(19) INDIA

(22) Date of filing of Application: 16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: RED MUD-BASED BRICKS COMPOSITION AND METHOD FOR PREPARATION THEREOF

:C04B0028080000, C04B0007153000, (71)Name of Applicant: (51) International 1)Presidency University, Bangalore B01J0029080000, C04B0012000000, classification C04B0014100000 Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------(86) International :PCT// Application No :01/01/1900 Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72) Name of Inventor: (61) Patent of Addition:NA 1)Sowmvashree T to Application Number :NA Address of Applicant : Assistant Professor, Department of Civil Filing Date Engineering, Presidency University, Bangalore, Itgalpur (62) Divisional to Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. :NA **Application Number** Bengaluru -----:NA Filing Date

(57) Abstract:

A red mud-based bricks composition, comprising of i) red mud in the range of 35-40% w/w; ii) GGBS (Ground Granulated Blast-Furnace Slag) in the range of 15-20% w/w; iii) metakaolin in the range of 8-12% w/w; iv) fly-ash in the range of 2-5% w/w; v) sodium hydroxide solution in the range of 7-10% w/w; and vi) sodium silicate in the range of 15-20 % w/w. A method for preparation of composition, comprising the steps of: a) mixing red mud, GGBS, metakaolin, and fly-ash to obtain a mixture; b) mixing sodium hydroxide solution and sodium silicate in order to obtain a solution, followed by mixing obtained mixture with obtained solution to obtain a mortar; c) casting obtained mortar in moulds followed by de-molding in order to obtain cubes; and d) curing cubes by keeping in water to obtain bricks.

No. of Pages: 14 No. of Claims: 4

(21) Application No.202241072881 A

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: UNMANNED AERIAL VEHICLE FOR RESCUING OPERATION

:G05D0001000000, G05D0001020000, (51) International H03K0017955000, B64D0047020000, classification

B64C0039020000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition:NA

to Application Number :NA Filing Date

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

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. Madura K

Address of Applicant : Assistant Professor, Department of Computer Science and Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru,

Karnataka Pin-560064, India. Bengaluru -----

(57) Abstract:

An unmanned aerial vehicle for rescuing operation, comprising a body 1 configured with at-least six motorized propellers 2 that rotates in a sequential manner in order to lift the body 1 at an optimum height from a ground surface, a controller 3 is paired with the body 1 for enabling a user to control movement of the body 1 while moving from one place to another, a night vision camera 4 integrated on the body 1, to determine presence of any obstacle in close proximity to the body 1 in low lighting conditions, a communication module integrated with the body 1 to alert the user in case of any obstacles, a sensing module 6 installed on the body 1 for detecting an emergency situation and accordingly alert the concerned authorities via communication module

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



(21) Application No.202241072874 A

(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: MACHINE LEARNING BASED AUDIO CLASSIFICATION SYSTEM

:A61B0005000000, G10L0025510000, (51) International G06N0020000000, G10L0025810000, classification

H04R0001080000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition:NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Dr. Arvind Kumar

Address of Applicant :Department of Electronics and Communication Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-

560064, India. Bengaluru -----

(57) Abstract:

A machine learning based audio classification system comprises of a microphone associated with system for receiving incoming audio signals within an enclosure, a processor coupled with microphone pre-processes signals by scaling and normalizing signals up to a threshold bandwidth for examining statistical characteristics of signals, a feature extraction module paired with processor for processing normalized audio signals into a series of feature sequences, a classifier associated with feature extraction module for classifying sequences into speech or music, an identifier unit integrated with classifier for segmenting classified signals to identify instrument used for producing signal in case sequences are classified as music.

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



(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: WATER QUALITY DETECTION DEVICE

:G01N0033180000, C02F0001000000, (51) International G06T0007000000, A61B0005000000, classification

G01N0033000000

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No

(61) Patent of Addition:NA

to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072897 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor:

1).Jisha L K

Address of Applicant : Assistant Professor, Department of Electrical and Electronics Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

A water quality detection device, comprising a body to be submerged within a water body, a sensing module mapped on the body to detect different parameters of the water within the water reservoir, a microcontroller associated with the body to process the data received from the sensing module in order to determine the quality of water, wherein in case the detected quality mismatch the threshold range, the microcontroller sends the parameter to a computing unit connected to the device by means of a communication module.

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

REGISTRAR

(21) Application No.202241072888 A

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: DUAL AXIS SOLAR TRACKING SYSTEM

(51) International classification	:H02S0020320000, F24S0030000000, F21Y0115100000, F24S0050200000, A61L0002000000	(71)Name of Applicant: 1)Presidency University, Bangalore Address of Applicant: Itgalpur Rajanakunte, Yelahanka,
(86) International Application No Filing Date	:PCT// :01/01/1900	Bengaluru, Karnataka Pin-560064, India. Bengaluru Name of Applicant: NA
(87) International Publication No	: NA	Address of Applicant: NA (72)Name of Inventor:
(61) Patent of Addition to Application Number Filing Date	:NA r:NA	1)Ajay Kumar Mishra Address of Applicant :Assistant Professor, Department of Mechanical Engineering, School of Engineering, Presidency
(62) Divisional to Application Number Filing Date	:NA :NA	University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru

(57) Abstract:

A dual axis solar tracking system, comprises of a frame 1 developed in a manner for placing over a ground surface, multiple solar panels 2 mapped on the frame 1 to generate electricity from sun light, set of sensors including LDR sensor 3, mounted on the frame 1 to detect the intensity of light in surrounding of the frame 1, a microcontroller linked with the system for processing the detected intensity, a data base linked with the microcontroller for saving the detected intensities and a set of servo motors 4 mounted on the frame 1 for aligning for receiving the maximum sun light.

No. of Pages: 9 No. of Claims: 4

(21) Application No.202241072889 A

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: GAS LEAKAGE DETECTION DEVICE

(51) International classification	:G01M0003200000, G01M0003040000, G16H0010600000, G06F0001160000, G08B0021160000	(71)Name of Applicant: 1)Presidency University, Bangalore Address of Applicant: Itgalpur Rajanakunte, Yelahanka,
(86) International Application No Filing Date	:PCT// :01/01/1900	Bengaluru, Karnataka Pin-560064, India. Bengaluru Name of Applicant: NA
(87) International Publication No (61) Patent of	: NA	Address of Applicant: NA (72)Name of Inventor: 1)Dr. Rajiv Ranjan Singh
Addition to	:NA	Address of Applicant :Professor, Department of Electronics and
Application Number Filing Date	:NA	Communication Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka,
(62) Divisional to Application Number Filing Date	:NA :NA	Bengaluru, Karnataka Pin-560064, India. Bengaluru

(57) Abstract:

A gas leakage detection device, comprises a body 1 developed to be installed within an enclosure, a MQ2 gas sensor 2 is installed on the body 1 for detecting a gas leakage within the enclosure, a display panel 4 installed on the body 1 for displaying an alert message, a speaker 5 configured on the body 1 for generating voice alerts to notify people present within the enclosure regarding the gas leakage, a LED (Light Emitting Diode) 3 is integrated on the body 1 for illuminating a red light to notify the user regarding the leakage.

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

(21) Application No.202241072892 A

(19) INDIA

(22) Date of filing of Application: 16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: GEOPOLYMER-BASED BRICKS COMPOSITION AND METHOD FOR PREPARATION THEREOF

(51) International classification :C04B0028000000, C04B00280800000, C04B00120000000,

A61K0009000000

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International : NA

Publication No
(61) Patent of Addition
NA

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

Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Sowmyashree T

Address of Applicant :Department of Civil Engineering, School of

Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A geopolymer-based bricks composition, comprising: i) red mud 50-60% w/w, ii) GGBS (Ground Granulated Blast-Furnace Slag) 15-20% w/w, iii) metakaolin 2-5% w/w, iv) sodium hydroxide solution 5-10% w/w, and v) sodium silicate 15-20 % w/w. A method for preparation of the geopolymer-based bricks, comprising following steps: a) mixing the red mud, GGBS, and metakaolin for 2-5 minutes in order to obtain a mixture, b) mixing the sodium hydroxide solution and sodium silicate in order to obtain a solution, followed by mixing of the obtained mixture with the obtained solution for 2-5 minutes in order to obtain a mortar, c) casting the obtained mortar in moulds and kept for drying for 20-28 hours, followed by de-molding in order to obtain cubes, and d) curing the obtained cubes for 5-10 days, followed by keeping in water for 20-28 hours in order to obtain the bricks.

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



(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: INBUILT FOUR-WHEELER LIFTING SYSTEM

:B60K0035000000, B60R0011020000, (51) International G02F0001133570, B62K0005010000, classification H04M0001230000

(86) International :PCT// Application No :01/01/1900

Filing Date

(19) INDIA

(87) International : NA Publication No

(61) Patent of Addition:NA

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

:NA **Application Number** :NA Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072895 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant : NA (72) Name of Inventor: 1)Dr. Madhusudhan M

Address of Applicant : Assistant Professor, Department of Mechanical Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

(57) Abstract:

An inbuilt four-wheeler lifting system, comprises of a four-wheeler's chassis 1, a pair of buttons 2 integrated on dashboard of the fourwheeler that is accessed by a user sitting inside the four-wheeler for uplifting/downlifting the four-wheeler, a DC (Direct current) motor 4 integrated with each of multiple frames 3 for rotating in a clockwise/anticlockwise direction, a spiral bevel gear 5 assembled with the frame by means of a lead screw arrangement for uplifting and downlifting the four-wheeler 2, relay 6 configured on a PCB ((Printed Circuit Board) board 7 installed on the frame 3 for saving the frame from fault.

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

REGISTRAR

(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: DRIVING ASSISTIVE SYSTEM

:B60W0030140000, G08G0001096200, (51) International G08G0001052000, B60W0010180000, classification

B60W0040105000

: NA

(86) International :PCT// Application No :01/01/1900

Filing Date (87) International

Publication No (61) Patent of

Addition to :NA Application Number :NA Filing Date

(62) Divisional to **Application Number** Filing Date

:NA :NA (71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072896 A

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant : NA (72) Name of Inventor: 1)Dr. Madhusudhan M

Address of Applicant : Assistant Professor, School of Engineering,

Presidency University, Bangalore, Itgalpur Rajanakunte,

Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru --

(57) Abstract:

The present invention relates to a driving assistive system, comprising a RFID unit 1 installed on a vehicle utilized for scanning RFID sign of a particular RFID zone, wherein a microcontroller linked with the RFID unit 1 processes the received input in order to detected speed limit to be maintain in the RFID zone and saves it in a linked data base, a locking unit 3 installed with acceleration cable 4 of the vehicle, wherein in case the microcontroller detects speed of the vehicle exceeds the detected RFID sign value, the microcontroller actuates the locking unit 3 in order to restrict the acceleration cable 4 for particular speed and a DC motor attached with chain drive of the vehicle, wherein in case the microcontroller the microcontroller detects speed of the vehicle recedes the detected value, the microcontroller actuates the motor to maintain the detected speed.

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



(21) Application No.202241072890 A

(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: GEOPOLYMER-BASED PAVER BLOCKS COMPOSITION AND METHOD FOR SYNTHESIS **THEREOF**

:C04B0028080000, C04B0028000000, (51) International A61P0025240000, C04B0007153000, classification

A61P0003040000

(86) International :PCT// Application No :01/01/1900 Filing Date

(87) International : NA Publication No (61) Patent of Addition :NA to Application Number :NA

Filing Date

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

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72) Name of Inventor: 1)Sowmyashree T

Address of Applicant :Department of Civil Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A geopolymer-based paver blocks composition and method for synthesis thereof comprises of; i) red mud in range of 30-40% w/w, ii) GGBS (Ground Granulated Blast-Furnace Slag) in range of 25-30% w/w, iii) fly-ash in range of 5-10% w/w, iv) sodium hydroxide solution in range of 5-10% w/w, and v) sodium silicate in range of 18-22 % w/w. A method for preparation of the composition comprises of following steps: i) mixing the red mud, GGBS, and fly-ash for 2-5 minutes to obtain a mixture, ii) mixing sodium hydroxide solution and sodium silicate to obtain a solution, followed by mixing obtained mixture with obtained solution for 2-5 minutes to obtain a mortar, iii) casting obtained mortar into moulds and kept for drying for 20-28 hours, followed by de-molding to obtain cubes, and iv) curing cubes for 5-10 days, followed by keeping in water for 20-28 hours to obtain paver blocks.

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



(21) Application No.202241072891 A

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention : RED MUD-BASED GEOPOLYMER BRICKS COMPOSITION AND METHOD FOR SYNTHESIS THEREOF

(51) International classification :C04B0028000000, A61P0003040000, C04B0012000000, C08K0003220000,

C08L0027060000

(86) International Application No Filing Date :PCT// :01/01/1900

(87) International : NA
Publication No : NA
(61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant :

1)Presidency University, Bangalore

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Sowmyashree T

Address of Applicant :Department of Civil Engineering, School of

Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -----

(57) Abstract:

A red mud-based geopolymer bricks composition and method for synthesis thereof comprising of: i) red mud 45-50% w/w, ii) fly-ash 2-5% w/w, iii) silica fumes 2-5% w/w, iv) M sand 10-15% w/w, v) sodium hydroxide 8-10% w/w, and vi) sodium silicate 20-24 % w/w. A method for synthesizing of red mud-based geopolymer bricks composition comprises of following steps: i) mixing red mud, fly-ash, silica fumes, and M sand for 2-5 minutes to obtain a mixture, ii) mixing sodium hydroxide and sodium silicate to obtain a solution, followed by mixing the mixture with the solution for 2-5 minutes to obtain a mortar, iii) casting the mortar in moulds and kept for drying for 20-28 hours, followed by de-moulding to obtain cubes, and iv) curing the cubes for 5-10 days, followed by keeping in water for 20-28 hours to obtain the bricks.

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

(21) Application No.202241072893 A

(19) INDIA

(22) Date of filing of Application:16/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention: PARTIALLY REPLACED BRICKS COMPOSITION AND METHOD FOR PREPARATION **THEREOF**

:C04B0028080000, C04B0007153000, (51) International C04B0111000000, C01B0033320000, classification

B22C0009120000

(86) International :PCT// Application No :01/01/1900 Filing Date

(87) International : NA Publication No (61) Patent of Addition:NA to Application Number :NA

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

Filing Date

(71)Name of Applicant:

1)Presidency University, Bangalore

Address of Applicant: Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Sowmyashree T

Address of Applicant :Department of Civil Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur

Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India.

Bengaluru -----

(57) Abstract:

A partially replaced bricks composition comprises of: i) red mud 20-25% w/w, ii) GGBS (Ground Granulated Blast-Furnace Slag) 35-40% w/w, iii) metakaolin 5-10% w/w, iv) M (manufactured) sand 5-10% w/w, v) sodium hydroxide solution 5-10% w/w and vi) sodium silicate 15-20 % w/w. A method for preparation of the partially replaced bricks comprises of the following steps: a) mixing red mud, GGBS, M-sand and metakaolin for 2-5 minutes in order to obtain a mixture, b) mixing sodium hydroxide solution and sodium silicate in order to obtain a solution, followed by mixing the obtained mixture with the obtained solution for 2-5 minutes to obtain a mortar, c) casting the obtained mortar in moulds and kept for drying for 20-28 hours, followed by de-molding in order to obtain cubes, and d) curing the cubes for 5-10 days, followed by keeping in water for 20-28 hours in order to obtain the bricks.

No. of Pages: 14 No. of Claims: 4

REGISTRAR

(19) INDIA

(22) Date of filing of Application :16/12/2022 (43) Publication Date : 30/12/2022

(54) Title of the invention: AUTOMATED CROP IRRIGATION DEVICE

(51) International :A01G0025160000, A61L0002240000, G01N0033240000, B60S0001080000,

(86) International Application No :PCT// :01/01/1900

Filing Date

(87) International Publication No : NA

(61) Patent of Addition

to Application Number :NA Filing Date

(62) Divisional to Application Number :NA Filing Date :NA (71)Name of Applicant:

1)Presidency University, Bangalore

(21) Application No.202241072894 A

Address of Applicant :Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. C. Kalajarasan

Address of Applicant: Professor, Department of Computer Science and Engineering, School of Engineering, Presidency University, Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru,

Bangalore, Itgalpur Rajanakunte, Yelahanka, Bengaluru, Karnataka Pin-560064, India. Bengaluru ------

(57) Abstract:

The present invention relates to an automated crop irrigation device, comprises of a body 1 developed to be positioned on a crop field, a moisture sensor 2 is mapped on body 1 for detecting moisture content of soil present within field, a microcontroller 3 linked with sensor 2 for processing data received from sensor 2 and based upon detected moisture content, the microcontroller 3 determines amount of water present within soil, a relay module 4 integrated within microcontroller 3 for operating a water pump 5 linked with relay and in case detected water quantity recedes a threshold value, the microcontroller 3 directs relay to actuate water pump 5 for pumping water from a water reservoir 6 connected to pump 5, towards crop field.

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



(51) International

(86) International

(87) International

Publication No

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Application Number

Filing Date

(62) Divisional to

(61) Patent of Addition to

Application No

classification

(22) Date of filing of Application :07/12/2022

(43) Publication Date: 30/12/2022

(54) Title of the invention: Water Management & Leakage Detection Problems Solutions Using IOT

:G01N0033180000, C02F0001000000,

H04W0004140000, F24H0009200000,

E03B0007070000

:PCT//

: NA

·NA

:NA

·NA

·NA

:01/01/1900

(71)Name of Applicant:

1)Dr. Robin Rohit. V

Address of Applicant: Associate Professor, Computer Science & Engineering, School of Computer Science & Engineering and Information Science, Presidency University, Itgalpur, Rajanakunte, Yelahanka, Bengaluru 560064

2)Mrs. Nisha. F

3)Dr. F. R. Shiny Malar

4)H. Umesh prabhu

5)Dr.V.Devi

6)S. Praveena Rachel Kamala

7)T.R.Chenthil

8)Dr.K.Sivakumar

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor:

1)Dr. Robin Rohit. V

Address of Applicant: Associate Professor, Computer Science & Engineering, School of Computer Science & Engineering and Information Science, Presidency University, Itgalpur, Rajanakunte, Yelahanka, Bengaluru 560064 -----

2)Mrs. Nisha. F

Address of Applicant :Assistant Professor, Computer Science & Engineering, Academy of Maritime Education and Training (Deemed to be University),

Kanathur -603112 -----

3)Dr. F. R. Shiny Malar

Address of Applicant: Associate professor & Head, Department of Computer Science and Engineering, Stella Mary's College of Engineering, Aruthenganvilai, Nagercoil- 629202 --------

4)H. Umesh prabhu

Address of Applicant : Assistant Professor / EEE, St. Joseph's College of

Engineering, OMR, Chennai -----

5)Dr.V.Devi

Address of Applicant :Principal & Professor, Department of Computer Science, Thiruthangal Nadar College, Selavayal, Chennai -600051 ------

6)S. Praveena Rachel Kamala

Address of Applicant :Assistant Professor / Information Technology, Easwari Engineering College, Chennai -------

7)T.R.Chenthil

Address of Applicant :Assistant Professor / ECE, Jeppiaar Engineering College, Chennai 119 ------

8)Dr.K.Sivakumar

Address of Applicant :Professor / Department of Mathematics, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences (SIMATS),

Thandalam, Chennai 602105 -----

(57) Abstract

There is no question that water is the most valuable resource in the whole globe. As a result of water pipes having leaks in different parts of the globe, a significant volume of water is lost. It is important to refrain from wasting water if one want to make effective use of this resource. This study outlines a more effective way for monitoring the pressure of water as it travels through the pipeline and locating any leaks that may exist across the pipeline. Mounted at various points along the pipeline is an observatory kit that consists of a Raspberry Pi as well as a pair of pressure sensors and a water quality sensor. The results of the measurements taken by the sensors are continually sent to a cloud server by the processor determines that the pressure is lower than the level that was previously defined, or if, despite the pressure remaining constant, the quality of the water has deteriorated, then it will send an alert message to the relevant staff members. In order to upload to the cloud, we need to be connected to the internet. However, an alarm message may still be delivered via the SMS service, which operates on GPRS even when there is no internet connection. In addition to that, this study offers light on the preparatory steps that should be taken to reduce leakage. The distribution of water and the regulation of its flow are both handled by valves that are positioned at the points where two or more pipes intersect. In order to cut down on the amount of water that is wasted as a result of leaks, the processor adjusts the position of the control valve. This slows the flow of water through the pipeline, which ultimately results in less water being wasted.

No. of Pages: 21 No. of Claims: 4



(22) Date of filing of Application: 15/12/2022 (43) Publication Date: 30/12/2022

(54) Title of the invention : ROLE OF AI AND BLOCKCHAINS IN MAKING VARIOUS SEGMENTS OF FINANCIAL SECTOR AUTOMATED AND DECENTRALIZED

(71)Name of Applicant:

1)Mr. TIRUMALA VASU GALITHOTI

Address of Applicant :ASSISTANT PROFESSOR, ELECTRONICS AND COMMUNICATION ENGINEERING, PRESIDENCY UNIVERSITY, BANGALORE, KARNATAKA,

INDIA-560064 -----

2)Mrs. SAMREEN FIZA

3)Mrs. AFREEN KUBRA

Name of Applicant: NA

(72)Name of Inventor:

Address of Applicant : NA

(51) International classification :H04L0009060000, G06Q0020060000, H04B0007049100, G06F0021620000,

H04L0009320000

(86) International Application No Filing Date :PCT// :01/01/1900

(87) International : NA

Publication No
(61) Patent of Addition
to Application Number :NA
:NA

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

Application Number Filing Date :NA 1)Mr. TIRUMALA VASU GALITHOTI

Address of Applicant : ASSISTANT PROFESSOR,

ELECTRONICS AND COMMUNICATION ENGINEERING, PRESIDENCY UNIVERSITY, BANGALORE, KARNATAKA,

INDIA-560064 -----

2)Mrs. SAMREEN FIZA

Address of Applicant :ASSISTANT PROFESSOR, ELECTRONICS AND COMMUNICATION ENGINEERING, PRESIDENCY UNIVERSITY, BANGALORE, KARNATAKA,

INDIA-560064 -----

3)Mrs. AFREEN KUBRA

Address of Applicant :RESEARCH SCHOLAR, ELECTRONICS AND COMMUNICATION ENGINEERING, PRESIDENCY UNIVERSITY, BANGALORE, KARNATAKA, INDIA-560064 -

(57) Abstract:

There has been much exploration into the potential of Blockchain and AI for some time now. The use of AI is on the rise in the IT industry, and we interact with it often. Bitcoin, the first Blockchain, has gained a lot of attention. The need for greater security, technological gaps, a lack of unified rules, etc., have all contributed to the financial sector's sluggish adoption of these technologies. Some companies have created POCs (proof-of-concept) for use in the banking sector. These include Hyperledger, an open-source project built on the Linux operating system. Businesses are starting to combine the two. It's possible that by combining these methods, we can find answers more quickly and efficiently. Disruptive technologies include AI and Blockchain. Blockchain would secure and decentralize our data while AI would streamline our daily lives. If banks and other financial institutions could combine the two technologies, they could be able to save money.

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



(19) INDIA

(22) Date of filing of Application: 17/09/2022

(21) Application No.202211053191 A

(43) Publication Date: 23/09/2022

(54) Title of the invention: AN EFFECTIVE HEALTHCARE MONITORING SYSTEM BASED ON IOT AND MACHINE LEARNING TO TRACK AN OLD AGE PATIENT'S VITALS

(51) International classification (A61B0005000000, A61B0005024000, G06Q0010100000, A61B0005110000, G16H0050200000 (86) International Application No Filing Date (87) International Publication : NA (61) Patent of Addition to :NA Application Number :NA Filing Date (62) Divisional to Application

:NA

·NA

(71)Name of Applicant:

1)Dr. Gauri Kalnoor

Address of Applicant : Assistant Professor, dept. of CSE, Presidency University, Bangalore, Karnataka, India

2)Gaurav Kumar Bhargav

3)Sachin Kumar Tyagi

4)Nidhi Agarwal

5)Harminder Kaur

6)ASHISH JAIN

7)Ms Rachna Narula

8)Dr. Renuka Arora

9)Tina Bania

10)Mr Zatin Gupta

Name of Applicant : NA

Address of Applicant : NA (72)Name of Inventor :

1)Dr. Gauri Kalnoor

Address of Applicant : Assistant Professor, dept. of CSE, Presidency University, Bangalore, Karnataka, India -

2)Gaurav Kumar Bhargav

Address of Applicant : Assistant Professor, Pharmaceutical Science, University of Science and

Technology Meghalaya, India 3)Sachin Kumar Tyagi

Address of Applicant : Assistant Professor, Department of Information Technology, AJAY

KUMAR GARG ENGINEERING COLLEGE, GHAZIABAD, UP, India --4)Nidhi Agarwal

Address of Applicant :Research Scholar, CSE, Indira Gandhi Delhi technical university for women, Delhi, India -

5)Harminder Kaur

Address of Applicant :Assistant Professor, CSE Department, Panipat Institute of Engineering and Technology, Samalkha, Panipat, Haryana, India -

6)ASHISH JAIN

Address of Applicant :ASSISTANT PROFESSOR, Department of Computer Science and Engineering, GL Bajaj Institute of Technology and Management, Greater Noida, India -

7)Ms Rachna Narula

Address of Applicant :Research Scholar, Department of Computer Science and Engineering, North cap University, Gurugram, Haryana, India --

8)Dr. Renuka Arora

Address of Applicant : Associate Professor, School of Computing Science and Engineering, Galgotias University, Greater Noida, UP, India ----

9)Tina Bania

Address of Applicant :Lecturer, Department of Pharmaceutical Science, Royal School of Pharmacy, Royal Global University, Guwahati, Assam, India

10)Mr Zatin Gupta

Address of Applicant : Assistant Professor, School of Computing Science and Engineering, Galgotias University, Greater Noida, Uttar Pradesh, India ----

Filing Date

The current invention relates to an IoT- and ML-enabled process for keeping tabs on a patient's well-being. The primary motivation behind this invention was the need to be notified of any abnormalities in a person's health. It can be challenging for patients to follow their doctors' orders to keep track of their heart rate and pulse regularly and share that information with them. The present invention is helpful in this kind of setting. The absence of a witness to the patient's misfortune is a major cause of the distressing physical and mental changes. The newly developed system will prove very useful in such situations. With the help of a few sensors, it is possible to keep tabs on every bodily function. If something unexpected happens, alerts can be sent to the user and their loved ones. This system's core features include wearable technology, machine learning algorithms, and support for IoT devices. Figures 1 and 2 are included for your convenience to better understand the details of the present invention.

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

60284 REGISTRAR

(22) Date of filing of Application :03/01/2023

(43) Publication Date: 06/01/2023

(54) Title of the invention: ELECTROLESS Ni-P / NANO c-BN COMPOSITION COATINGS, METHOD OF PREPARING ELECTROLESS Ni-P / NANO c-BN COMPOSITION COATINGS THEREOF

:C23C0018160000, C23C0018180000, (51) International C23C0018360000, C04B0041870000, classification

C23C0030000000

(86) International :PCT// Application No :01/01/1900 Filing Date

(87) International : NA Publication No (61) Patent of Addition:NA to Application Number :NA

Filing Date

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

(71)Name of Applicant: 1)Presidency University

Address of Applicant : Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

Name of Applicant: NA Address of Applicant : NA (72)Name of Inventor: 1)Dr.Shashikala A R

Address of Applicant : Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

2)Kothakula Keerthi

Address of Applicant : Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

(57) Abstract:

ABSTRACT ELECTROLESS Ni-P / NANO c-BN COMPOSITION COATINGS, METHOD OF PREPARING ELECTROLESS Ni-P / NANO c-BN COMPOSITION COATINGS THEREOF The present invention generally relates to electrochemical coatings more particularly relates to a method of development of electroless Ni-P/ nano c-BN coatings. The electroless Ni-P coatings is used extensively for industrial applications as it provides protection against corrosion, enhances mechanical properties. The addition of nano particles in the binary plating bath enhances the mechanical properties of the composite coating. Hexagonal BN (h-BN) has offers high corrosion resistance, thermal stability and can function as excellent lubricant. However, h-BN has poor wettability and poor friction control below 4000 C. Nano c-BN, being extremely hard, improves the microhardness of the composite coating and corrosion resistance. Owing to higher stiffness, hardness and wear resistance of nano c-BN, nano c-BN reinforced electroless Ni-P coatings (Ni-P/nano c-BN) were produced in a hypophosphite reduced bath solution on Al-6061 substrate in acidic medium.

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



(19) INDIA

(51) International

(86) International

Filing Date (87) International

(61) Patent of Addition :NA

to Application Number :NA Filing Date

Application No

Publication No

(62) Divisional to

Application Number

Filing Date

classification

(22) Date of filing of Application :30/12/2022

:G06N0020000000, H02J0003380000,

G06N0003040000, G06N0003080000,

G06Q0050060000

:PCT//

: NA

:NA

:NA

:01/01/1900

(21) Application No.202241077033 A

(43) Publication Date: 06/01/2023

(54) Title of the invention : AN AUTOMATIC HYBRID POWERED OBJECT ANALYSIS AND SEPARATING SYSTEM AND A METHOD THEREOF

(71)Name of Applicant:

1)Presidency University

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064. India Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

2)Dr. Manikandan. M

1)Dr. Joseph Anthony Prathap

Address of Applicant : Presidency University, Itgalpur,

Rajanakunte, Bengaluru, Karnataka – 560064, India. Bengaluru ---

Address of Applicant :Presidency University, Itgalpur,

Rajanakunte, Bengaluru, Karnataka – 560064, India. Bengaluru ---

3)Ms. Manaswini. R Address of Applicant :Presidency University, Itgalpur,

Rajanakunte, Bengaluru, Karnataka – 560064, India. Bengaluru ---

4)Dr. Rajiv Ranjan Singh

Address of Applicant :Presidency University, Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560064, India. Bengaluru ---

(57) Abstract:

ABSTRACT AN AUTOMATIC HYBRID POWERED OBJECT ANALYSIS AND SEPARATING SYSTEM AND A METHOD THEREOF The instant invention discloses a system and method for automatic identification, analysis and segregation of objects in a variety of settings and utilizes hybrid renewable power sources namely PV and Windmills. The hybrid renewable source is controlled by a source controller based on the varying weather condition and wind speed. A regulated DC output obtained from a programmable hardware means enables a 3D TOF sensor equipped imaging device to identify the type of objects that can either collect or discard as set by the object separator using deep learning or machine learning techniques. The hybrid renewable sources would reduce fuel consumption and improve eco-friendliness, and thus initiate the importance and advantages of utilizing renewable energy within the community. Most illustrative figure is Fig.1

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



(19) INDIA

(22) Date of filing of Application: 18/01/2023 (43) Publication Date: 27/01/2023

(54) Title of the invention: A HYBRID BATTERY THERMAL MANAGEMENT SYSTEM

(51) International classification :H01M0010613000, H01M0010625000, F28D0015020000, H01L0023427000,

F21V0029510000

(86) International Application No Filing Date :PCT// :01/01/1900

(87) International Publication No : NA (61) Patent of Addition :NA

to Application Number :NA Filing Date

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant:
1)Presidency University

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)Dr. Devendra Singh Dandotiya

(21) Application No.202341003561 A

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

2)Pallabi Kakati

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

3)Anand K Joshi

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

(57) Abstract:

ABSTRACT A HYBRID BATTERY THERMAL MANAGEMENT SYSTEM The present invention discusses a hybrid system and method for battery thermal management, which includes a combination of NePCM (Nano enhanced Phase changing material) having nanoparticles and HP (heat pipes) technologies where heat pipes comprising nano fluids and equipped with circular fins the system also includes fins flanking the battery. The method of heat dissipation occurs by storing the heat generated out by the battery is stored in PCM, which upon completely charging/ melting dissipates heat to the environment. In another aspect heat dissipation occurs by way of heat transfer from battery to the heat pipe evaporator which carries the heat to condenser and delivers the same to nano assisted PCM, thereby maintaining the ambient temperature of not more than 45oC at high rate of 4C. The system is assisted with machine learning.

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

REGISTRAR REGISTRAR

(21) Application No.202341005497 A

(19) INDIA

(22) Date of filing of Application :27/01/2023 (43) Publication Date : 24/02/2023

(54) Title of the invention: Device for capturing Methane and method thereof

(51) International classification :C10L0003100000, C07K0014620000, C10L0003060000, F17C0011000000,

F25B003000000

(86) International Application No :PCT//

Filing Date :01/01/1900

(87) International Publication No : NA

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

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant:
1)Presidency University

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Deepjyoti Mech

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

(57) Abstract:

ABSTRACT Device for capturing Methane and method thereof. The instant invention relates to the field of energy technology more particularly relates to extraction of methane from agricultural fields. The instant invention discloses device for using gas hydrate method of methane capturing wherein the gas hydrate naturally forms at high pressure and low temperature conditions, but the conditions can improve by using promoters such as cheap and natural additives. The hydrate reactor starts capturing the methane via hydrate formation process at an optimum pressure and temperature conditions using promoters to produce the hydrate pellets. These hydrate pellets are then transported to the end users such as for industrial purpose like to generate electricity and for domestic purposes like for cooking and heating.

No. of Pages: 9 No. of Claims: 4

(19) INDIA

(22) Date of filing of Application :06/02/2023

(21) Application No.202341007360 A

(43) Publication Date: 17/02/2023

(54) Title of the invention: AN AUTOMATIC FUZZY LOGIC CONTROLLER SYSTEM FOR TEMPERATURE AND HUMIDITY MAINTANENCE IN AN OUTDOOR FARM

:G05B0013020000, G05B0019050000,

(51) International G06Q0050100000, G05B0015020000, classification

B60L0058260000

(86) International :PCT// Application No :01/01/1900 Filing Date

(87) International : NA Publication No

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

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

(71)Name of Applicant: 1)Presidency University

Address of Applicant : Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

Name of Applicant: NA Address of Applicant : NA (72) Name of Inventor:

1)Dakhole Dipali Khushalrao

Address of Applicant : Presidency University, Itgalpur,

Rajanakunte, Bengaluru, Karnataka – 560064, India. Bengaluru ---

2) Thiruselvan Subramanian

Address of Applicant : Presidency University, Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560064, India. Bengaluru ---

3)G Senthil Kumaran

Address of Applicant :ICAR-Indian Institute of Horticulture Research, Bangalore. Hessaraghatta lake post, IIHR Main Rd, Indian Institute of Horticultural Research, Ivar Kandapura, Bengaluru, Karnataka 560089 Bengaluru -----

(57) Abstract:

ABSTRACT AN AUTOMATIC FUZZY LOGIC CONTROLLER SYSTEM FOR TEMPERATURE AND HUMIDITY MAINTANENCE IN AN OUTDOOR FARM The invention relates to a smart control system. It provides for an autonomous environment control system to optimize and offer the necessary environmental conditions. To optimize the temperature and humidity in the control system and consequently maximize mushroom production, a cost effective and smart monitoring and controlling system using fuzzy logic controllers (FLC) have been developed.

No. of Pages: 20 No. of Claims: 2

(22) Date of filing of Application :30/03/2023 (43) Publication Date : 07/04/2023

(54) Title of the invention: BAMBOO WASTE AS BIO-SURFACTANT FOR CHEMICAL ENHANCED OIL RECOVERY

		(71)Name of Applicant:
(51) International	:A61K 368990, C09K 085840, C09 <mark>K</mark>	1)Presidency University
classification	085880, C11D 033800, E21B 431600	Address of Applicant :Itgalpur, Rajanakunte, Bengaluru,
(86) International	:PCT//	Karnataka – 560 064, India Bengaluru
Application No	:01/01/1900	Name of Applicant : NA
Filing Date		Address of Applicant : NA
(87) International	: NA	(72)Name of Inventor:
Publication No		1)Dr. Kalpajit Hazarika
(61) Patent of Addition to	:NA	Address of Applicant :Presidency University Itgalpur,
Application Number	:NA	Rajanakunte, Bengaluru, Karnataka – 560064, India Bengaluru
Filing Date	.INA	
(62) Divisional to	:NA	2)Prof. Subrata Borgohain Gogoi
Application Number	:NA	Address of Applicant :Presidency University Itgalpur,
Filing Date		Rajanakunte, Bengaluru, Karnataka – 560064, India Bengaluru
		•

(57) Abstract:

ABSTRACT BAMBOO WASTE AS BIO-SURFACTANT FOR CHEMICAL ENHANCED OIL RECOVERY The instant invention relates to the field of Enhancing the crude oil production by Bio-surfactant, more particularly relates to bamboo waste bio-surfactant for chemical enhanced oil recovery. The instant invention discloses a method of using bio-surfactant from bamboo waste for the process of chemical enhanced oil recovery (CEOR). The above-mentioned bamboo waste potentially used as a bio-surfactant for chemical enhanced oil recovery process.

No. of Pages: 22 No. of Claims: 3

(22) Date of filing of Application :21/02/2023 (43) Publication Date : 17/03/2023

(54) Title of the invention : MULTI-SENSOR MEDICAL IMAGE FUSION USING COMPUTATIONAL HARMONIC ANALYSIS WITH WAVE ATOMS

(51) International :A61B 060000, A61B 060300, A61B 080000, A61B 080800, G06T 055000 classification (86) International Application No :01/01/1900 Filing Date (87) International : NA Publication No (61) Patent of Addition to :NA **Application Number** :NA Filing Date (62) Divisional to :NA **Application Number** :NA Filing Date

(71)Name of Applicant: 1)Presidency University

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Mrs. SAMREEN FIZA

Address of Applicant: Department of Electronics & Communications Engineering, Presidency University, Bangalore - 560064, Karnataka, India. Bangalore ------

2)Dr. SAFINAZ S

Address of Applicant :Department of Electronics & Communications Engineering, Presidency University, Bangalore - 560064, Karnataka, India. Bangalore ------

(57) Abstract:

ABSTRACT MULTI-SENSOR MEDICAL IMAGE FUSION USING COMPUTATIONAL HARMONIC ANALYSIS WITH WAVE ATOMS. The present invention discusses a multi-sensor medical image fusion using computational harmonic analysis with wave atoms where the process of image fusion includes three stages/steps viz., medical image decomposition where the source images (CT & MR) are decomposed using average filter into two scale representations to obtain energy layer and structural layer. Then wave atom coefficient is generates using filter by constructing weight maps via generating saliency map and finally fused image is reconstructed by wave Atom coefficients are applied directly to the Energy Layer (EL) and Structural Layer (SL) and inverse wave atom transformation will be applied to reconstruct the spatial information of CT and MRI images to obtain a single cohesive image of superior quality for assessment which provides better quality than individual input images. The source images are analyzed at same dimensions but may differ in intensities. Fig 1

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



(22) Date of filing of Application :07/04/2023

(43) Publication Date: 05/05/2023

(54) Title of the invention : OCTAVE AND LEVEL SAMPLING BASED MEDICAL IMAGE REGISTRATION USING MAXIMUM DOMINANCE

(51) International :A61B 050550, G03G 150000, G03G classification 150100, G06T 073300, G16H 503000

(86) International Application No Filing Date :PCT// :01/01/1900

(87) International Publication No : NA

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

(62) Divisional to Application Number Filing Date :NA (71)Name of Applicant:

1)Presidency University

Address of Applicant : Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Mrs. Samreen Fiza

Address of Applicant :Department of Electronics &

Communications Engineering, Presidency University, Bangalore -

Address of Applicant :Department of Electronics &

Communications Engineering, Presidency University, Bangalore -

560064, Karnataka, India. Bangalore -----

3)Afreen Kubra

Address of Applicant :Department of Electronics &

Communications Engineering, Presidency University, Bangalore -

560064, Karnataka, India. Bangalore -----

4)Ata. Kishore Kumar

Address of Applicant :Department of Electronics & Communications Engineering, Sree Vidyanikethan Engineering College, Mohan Babu University, Rangampet, Tirupati - 517102,

Andhra Pradesh, India. Tirupati -----

(57) Abstract:

ABSTRACT OCTAVE AND LEVEL SAMPLING BASED MEDICAL IMAGE REGISTRATION USING MAXIMUM DOMINANCE The present invention discusses an octave and level sampling based medical image registration using maximum dominance comprising steps of (a) calculating differential operators for each image separately using convolutional filter, (b) key points detection which involves Hessian matrix determinants, octave sampling and level sampling, (c) Key / common points selection based on the detected features of step (b) found through multi scale adaptive local feature done using convolutional filters, (d) Matching the key points of two reference images is done considering several parameters of neighbourhood pixels viz shape, location, scale etc these points are referred as maxima and (e)Calculating the motion vectors. The resultant image registration provides better visual perception than the input images like PET, MR, CT, Xray etc.

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

REGISTRAR Registrar Registrar

(22) Date of filing of Application :28/02/2023 (43) Publication Date: 17/03/2023

(54) Title of the invention: PREDICTION AND EVALUATION OF EPILEPTIC SEIZURES BASED ON THE EEG DATASETS, **DEVICES AND METHODS THEREOF**

(51) International :A61B 050000, A61B 052910, A61B 053690, A61B 053750, A61P 250800 classification

(86) International :PCT// Application No :01/01/1900 Filing Date

(87) International : NA Publication No

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

(62) Divisional to :NA **Application Number** :NA

Filing Date

(71)Name of Applicant: 1)Presidency University

Address of Applicant : Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

Name of Applicant: NA Address of Applicant : NA (72) Name of Inventor: 1)Dr K Bhanu Rekha

Address of Applicant : Presidency University Itgalpur,

Rajanakunte, Bengaluru, Karnataka – 560064, India Bengaluru ---

2)Dr Safinaz S

Address of Applicant: Presidency University Itgalpur,

Rajanakunte, Bengaluru, Karnataka – 560064, India Bengaluru ---

3)Sveda Noor Fathima Address of Applicant :Presidency University Itgalpur,

Rajanakunte, Bengaluru, Karnataka – 560064, India Bengaluru ---

(57) Abstract:

ABSTRACT PREDICTION AND EVALUATION OF EPILEPTIC SEIZURES BASED ON THE EEG DATASETS, DEVICES AND METHODS THEREOF The instant invention relates to the field of electro-encephalography (EEG), more particularly relates to an electro-encephalography-based epileptic seizure predictor and evaluator. The instant invention discloses the device and methods by which electro-encephalography is monitored for predicting and evaluating epileptic seizures. The concept behind the invention is, the monitoring device acts as a data Source and collects and monitors the EEG signals 24*7. In the trained data repository, the machine learning algorithm classifies extracts and learns the signals. Once the decision is made it is updated in the system and in case of any risk or possible seizures, the help alert is sent to the caretaker and medical support. Therefore, the invention is a medical technology that monitors the user's EEG 24/7. The above-mentioned system will be helpful for people to predict and evaluate the chance of epileptic seizures.

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



(51) International

Filing Date (87) International Publication

Application Number

Filing Date

Filing Date

Number

(61) Patent of Addition to

(86) International Application :NA

(62) Divisional to Application :NA

:NA

: NA

:NA

:NA

:NA

classification

(22) Date of filing of Application :09/05/2023

(43) Publication Date: 23/06/2023

(54) Title of the invention: AN IoT BASED CONTROLLER ASSISTED SMART BIN

:G06N 200000, G10L 151800, H04L

671200, H04N 214820, H04W 120600

(71)Name of Applicant:

1)Presidency University

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Swathi Pai M

Address of Applicant :Presidency University Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560064, India Bengaluru ------

2)Mohan Kumar A V

Address of Applicant :Presidency University Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560064, India Bengaluru -------

3)Yashaswini D K

Address of Applicant :Presidency University Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560064, India Bengaluru -----

4)Tanveer Ahmed

Address of Applicant :Presidency University Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560064, India Bengaluru -------

Address of Applicant :Presidency University Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560064, India Bengaluru ------

6)Meena Kumari K S

Address of Applicant :Presidency University Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560064, India Bengaluru ------

7)Shankara Gowda SR

Address of Applicant :Information Science & Engineering/ Don Bosco Institute of Technology, Mysore Road, Kumbalagodu, Bangalore - 560074, Karnataka, India. Bengaluru -------

8) Abdul Saleem Javeed

Address of Applicant :Gitam School of Technology, Bengaluru Campus NH 207, Nagadenehalli, Doddaballapur Taluk, Bengaluru-561203 Bengaluru ------

(57) Abstract:

ABSTRACT AN IoT BASED CONTROLLER ASSISTED SMART BIN The present invention discusses an IoT based controller assisted smart bin which uses Internet of Things (IoT) and cloud computing, designed for efficient garbage collection systems and real time monitoring of the bins by connected to the central control system via cloud (100). A GPS module is installed bin to update precise position in the cloud. The trash collecting pan is equipped with moisture sensor (200) to sense and differentiate between dry and wet garbage. The collection pan is further equipped with servo motors (301,302) which when senses a dry or waste garbage the respective motor (301, 302) is actuated via controller to direct the waste either of wet (500) or dry receptacle (600) thereby segregating the dry or wet waste in separate sections. Each receptacle in the bin is equipped with an infrared (IR) proximity sensor (400) to analyze the level of garbage. Fig 1

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

REGISTRAR REGISTRAR

(22) Date of filing of Application :09/05/2023

(43) Publication Date: 23/06/2023

(54) Title of the invention: SELF-POWERED SMART SHOE BASED ASSISTANCE SYSTEM FOR VISUALLY IMPAIRED PERSON USING OBJECT DETECTION AND OBJECT VISUALIZATION, A DEVICE AND METHOD THEREOF

		(71)Name of Applicant: 1)Presidency University
		Address of Applicant :Itgalpur, Rajanakunte, Bengaluru,
(51) International	:A61H 030600, A61M 160400, B64D	Karnataka – 560 064, India Bengaluru
classification	450000, G02B 270100, G09B 210000	Name of Applicant : NA
(86) International	:NA	Address of Applicant : NA
Application No Filing Date (87) International Publication No	:NA	(72)Name of Inventor:
		1)Akshaya M Ganorkar
	: NA	Address of Applicant :Department of Electronics &
		Communications Engineering, Presidency University, Bangalore-
(61) Patent of Addition to	:NA	560064, Karnataka, India Bangalore
Application Number	:NA	2)Dr. Puneeth S B
Filing Date	.11/21	Address of Applicant :Department of Electronics &
(62) Divisional to	:NA :NA	Communications Engineering, Presidency University, Bangalore-
Application Number		560064, Karnataka, India Bangalore
Filing Date		3)Shagufta
		Address of Applicant :Department of Electronics &
		Communications Engineering, Presidency University, Bangalore-
		560064, Karnataka, India Bangalore

(57) Abstract:

ABSTRACT SELF-POWERED SMART SHOE BASED ASSISTANCE SYSTEM FOR VISUALLY IMPAIRED PERSON USING OBJECT DETECTION AND OBJECT VISUALIZATION, A DEVICE AND METHOD THEREOF The instant invention discloses a device and method of Self-powered smart shoe-based assistance System for visually impaired person by using a device which deduct, visualise and estimate the speed and distance of the object, the device is a self-powered device uses piezoelectricity to harvest the energy and the said energy is stored in Lithium-ion battery. Fig 1

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

(22) Date of filing of Application :07/04/2023 (43) Publication Date : 05/05/2023

(54) Title of the invention: FLEXIBLE FREESTANDING Ti3C2Tx FOIL AND METHOD OF PREPARATION THEREOF

(51) International classification (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	:B32B 150100, B65D 755800, C25D 010400, C30B 251800, E04H 011200 :PCT// :01/01/1900 : NA :NA :NA :NA	(71)Name of Applicant: 1)Presidency University Address of Applicant: Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. RAJA MOHAN Address of Applicant: Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru
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(57) Abstract:

ABSTRACT FLEXIBLE FREESTANDING Ti3C2Tx FOIL AND METHOD OF PREPARATION THEREOF The present invention relates to flexible freestanding Ti3C2Tx foil and method of preparation thereof. The present invention discusses a method of preparation of MXene/ Ti3C2Tx foils which are free standing by way of dispersion of 0.1gms of Ti3C2Tx in 5ml of organic solvent like DMF along with 0.01gm PVDF powder. The mixture is sonicated for at least one hour to obtain a homogeneous dispersion / mixture. The said homogeneous mixture is casted onto clean PDMS substrate and then dried at 60oC under vacuum conditions to obtain a flexible freestanding foil.

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

(19) INDIA

(22) Date of filing of Application :10/04/2023 (43) Publication Date : 05/05/2023

(54) Title of the invention : MULTI-FOCUS REMOTE SENSING IMAGE FUSION USING BOUNDARY DISCRIMINATIVE EDGE PRESERVING FILTER

(51) International :G02C 070600, G06F 171300, G06N classification 030400, G06T 055000, H04L 050000

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(71)Name of Applicant: 1)Presidency University

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor :

1)Mr. G. TIRUMALA VASU

(21) Application No.202341026571 A

Address of Applicant :Department of Electronics & Communications Engineering, Presidency University, Itgalpur, Rajanakunte, Bangalore-560064, India. Bangalore -------

2)Dr. P. Palanisamy

Address of Applicant :Department of Electronics & Communications Engineering, National Institute of Technology, Tiruchirapalli -620015, Tamil Nadu, India. Tiruchirapalli ------

(57) Abstract:

ABSTRACT MULTI-FOCUS REMOTE SENSING IMAGE FUSION USING BOUNDARY DISCRIMINATIVE EDGE PRESERVING FILTER The instant invention relates to the field of Remote Sensing Image Fusion, more particularly relates to multi-focus remote sensing image fusion using boundary discriminative edge-preserving filter. The instant invention discloses a method of using a boundary discriminative edge-preserving filter for multi-focus remote sensing image fusion. Multi-focus image fusion involves generating a single coherent image from multiple images coming from the same scene taken at different focal lengths. Tri-stages process of image decomposition, Generation of weight map and Reconstruction of fused image is involved in the present invention to produce a multi-fused image.

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

REGISTRAR REGISTRAR

(19) INDIA

(22) Date of filing of Application: 10/04/2023 (43) Publication Date: 05/05/2023

(54) Title of the invention: CT AND MRI MULTI-MODAL MEDICAL IMAGE FUSION USING WEIGHT OPTIMIZED ANISOTROPIC DIFFUSION FILTERING

:A61B 050550, G01R 335630, G02B (51) International classification 050200, G06T 050000, G06T 055000 (86) International :PCT// Application No :01/01/1900

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(71)Name of Applicant: 1)Presidency University

(21) Application No.202341026570 A

Address of Applicant : Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru -----

Name of Applicant: NA Address of Applicant : NA (72) Name of Inventor:

1)Mr. G. TIRUMALA VASU

Address of Applicant :Department of Electronics & Communications Engineering, Presidency University, Itgalpur, Rajanakunte, Bangalore-560064, India. Bangalore ------

2)Dr. P. Palanisamy

Address of Applicant :Department of Electronics & Communications Engineering, National Institute of Technology, Tiruchirapalli -620015, Tamil Nadu, India. Tiruchirapalli ------

(57) Abstract:

ABSTRACT MULTI-FOCUS REMOTE SENSING IMAGE FUSION USING BOUNDARY DISCRIMINATIVE EDGE PRESERVING FILTER The instant invention relates to the field of medical image fusion, more particularly relates to CT and MRI Multi-Modal Medical Image Fusion Using Weight Optimized Anisotropic Diffusion Filtering. The instant invention discloses a method of using a weight optimised anisotropic diffusion filtering for CT and MRI Multi-Modal Medical Image Fusion.

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

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(21) Application No.202341040770 A

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru ------

Address of Applicant : Presidency University, Itgalpur,

Rajanakunte, Bangalore-560064, India. Bangalore ------

(71)Name of Applicant: 1)Presidency University

(19) INDIA

(22) Date of filing of Application :15/06/2023 (43) Publication Date : 30/06/2023

(54) Title of the invention: A REAL TIME BATTERY MONITORING SYSTEM

		Trainatana 200 00 i, maia Bengarara
		Name of Applicant : NA
		Address of Applicant : NA
		(72)Name of Inventor:
		1)Dr. V Joshi Manohar
		Address of Applicant :Presidency University, Itgalpur,
(51) International	:G01R 313600, G01R 313710, G01R	Rajanakunte, Bangalore-560064, India. Bangalore
classification	313835, G01R 313960, H01M 104800	
(86) International		2)Sharanya P C
Application No	:PCT//	Address of Applicant :Presidency University, Itgalpur,
Filing Date	:01/01/1900	Rajanakunte, Bangalore-560064, India. Bangalore
(87) International		
Publication No	: NA	3)Rahul Ramesh Pammar
(61) Patent of Addition to		Address of Applicant :Presidency University, Itgalpur,
Application Number	:NA	Rajanakunte, Bangalore-560064, India. Bangalore
Filing Date	:NA	
(62) Divisional to		4)Ashwin S
Application Number	:NA	Address of Applicant :Presidency University, Itgalpur,
Filing Date	:NA	Rajanakunte, Bangalore-560064, India. Bangalore
		Language of Society, India. Dangarore
		5)Suheb Ahamed Balaganur
		Address of Applicant :Presidency University, Itgalpur,
		1
		Rajanakunte, Bangalore-560064, India. Bangalore
		CALLEGE
		6)Abhinav P

(57) Abstract:

ABSTRACT A REAL TIME BATTERY MONITORING SYSTEM The present invention discusses a real time battery monitoring system and method comprising a Arduino assisted voltage monitoring unit which monitors voltage by way of sensing resistor values, a current monitoring unit which senses battery current by calculating the voltage drop across resistors and it further calculates battery percentage and triggers the charging when the battery is 100 % charged to avoid overcharging, a temperature monitoring unit equipped with NodeMCU to sense the analog value and covert the same into temperature readings and an alert system connected which triggers the fan, and alerts the user when the temperature reaches a certain threshold. The entire system is equipped with a screen to display the results and connected with app and web portal via wi-fi for real-time monitoring. Fig 1

No. of Pages: 26 No. of Claims: 11

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(19) INDIA

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(54) Title of the invention: A REAL TIME SMART ATTENDENCE SYSTEM

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(87) International

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Filing Date

(71)Name of Applicant :

1)Presidency University

(21) Application No.202341040769 A

Address of Applicant :Itgalpur, Rajanakunte, Bengaluru, Karnataka – 560 064, India Bengaluru ------

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Mohammed Aarif K.O.

Address of Applicant :Presidency University, Itgalpur,

Rajanakunte, Bengaluru, Karnataka – 560 064, India. Bengaluru --

2)Pakruddin B

Address of Applicant :Presidency University, Itgalpur,

Rajanakunte, Bengaluru, Karnataka – 560 064, India. Bengaluru --

(57) Abstract:

ABSTRACT A REAL TIME SMART ATTENDENCE SYSTEM The present discusses a real time smart attendance system which works with capturing device capturing the student's image in the class room. The captured image is forwarded to the segmentation process via segmentation module to segment the picture into the facial image of individual student. The individual student image are feed to the deep learning model which is deployed in the edge device (Nvidia Jetson). The deep learning model is trained with the student facial image dataset with classes as students name and roll number will classify and recognize the individual student. Then the recognized students name with roll number is generated as attendance in an excel sheet and forwarded to the attendance management system. Additionally daily attendance status of the student will be updated to their parents through message/WhatsApp using GSM module integrated in the edge device. FIG 1

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

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