# पेटेंट कार्यालय शासकीय जर्नल OFFICIAL JOURNAL OF THE PATENT OFFICE

निर्गमन सं. 39/2022	शुक्रवार	दिनांक: 30/09/2022
ISSUE NO. 39/2022	FRIDAY	DATE: 30/09/2022

### पेटेंट कार्यालय का एक प्रकाशन PUBLICATION OF THE PATENT OFFICE

The Patent Office Journal No. 39/2022 Dated 30/09/2022

(22) Date of filing of Application :20/09/2022

#### (43) Publication Date : 30/09/2022

## (54) Title of the invention : A METHOD FOR REDUCING LIGHT REFLECTION IN THE PHOTOVOLTAIC ARRANGEMENT USING REFLECTING FILM

<ul> <li>(51) International classification</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:H01L0031021600, H01L0031048000, H01L0031054000, H01L0031055000, H02S0040220000 :PCT// :01/10/1900 : NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>1)Dr. V. Hemanalini</li> <li>Address of Applicant :Assistant Professor, Department of Networking and Communications/ School of Computing, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India</li></ul>
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(57) Abstract :

(37) Abstract : ABSTRACT A METHOD FOR REDUCING LIGHT REFLECTION IN THE PHOTOVOLTAIC ARRANGEMENT USING REFLECTING FILM A method for reducing light reflection in the photovoltaic arrangement using reflecting film. The method includes a plurality of solar cells forming a light absorbing surface provided on the light incident surface of the PV module for absorbing solar radiation and converting the solar radiation to electrical energy and forming a second surface opposite the light absorbing surface. Covering a glass layer on the upper surface of the solar cell and coating a reflecting film on the surface of the glass layer, and reflecting film on the surface of the glass layer, and reflecting film and mounting the coated solar cell and the solar cell without the coating on a solar array at intervals, and then executing. Mounting the solar cell after film coating on a solar array panel, and then executing. A transparent cover provided on the light-absorbing surface and a back sheet comprising a thermally conductive material disposed adjacent to the second surface and extending externally to form the shaded back surface of the PV module. FIG.1

(19) INDIA

(22) Date of filing of Application :19/04/2022

(51) International	:F21W0131103000, F03D0009250000, F21S0008080000, H05B0047190000, H02J0003380000 :NA :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant : <ul> <li>1)Hindusthan College of Engineering and Technology</li> <li>Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>Name of Applicant : NA</li> <li>Address of Applicant :Professor/ECE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(72)Name of Inventor : <ul> <li>1)Dr.J.Jaya</li> <li>Address of Applicant :Professor/ECE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(70)Dr.N P Ananthamoorthy</li> <li>Address of Applicant :Professor &amp; Head - EEE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(71)Maheshkumar N</li> <li>Address of Applicant :Assistant Professor/ EEE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(71)Maheshkumar N</li> <li>Address of Applicant :Associate Professor/ EEE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(71)Mana Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(71)Marama Subramanian R</li> <li>Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(71)Marama Subramanian R</li> <li>Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(71)Marama Subramanian R</li> <li>Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(7)Aldrin Samuel A</li> <li>(7)Address of A</li></ul></li></ul></li></ul>
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(54) Title of the invention : AUTOMATIC STREET LIGHTING USING RENEWABLE ENERGY SOURCES

(57) Abstract :

ANNEXURE- 3 In the past few years there is a global transformation on technology and researches which aims to energy savings through the usage of renewable sources in many applications. Solar as well as wind energy can be used for street lighting usually in cases of low consumption applications. Many applications have been made especially the last decade round the world. In countries such as USA, UK, Italy several PV street lighting projects have been carried out in order to save energy. In India many efforts have been made for the expansion of this technology, but still the results are not very satisfactory. The applications are limited in building projects, but the need of cheap and clean energy, especially in India where is observed high amount of sunlight and wind, have led to the realization of projects of street lighting, but in experimental level yet.



## OFFICIAL JOURNAL OF THE PATENT OFFICE

निर्गमन सं. 44/2022	शुक्रवार	दिनांकः 04/11/2022
<b>ISSUE NO. 44/2022</b>	FRIDAY	DATE: 04/11/2022

## पेटेंट कार्यालय का एक प्रकाशन PUBLICATION OF THE PATENT OFFICE

The Patent Office Journal No. 44/2022 Dated 04/11/2022

(54) Title of the invention : INTERNET OF THINGS IN ADVANCED MANUFACTURING

#### (19) INDIA

(22) Date of filing of Application :20/10/2022

#### (43) Publication Date : 04/11/2022

(51) International classification (66) International Application No 1010/1/900 (75) International Publication No (61) Patent of Addition to SNA Piling Date (61) Patent of Addition to NA (62) Divisional to Application Number Filing Date (NA SNA Filing Date (SNA SNA SNA SNA SNA SNA SNA SNA	<ul> <li>(71)Name of Applicant :</li> <li>(71)Name of Applicant : Department of Computer Science and Electronics, University of Science &amp; Technology, Ri-Bhoi, Techno City, Killing Road, Baridua, Meghalaya 793101</li></ul>

(57) Abstract :

[06] The Internet of Things (IoT) has attracted increasing attention from organizations for allowing objects to connect to each other without the need for human interference, allowing the collection of data from devices and their operating conditions in real time. The applications related to IoT are numerous and can be used in different market segments, such as in the manufacture of products. The purpose of this work is to present a theoretical framework on the internet of things, enabling technologies and its architecture, it is also a case study of a real application in a sugar cane plant aimed at controlling the production of sugarcane seedlings in a newly opened bio factory. The work consisted in the implementation of an Iot platform that market is possible to use a radio frequency identification system (RFID) to control the movement of sugarcane seedlings during the production stages and to monitor it through temperature, humidity, radiation and luminosity. Accompanied Drawing [FIG. 1] [FIG. 2][FIG. 3] [FIG. 4] [FIG. 5]

### (19) INDIA

(22) Date of filing of Application :10/08/2022

#### (43) Publication Date : 26/08/2022

## (54) Title of the invention : FUZZY AND INTUITIONISTIC FUZZY STRONG IMPLICATIVE FILTERS OF RESIDUATED LATTICE WAJSBERG ALGEBRAS

104B0007040000, H04L0005000000, H04W0048080000, 01D0046000000, G06Q005000000 CT/// 1/01/1900 NA IA IA IA	<ul> <li>(71)Name of Applicant :</li> <li>1)DR.V.NIRMALA Address of Applicant :ASSISTANT PROFESSOR DEPARRMENT OF SCIENCE AND HUMANITIES,FACULTY OF ENGINEERING, KAPAGAM ACADEMY OF HIGHER EDUCATION, EACHANARI, COIMBATORE- 641 021</li></ul>
	Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF MECHATRONICS
	01D0046000000, G06Q0050000000 CT// / 1/01/1900 NA A A A

(57) Abstract :

In aim of this paper is defined the notions of fuzzy strong implicative and intuitionistic fuzzy strong implicative filters of residuated lattice Wajsberg algebra and some properties are studied with illustrations. We establish a set of equivalent condition for every fuzzy strong implicative filter becomes an implicative filter of residuated lattice Wajsberg algebra. Finally, we obtain relation between a fuzzy strong implicative filter and intuitionistic fuzzy strong implicative filter. In addition, we obtain some equivalent conditions of intuitionistic fuzzy strong implicative filter. In addition, we obtain some equivalent conditions of intuitionistic fuzzy strong implicative filter.

#### (19) INDIA

(22) Date of filing of Application :14/03/2022

(54) Title of the invention : AN	N ALERT SYSTEM TO PREVENT	THEFTS
(54) Title of the invention : AN	N ALERT SYSTEM TO PREVENT	THEFTS (71)Name of Applicant : 1)Mrs. C P THAMIL SELVI Address of Applicant :D/o P PALANICHAMY, ASSOCIATE PROFESSOR, HEAD OF THE DEPARTMENT, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, PPG INSTITUTE OF TECHNOLOFY, COIMBATORE - 642109, TAMIL NADU, INDIA Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Mrs. C P THAMIL SELVI Address of Applicant :D/o P PALANICHAMY, ASSOCIATE PROFESSOR, HEAD OF THE DEPARTMENT, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, PPG INSTITUTE OF TECHNOLOFY, COIMBATORE - 642109, TAMIL NADU, INDIA
(S1) International classification H04N00196 (86) International Application	9370000, A45C0013180000, E05G0001000000, 610000, G08B0003100000	WOMEN, DINDIGUL 624001 INDIA <b>4)Mrs. K. SELVASHEELA</b> Address of Applicant :HOD/CSE SREE SAKTHI ENGINEERING COLLEGE,
No Filing Date :01/01/1900	0	KARAMADAI, COIMBATORE, Tamil Nadu 641104 INDIA
(87) International Publication No (61) Patent of Addition to Application Number		Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, MAHENDRA ENGINEERING COLLEGE (AUTONOMOUS), MALLASAMUDRAM, NAMAKKAL – 637503, TAMIL NADU, INDIA
Filing Date :NA (62) Divisional to Application :NA Number :NA Filing Date :NA		6)Mr. DHARMAPRABHAKARAN T Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF MECHANICAL ENGINEERING SYED AMMAL ENGINEERING COLLEGE RAMANATHAPURAM - 623502 INDIA
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(57) Abstract :

The proposed system will involve the use of sensors like Motion, Alarm, Touch, and GPS. This proposed system will focus on theft prevention when the residents of the house are not in the house it will be quite insecure for their belongings, asserts, jewels etc., which are present in the locker. This kind of scenario is favorable for thief to steal the valuables which are present in the locker. So in order to avoid this kind of situation the proposed system consists of sensors will alert the residents and as well as the nearby residents. The touch sensor is for finger print purpose, a family consists of four or five members can add their finger prints so that only those family members has the privilege to access that locker whereas outsiders can 't, if an unauthorized persons touches the locker or tries to open the locker, it doesn't recognize their finger print and as a result it gives notifications to the residents and thereby saving the belongings. Fig 1.

#### (19) INDIA

(22) Date of filing of Application :07/04/2022

(51) International :H04L0029060000, H04W0012120000, classification H04W0012020000 (86) International :PCT// Application No :01/01/1900 (87) International :NA Publication Number :NA Filing Date :NA	<ul> <li>1)Dr. C. Tamizhselvan</li> <li>Address of Applicant :Assistant Professor (Senior Grade) Saveetha School of Engineering, SIMATS, Thandalam, chennai Pin: 602105. State: Tamilnadu Country: India</li></ul>
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(54) Title of the invention : Detection and Countermeasures for Cyber Security Threats to Wireless Networks on a Chip

(57) Abstract :

Detection and Countermeasures for Cyber Security Threats to Wireless Networks on a Chip Abstract This document discusses the dangers to wireless network security and some current academic research on the subject. Snooping, man-in-the-middle attacks, rogue access points, distributed denial-of-service assaults, and social engineering attacks are just a few of the most serious and persistent threats. Another example of a recent advancement in wireless communication technology is the development of short-range communication and cloud computing. These are also referred to as recent wireless communication developments. These include short-range communication, cloud computing, tethering, and the convergence of WiFi and cellular networks. Additionally, this paper discusses some advanced countermeasures, but also offers some practical recommendations. The sophistication of attacks has evolved significantly throughout time. As a result of increasing complexity, attacks on WiFi networks have grown more passive and destructive to users.

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

The Patent Office Journal No. 16/2022 Dated 22/04/2022

(21) Application No.202241013549 A

(19) INDIA

## (22) Date of filing of Application :12/03/2022

(43) Publication Date : 25/03/2022

# (54) Title of the invention : DESIGNING A ROBOT WITH DIELECTRIC MATERIAL TO WORK IN HIGH VOLTAGE ELECTRIC ENVIRONMENT

(51) International classification	:B25J0009160000, B25J0019000000, B25J0011000000, G05B0013040000, B25J0005020000	<ul> <li>(71)Name of Applicant :</li> <li>1)DEEPAK GOWDA .L Address of Applicant :DESIGN &amp; PROJECT ENGINEER, PANASONIC INDIA PVT.</li> <li>LTD. DIVYASHREE CHAMBERS- GLOBAL TECH PARK, LANGFORD ROAD, MG ROAD, BANGALORE -560025</li></ul>
(86) International Application No	:PCT//	
Filing Date	:01/01/1900	3)B.SURESH KUMAR Address of Applicant :ASSOCIATE PROFESSOR, CHAITANYA BHARATHI INSTITUTE
(87) International Publication No	: NA	OF TECHNOLOGY, HYDERABAD, PIN-500075
(61) Patent of Addition to Application Number	:NA	Address of Applicant : PROFESSOR AND HEAD, DEPARTMENT OF ELECTRONICS, DR.
Filing Date	:NA	AMBEDKAR COLLEGE OF ARTS, COMMERCE & SCIENCE, CHANDRAPUR - 442401
(62) Divisional to Application	:NA	(M. S.) 5)JOBY SEBASTIAN
Number Filing Date	:NA	Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHYSICS, ST.
rning Date		THOMAS' COLLEGE (AUTONOMOUS), THRISSUR, KERALA, PIN-680001
		6)DR P JOEL JOSEPHSON Address of Applicant :PROFESSOR/ECE ST MARTIN'S ENGINEERING COLLEGE,
		SECUNDERABAD, 500100
		7)BERLIN BENO T L
		Address of Applicant :RESEARCH SCHOLAR, ANNAI VELANKANNI COLLEGE THOLAYAVATTAM KANYAKUMARI 629157 8)DR.ABINA SHINY R S
		Address of Applicant ASSISTANT PROFESSOR PHYSICS DEPARTMENT BETHLAHEM

Address of Applicant :ASSISTANT PROFESSOR,PHY:	OF ELECTRONICS AND
INSTITUE OF ENGINEERING,KARUNGAL,629157 -	ENGINEERING COLLEGE,
9)DR.D.SELVARAJ	AD), MAHATMA PHULE ARTS
Address of Applicant :PROFESSOR, DEPARTMENT O	IST RAIGAD
COMMUNICATION ENGINEERING, PANIMALAR I	TECHNOLOGY AND
CHENNAI-600123	CH SCHOLAR, BHUBANESWAR,

(57) Abstract :

Designing a robot with dielectric material to work in high voltage electric environment is the proposed invention. The invention focuses on designing a robot that can replace humans who work in cautions and dangerous environments. The proposed invention will revolutionize the working model of electricity board by implementing robots to their work.

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

The Patent Office Journal No. 12/2022 Dated 25/03/2022



(54) Title of the invention : A SMART CHAIR SITTING POSTURE RECOGNITION SYSTEM

(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	:G06K000900000, A47C000900000, A47C0007000000, A23L0033155000, G06K0009620000 :NA :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>1)Hindusthan College of Engineering and Technology Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor :</li> <li>1)Dr.J.Jaya Address of Applicant :Professor/ECE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>2)Dr. P.T.Saravana kumar Address of Applicant :Professor &amp; Head-Mecht, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li></li></ul>
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### (57) Abstract :

ANNEXTURE3 Sitting is the most common status of modern human beings. Some sitting postures may bring health issues. To prevent the harm from bad sitting postures, a local sitting posture recognition system is desired with low power consumption and low computing overhead. The system should also provide good user experience with accuracy and privacy. This project reports a novel posture recognition system on an office chair that can categorize seven different health-related sitting postures. Here we proposed a model smart sitting chair for reduce health issues and stress of humans who are all working long in sitting, this project gives the solution to avoid back pain stress of humans.

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	Application Details
APPLICATION NUMBER	202221018867
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	30/03/2022
APPLICANT NAME	1 . DR. SANDHYA MILIND KHEDEKAR 2 . MATE YOGESH DATTATRAYA 3 . DR.SUBHASH MAHADEO SHEKOKAR 4 . PROF. (DR.) AVADHESH KUMAR KOSHAL 5 . DR.M.SANTHI 6 . DR. M. SARANYA 7 . DR.RAVIPRAKASH DAGDUSAHEB THOMBRE 8 . RAJADURAI NARAYANAMURTHY 9 . RANVIR ANAND GHATE 10 . CHETAN SHASHIKANT CHAVAN 11 . KESAVARAJ K 12 . DHAMODHARAN N
TITLE OF INVENTION	A SYSTEMATIC APPROACH ENABLED WITH IOT TECHNOLOGY TO MONITOR THE WATER RESOURCE AVOIDING DISASTER
FIELD OF INVENTION	COMPUTER SCIENCE
-MAIL (As Per Record)	sgowthami12@gmail.com
DDITIONAL-EMAIL (As Per Record)	sgowthami12@gmail.com
-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	
PUBLICATION DATE (U/S 11A)	27/05/2022
6	Application Status
APPLICATION STATUS	Awaiting Request for Examination
	View Documents

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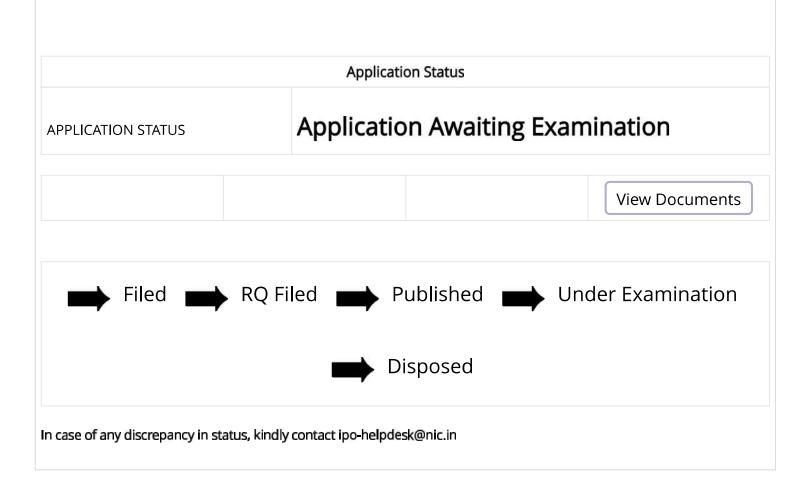
Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India

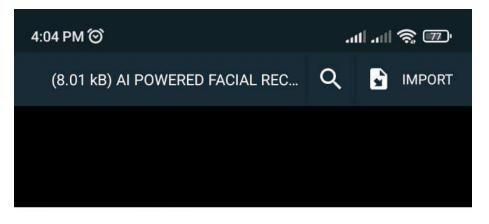
(http://ipindia.nic.in/index.htm)



(http://ipindia.nic.in/index.htm)

	Application Details
APPLICATION NUMBER	202241006313
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	07/02/2022
APPLICANT NAME	<ol> <li>Mr. B. Nishanth</li> <li>Dr. V. Nirmaladevi</li> <li>Mrs.S.SS.Sindhu</li> <li>Mr.M.Kumaresan</li> <li>Mrs.D.Dhanalakshmi</li> <li>Mrs.V.Priya</li> <li>Mrs.R.Priyadharshini</li> <li>Mr.M.Chandramohan</li> <li>Mr.J.Dhanasekar</li> <li>Mr.C.Dinesh</li> <li>Mr.A.Jeevarathinam</li> <li>Mr.M.Vijayakumar</li> <li>Mr.R.Krishnakumar</li> </ol>
TITLE OF INVENTION	AGILE AND SMART TRAFFIC CONTROL SYSTEM
FIELD OF INVENTION	COMMUNICATION
E-MAIL (As Per Record)	
ADDITIONAL-EMAIL (As Per Record)	kumaresan.mcts@hicet.ac.in
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	07/02/2022
PUBLICATION DATE (U/S 11A)	18/02/2022





### (12) PATENT APPLICATION PUBLICATION (21) Application No.202241025850 A (19) INDIA (22) Date of filing of Application :04/05/2022 (43) Publication Date : 20/05/2022 (54) Title of the invention : AI POWERED FACIAL RECOGNITION IN DRONE (71)Name of Applicant : 1)Hindusthan College of Engineering and Technology Address of Applicant :Hindusthan College of Engineering and Technology, Valey Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr.J.Jaya 1)Dr.J.Jaya Address of Applicant :Professor/ECE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Taminadu, India 641032. Tanumaou, muni 641052. 20Dr. PT. Starsvana kumar Address of Applicant Professor & Head-Mecht, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. :G06K000900000, B64C0039020000, G06K0009620000, B64D0047080000, H04N0007180000 (51) International

Silbr, Pradeep Johnson Address of Applicant Associate Professor/Mecht, Hindusthan College of Engineering and Technology. Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. (86) International :NA :NA Application No Filing Date (87) International :NA Publication No 4)Mr.M.Karthikeyan Address of Applicant Assistant Professor/Mecht, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. (61) Patent of Addition (61) Patent of Addition to Application Number Filing Date
 (62) Divisional to Application Number NA :NA 5)Mohammed Ismail Address of Applicant :Hindusthan College of Engineering and :NA :NA Filing Date Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. India 641052. 6)MallainhArjun Address of Applicant Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. Billarish Godwin Address of Applicant Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.

(57) Abstract : ANNEXURE 3 This project finds a solution to help the task force using a face recognition based unmanned aerial vehicle (UAV) to identify the criminals, missing people, civilians and for surveillance. They can easily reach locations which are too difficult to reach ty bumans and collect images from bird's-eye view through AI face recognition. Biometric facial recognition is an Artificial intelligence technology involving the automated comparison of facial features, to identify unknown suspects. Once a felos's photograph is fed into the AI network, facial recognition drones take to the skies and acan crowded public spaces. When a drone suspect is thas spotted a target, it will search for the matches to capture this o her images-possibly flying lower and adjusting for a better angle. If AI drone found any matches of people it will send the GPS location by SMS to people in ground units. Using this AI Drone we can find the missing peoples, wanted people in crowed area. We can use this AI drone for, security purpose of prime minister and chief minister in their public meeting e his or

No. of Pages : 5 No. of Claims : 4

classification

#### The Patent Office Journal No. 20/2022 Dated 20/05/2022

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	Application Details		
APPLICATION NUMBER	202211020243		
APPLICATION TYPE	ORDINARY APPLICATION		
DATE OF FILING	04/04/2022		
APPLICANT NAME	1 . DR JUHIE AGARWAL 2 . M ARVIND KUMAR REDDY 3 . K.CHITRA DEVI 4 . G. SUBASHINI 5 . DR. SHAIK KHAJA PEER SAHEB 6 . DR. PRANITA VISHWANATH RAITHAK 7 . DR. BHUVANESWARI S 8 . DR. EKTA MENGHANI 9 . K. SREENIVAS REDDY 10 . T.PRABHU 11 . DR SUDESH KUMAR 12 . PREM ANAND S		
TITLE OF INVENTION	ARTIFICIAL INTELLIGENCE BASED TECHNIQUE TO ANALYZE THE ANTIBACTERIAL PROPERTIES OF SILVER NANOPARTICLES		
FIELD OF INVENTION	CHEMICAL		
-MAIL (As Per Record)	sgowthami12@gmail.com		
ADDITIONAL-EMAIL (As Per Record)	sgowthami12@gmail.com		
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PUBLICATION DATE (U/S 11A)	13/05/2022		
i.	Application Status		
APPLICATION STATUS	Awaiting Request for Examination		
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	Application Details		
APPLICATION NUMBER	202211020243		
APPLICATION TYPE	ORDINARY APPLICATION		
DATE OF FILING	04/04/2022		
APPLICANT NAME	1 . DR JUHIE AGARWAL 2 . M ARVIND KUMAR REDDY 3 . K.CHITRA DEVI 4 . G. SUBASHINI 5 . DR. SHAIK KHAJA PEER SAHEB 6 . DR. PRANITA VISHWANATH RAITHAK 7 . DR. BHUVANESWARI S 8 . DR. EKTA MENGHANI 9 . K. SREENIVAS REDDY 10 . T.PRABHU 11 . DR SUDESH KUMAR 12 . PREM ANAND S		
TITLE OF INVENTION	ARTIFICIAL INTELLIGENCE BASED TECHNIQUE TO ANALYZE THE ANTIBACTERIAL PROPERTIES OF SILVER NANOPARTICLES		
FIELD OF INVENTION	CHEMICAL		
-MAIL (As Per Record)	sgowthami12@gmail.com		
ADDITIONAL-EMAIL (As Per Record)	sgowthami12@gmail.com		
-MAIL (UPDATED Online)			
PRIORITY DATE			
REQUEST FOR EXAMINATION DATE			
PUBLICATION DATE (U/S 11A)	13/05/2022		
i.	Application Status		
APPLICATION STATUS	Awaiting Request for Examination		
	View Documents		

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#### (19) INDIA

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(	54)	Title of the	e invention	: Automobile	Seat Design	Ergonomics a	nd Whiplash	Protection system

(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	:B60N0002427000, B60N0002420000, A41D0013050000, B60N0002240000, A42B0003040000 :PCT// 01/01/1900 : NA :NA :NA :NA :NA	<ul> <li>(1)Name of Applicant : Associate Professor, Department of Mechatronics Engineering, Hindusthan College of Engineering and Technology, Valley Campus Coimbatore – 641032 Tamilnadu. India</li></ul>
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Automobile Seat Design Ergonomics and Whiplash Protection system Abstract: Due to the rapid advancement of car performance, greater safety regulations have accelerated the industry's growth. There is a direct correlation between where you sit in an automobile and the vehicle's safety and reliability. When it comes to racing, drivers' vision, weariness, and comfort all play a role in who wins. Even though the seat is supposed to be more comfortable, numerous people have did or been injured in collisions involving quick accelerations and decelerations and decelerations and becelerations and decelerations and accelerations and accelerates and the restrained seat will remain constant. As a result, the body absorbs the entirety of the stress, rather than the frame or seat, which would normally carry the force of a fall or bump. According to the article cited in three primary areas. It is positioned in such a way that it can act as a sliding support for your neck. This section contains two subsections. The neck support is connected to the main seat through a hinge. This means that the principal seating stock and a back-supporting frame are hinged together in the seat's structure. Two torsional springs on each side of a hinge fifthe rear support structure. This offers the driver and the finest shock absorption and smoothest support possible. Seats are held in place when dragged. A spring guarantees that the backrest structure goes backward after being struck. It is the major system responsible for absorption and protection of the neck and he

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(51) International	:F21W0131103000, F03D0009250000, F21S0008080000, H05B0047190000, H02J0003380000 :NA :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant : <ul> <li>1)Hindusthan College of Engineering and Technology</li> <li>Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>Name of Applicant : NA</li> <li>Address of Applicant :Professor/ECE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(72)Name of Inventor : <ul> <li>1)Dr.J.Jaya</li> <li>Address of Applicant :Professor/ECE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(70)Dr.N P Ananthamoorthy</li> <li>Address of Applicant :Professor &amp; Head - EEE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(71)Maheshkumar N</li> <li>Address of Applicant :Assistant Professor/ EEE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(71)Maheshkumar N</li> <li>Address of Applicant :Associate Professor/ EEE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(71)Mana Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(71)Marama Subramanian R</li> <li>Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(71)Marama Subramanian R</li> <li>Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(71)Marama Subramanian R</li> <li>Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(7)Aldrin Samuel A</li> <li>(7)Address of A</li></ul></li></ul></li></ul>
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(54) Title of the invention : AUTOMATIC STREET LIGHTING USING RENEWABLE ENERGY SOURCES

(57) Abstract :

ANNEXURE- 3 In the past few years there is a global transformation on technology and researches which aims to energy savings through the usage of renewable sources in many applications. Solar as well as wind energy can be used for street lighting usually in cases of low consumption applications. Many applications have been made especially the last decade round the world. In countries such as USA, UK, Italy several PV street lighting projects have been carried out in order to save energy. In India many efforts have been made for the expansion of this technology, but still the results are not very satisfactory. The applications are limited in building projects, but the need of cheap and clean energy, especially in India where is observed high amount of sunlight and wind, have led to the realization of projects of street lighting, but in experimental level yet.

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(57) Abstract :

ANNEXURE 3 E-vehicles are a new and developing field that is the future of the automotive sector. As such a good battery management system is necessary. In this project a method which is more efficient and suitable than the current charging system. It can help charge the batteries faster and let the batteries get a longer range than usual. It also provides better cooling for the system and can thus allow a better battery health in the long run. This system can be easily implemented and connected to the current battery system. Moreover, there is no need for battery swapping through this method and thus saves the need of proprietary batteries for each vehicle. In the future the system can be made more complex with chips to include other functions of the battery and even an app can be created using Arduino to help the owner ascertain the current properties in real time. The system while primarily built for e-vehicles but can be used in a wide range of mobile devices that require a long range of battery.

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

<ul> <li>(51) International classification</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:G06K0009000000, G06F0021320000, A61B0005117200, G07C0009370000, G07C0013020000 :NA :NA :NA :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant : <ul> <li>1)Hindusthan College of Engineering and Technology</li> <li>Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>Name of Applicant : NA</li> <li>Address of Applicant :Professor/ECE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(72)Name of Inventor : <ul> <li>1)Dr.J.Jaya</li> <li>Address of Applicant :Professor/ECE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(70)Dr.B.Anand</li> <li>Address of Applicant :Professor &amp; Head-EIE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(7)Dr.B.Anand</li> <li>Address of Applicant :Assistant Professor/EIE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(7)Dr.R.Madhu sudhanan</li> <li>Address of Applicant :Associate Professor/EIE, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032.</li> <li>(Address of</li></ul></li></ul></li></ul>
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(54) Title of the invention : BIOMETRIC BASED VOTING SYSTEM USING IMAGE PROCESSING

### (57) Abstract :

Fingerprint identification is one of the most well-known and publicized biometrics. Because of their uniqueness and consistency overtime, fingerprints have been used for identification for over a century, more recently be coming automated a biometric due to advancement sin computing capabilities. Finger print and offline data set are important identifies of the candidate in voting process. It is used to fulfill the user requirements. It has simple architecture and gives instant response. It decreases the polling time. Transportation is very easy from one station to other station, and usage of manual power has also reduced. It gives accurate result at the time of counting without committing mistakes.

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(54) Title of the inventio	on : CHATBOT FOR FOUNDRY APPLICAT	TIONS
<ul> <li>(51) International classification</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:G06N000300000, B25J0011000000, B25J0009160000, H04L0012580000, G10L0013080000 :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>1) HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY</li> <li>Address of Applicant : HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHH HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>Name of Applicant : NA</li> <li>(72)Name of Inventor :</li> <li>1)Dr. JAYA</li> <li>Address of Applicant : PROFESSOR/ECE, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>2)Dr. P.T. SARAVANA KUMAR</li> <li>Address of Applicant : PROFESSOR &amp; HEAD - MECHT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>3)Dr. PRADEEP JOHNSON</li> <li>Address of Applicant : ASSOCIATE PROFESSOR/MECHT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>4)Mr. T. PRABHU</li> <li>Address of Applicant : ASSISISTANT PROFESSOR/MECHT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>4)Mr. T. PRABHU</li> <li>Address of Applicant : ASSISISTANT PROFESSOR/ MECHT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>4)Mr. T. PRABHU</li> <li>Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>5)ASHOK K</li> <li>Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>6)CHINNADURAI M</li> <li>Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>6)KSAC DIVAKARAN K</li> <li>Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU</li></ul>

#### (57) Abstract :

In the development of assistive robots, a major challenge is to improve the response along with human-like-expressions. So, in a first phase, our main goal was to reach a minimum level of emotional expressiveness in order to obtain nonverbal communication between the robot and human by building basic facial expressions. The main idea is to build a robot head which simulates human-like conversations with users via text messages on chat. Its key task is to help users by providing answers to their requests allowing humans to interact with digital devices as if they were communicating with a real person. This helps add convenience for users because they are automated programs that interact with customers like a human would and cost little to nothing to engage with. It is the . bridge between 3D printing enthusiasts and students in engineering fields.

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(43) Publication Date : 20/05/2022

<ul> <li>(51) International classification</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition for Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:F04D0025080000, G06F0001200000, A47J0037060000, F24F0007007000, F21V0033000000 :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>(1)Hindusthan College of Engineering and Technology Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032</li></ul>
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#### (57) Abstract :

ANNEXURE 3 In regular human appliances, the ceiling fan has been used for air circulation purposes, in that air can cover only a specific area according to the design and length of the fan leaf. Moreover, because of user convenience, they need air circulation for the broad scope of coverage; for that, they need to use two or three fans for a specific area of air circulation. In this case, to overcome the above drawbacks, the replacing design and analysis of the gearbox set up using LLV-mechanism (lateral, longitudinal, and vertical), which rotates three dimensions of pitch, roll, and yaw rotation, is helpful. By the use of this mechanism, the air circulation coverage will be broad and will help to minimize the maintenance of employing the number of fans under usage of the power supply and also above mechanism consist of a stepper motor and gear wheels, which have been controlled by manually as well as the mobile application. The automation process of the above mechanism has been controlled by a microcontroller consisting of subcomponents and a relay.

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(54) Title of the invention : DESIGN AND DEVELOPMENT OF AI BASED SEED SUGGESTING AND MONITORING SYSTEM

(57) Abstract :

Annexure 3 Agriculture, the cultivation of food and goods through farming, produces the vast majority of the world's food supply. It is critical for the Indian economy and it's GDP. However, the road to the present has not been smooth. Resource degradation, rapid population growth, changing climate, diseases, labor shortages and other forces have periodically crippled food supplies. The objective is to combat losses, artificially intelligent, data-centric, Internet of Things, IoT-driven smart agriculture employs a variety of technological innovations in traditional farming to optimize the. food production process and improve quality. The way machine learning and data analytics re-imagine it, help farmers avert all expensive mishaps. Our highly efficient, low cost and low power Wireless Sensor Network (WSN) -PIC (IC PIC16F877A) microcontroller, Node MCU (ESP8266-12E), USB to UART converter, driver, relay, water pump, soil moisture, soil pH, soil NPK, temperature and humidity sensors deployment in the field prove to be an elixir. This IoT performs automatic irrigation, crop variety prediction for sowing according to land suitability through Machine Learning techniques and soil quality monitoring though Data Analysis. PC local host database and the mobile application, my devices Cayenne function as the remote eyes and hands for our farmer.

(12) PATENT APPLICATION PUBLICATION (19) INDIA

(22) Date of filing of Application :04/05/2022

(43) Publication Date : 13/05/2022

#### (54) Title of the invention : DESIGN AND DEVELOPMENT OF FAN LIGHT CONTROL SYSTEM AND FACE DETECTION ATTENDANCE SYSTEM

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(57) Abstract :

As we know that automation has become a significant need in all domains nowadays. In this project, two functions are provided with different approaches. The first function is to replace the manual switching system with an automatic on/off control system. Arduino Uno, PIR sensor, and relay are the main parts of the system. The second approach is the insult a face detection Attendance system by using Raspberry PI and High-definition. This becomes a solution to handle students' attendance effortlessly. In a face recognition attendance system, faces are detected in images or videos that are being captured through a surveillance camera. It helps in the conversion of the frames of the video into images so that the face of the student can be easily recognized for their attendance so that the attendance database can be easily reflected automatically.

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<ul> <li>(51) International classification</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:H01L0021020000, G05B0019418000, B32B0037140000, G06F0040200000, H04L0009320000 :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>1)HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY</li> <li>Address of Applicant :HINDUSTHAN COLLEGE OF</li> <li>ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>Name of Applicant : NA</li> <li>Address of Applicant : NA</li> <li>(72)Name of Inventor :</li> <li>1)Dr. JAYA</li> <li>Address of Applicant :PROFESSOR/ECE, HINDUSTHAN COLLEGE</li> <li>OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>(72)Name of Inventor :</li> <li>1)Dr. JAYA</li> <li>Address of Applicant :PROFESSOR/ECE, HINDUSTHAN COLLEGE</li> <li>OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>(7)Dr. P.T. SARAVANA KUMAR</li> <li>Address of Applicant :PROFESSOR &amp; HEAD - MECHT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>(7)Mr. M. JEGAN</li> <li>Address of Applicant :ASSISTANT PROFESSO/MECHT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>(7)MORUL RIYAS S</li> <li>Address of Applicant :ASSISTANT PROFESSO/MECHT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>(7)MORUL RIYAS S</li> <li>Address of Applicant :ASSISTANT PROFESSO/MECHT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>(7)MORUL RIYAS S</li> <li>Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>(7)SRI GUHAN V S</li> <li>Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>(7)MBATORE, TAMIL NADU, INDIA - 641032.</li> <li>(7)MBATORE,</li></ul>

(54) Title of the invention : DESIGN AND DEVELOPMENT OF ROBOTIC ARM WITH REPLACABLE EFFECTOR

(57) Abstract :

Automation technology is widely accepted and rapidly growing technology in the field of core and many other industries. Anyone can observe that due to these problems many industries are turning towards automation. When searching for problem of labor manpower. in middle-case industries, we came to know about many other things like production, speed of manufacturing and quality of the product are necessary in the current scenario. These parameters are not being well maintained in incorporate industries with manual manufacturing processes instead of using automatic system. Our objective is to solve these problems and to provide changeable arm by efficient use of 3D technology for making an industry fully or partially automated.

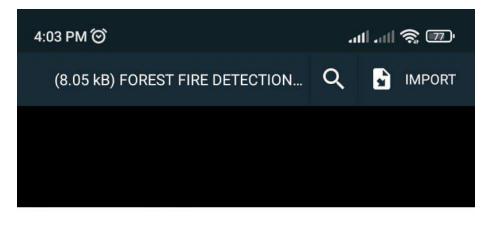
(22) Date of filing of Application :04/05/2022

<ul> <li>(51) International classification</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:F03D0003060000, F03D0007060000, B01D0053047000, F03D0003000000, F03D0003020000 :NA :NA :NA :NA :NA :NA :NA	<ul> <li>[71)Name of Applicant :</li> <li>1)HINDUSTHAN COLLEGE OF ENGINEERING AND</li> <li>TECHNOLOGY</li> <li>Address of Applicant : HINDUSTHAN COLLEGE OF</li> <li>ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS,</li> <li>POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA -</li> <li>(641032.</li> <li>Mame of Applicant : NA</li> <li>Address of Applicant : RA</li> <li>(72)Name of Inventor :</li> <li>1)Dr. JAYA</li> <li>Address of Applicant :PROFESSOR/ECE, HINDUSTHAN COLLEGE</li> <li>OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS,</li> <li>POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA -</li> <li>(641032.</li> <li>POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA -</li> <li>(641032.</li> <li>POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA -</li> <li>(641032.</li> <li>Matter College OF ENGINEERING AND TECHNOLOGY,</li> <li>VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL</li> <li>NADU, INDIA - 641032.</li> <li>Address of Applicant :ASSOCIATE PROFESSOR/MECHT,</li> <li>HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY,</li> <li>VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL</li> <li>NADU, INDIA - 641032.</li> <li>Address of Applicant :ASSISTANT PROFESSOR/MECHT,</li> <li>HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY,</li> <li>VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL</li> <li>NADU, INDIA - 641032.</li> <li>Address of Applicant :ASSISTANT PROFESSOR/MECHT,</li> <li>HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY,</li> <li>VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL</li> <li>NADU, INDIA - 641032.</li> <li>SIVABHARATHI V</li> <li>Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING</li> <li>AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY,</li> <li>COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>SIVABHARATHI V</li> <li>Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING</li> <li>AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY,</li> <li>COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>SIREE RAM. P.S</li> <li>Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING</li> <li>AND TECHNOLOGY, VALLEY CAMPUS,</li></ul>
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(54) Title of the invention : DESIGN OF VERTICAL AXIS WIND TURBINE WITH VARIABLE SWEPT AREA

#### (57) Abstract :

This paper presents a new approach to wind turbine power generation. A vertical axis wind turbine (VAWT) is capable of achieving a constant power output regardless of wind speed, using variable swept area (VSA) as smart rotors which are adjustable for height and width adjusted with actuators. The VSA housing is connected to a permanent magnet synchronous generator (PMSG) and a DC-DC boost converter. The VSA rotors are controlled by a fuzzy logic controller (FLC) to maintain a constant power rating at the PMSG. The variable inputs of FLC are based on wind speed and are then broken down into cluster groups, each of which represents a wind speed range which is assigned a position through the FLC. The cluster groups determine the VSA size which compensates for the non-linear characteristics of the wind speed to get a consistent power rating for the PMSG. The experimental of VSA system is tested with wind speed variation from 0 to 12 m/s. The VSA velocity movement is limited from 0.75 m2 to 1.87 m2. The VSA extension increase 33% to tap constant power at 200 Watt when wind speed decreases from 12 to 10 m/s. The result of proposed method is compared with fixed swept area (FSA), so that the VSA achieved four times increase in efficiency greater than FSA, and the VSA system can be operated at wider range of wind speeds.



(21) 1-1 - N- 2022 (1025920 )

(12) PATENT APPLICA (19) INDIA	ATION PUBLICATION	(21) Application No.202241025820 A
(22) Date of filing of Application :04/05/2022		(43) Publication Date : 20/05/2022
(54) Title of the invention : FOREST FIRE DETECTION USING IOT AND CLOUD COMPUTING		
<ul> <li>(51) International classification</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No (61) Patent of Addition to Application Number Filing Date</li> <li>(52) Divisional to Application Number Filing Date</li> </ul>	:A62C0803020000, G08B0017120000, G06Q0050250000, G08B0031000000, C08B0017000000 :NA :NA :NA :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :         <ul> <li>1) HINDUSTHAN COLLEGE OF ENGINEERING AND</li> <li>1) CHNDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACH HIGHWAY, COIMBATORE, TAMIL NADU, INDIA -641032.</li> <li>Name of Applicant : NA</li> <li>Address of Applicant : NA</li> <li>Min PROFESSOR &amp; HEAD - MECHT,</li> <li>HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACH HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>MADU, INDIA - 641032.</li> <li>MADU ASANT ROFESSOR MECHT,</li> <li>MINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACH HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>MADTECHNOLOGY, VALLEY CAMPUS, POLLACH HIGHWAY, COMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>MADTECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COMBATORE, TAMIL NADU, INDIA - 641032.</li></ul></li></ul>

(57) Abstract : The environmental challenges the world faces nowadays have never been greater or more complex. Global areas covered by forests and urban woodlands are threatened by natural disasters that have increased dramatically during the last decades, in terms of both frequency and magnitude, Large-scale forest fires are one of the most harmful natural hazards affecting climate change and life around the world. Thus, to minimize their impacts on people and nature, the adoption of well-planned and closely coordinated, effective prevention, early warning, and response approaches are necessary. Three types of systems are identified, namely terrestrial, airborne, and space borne-based systems, while various models aiming to detect fire occurrences with high accuracy in challenging environments are studied.

No. of Pages : 5 No. of Claims : 4

(12) DATENT ADDI ICATION DUDI ICATION

The Patent Office Journal No. 20/2022 Dated 20/05/2022

31219

[7] PDF Toolkit Open with Print Share Save -

(22) Date of filing of Application :04/05/2022

(43) Publication Date : 20/05/2022

#### (54) Title of the invention : FUTURISTIC AUTOMATION FOR ELECTRIC VEHICLE CS CHARGING POINT PREDICTION AND BOOKING SYSTEM

(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	:B60L0053300000, B60L0053630000, H02J0007000000, B60L0053140000, B60L0053680000 :NA :NA :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>1) HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY Address of Applicant : HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li>Name of Applicant : NA Address of Applicant : NA</li> <li>(72)Name of Inventor :</li> <li>1)Dr. JAYA</li> <li>Address of Applicant : PROFESSOR/ECE, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032.</li> <li></li></ul>
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(57) Abstract :

Electric vehicles (EVs) are gaining in popularity, one of the roadblocks for widespread adoption is charging capabilities. Vehicle Owners or Drivers are hesitant to purchase electric vehicles due to a perceived scarcity of charging stations, Prediction of available charging point and energy costs, while lower than gasoline, are still high. With IoT technology, EV charging stations become more efficient and convenient not only for drivers, but also for service workers connects distributed EV stations, enabling drivers, charger vendors, local service companies, and station owners to collaborate more effectively. Moreover, the IoT platform uses advanced cloud solutions, that allow to collect and analyze data in real time. Additionally, a geo-dashboard shows geographically distributed EV charging stations and identifies the nearest EV charging station for a driver. To make it even more convenient for users, the geo-dashboard applies a color visualization - a reserved or occupied station is red-colored, a free one is marked with a green label.

AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032. ------

Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032. -------

#### (19) INDIA

(22) Date of filing of Application :04/05/2022

#### (54) Title of the invention : HAND GESTURE CONTROLLED ROBOTIC ARM (71)Name of Applicant : 1) HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY Address of Applicant : HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA -641032. -----Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1) Dr. JAYA Address of Applicant : PROFESSOR/ECE, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA -641032. -----2)Dr. P.T. SARAVANA KUMAR :G06F0003010000, B25J0009160000, Address of Applicant :PROFESSOR & HEAD - MECHT, (51) International H04L0029060000, G06F0003034600, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, classification B25J0019060000 VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL (86) International NADU, INDIA - 641032. ------:NA Application No 3)Mr. M. KARTHIKEYAN :NA Filing Date Address of Applicant :ASSISTANT PROFESSOR/MECHT, (87) International HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, : NA Publication No VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL (61) Patent of Addition to :NA NADU, INDIA - 641032. -----Application Number 4)Mr. P. KARTHIK :NA Filing Date Address of Applicant :ASSISTANT PROFESSOR/MECHT, (62) Divisional to HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY. :NA VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL Application Number :NA Filing Date NADU, INDIA - 641032. ------**5)JAYAKRISHNAN A** Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032. ------6)HARIBABU. R Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032. ------7)HARIHARAN J Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING

(57) Abstract :

A gesture-controlled robot is controlled by using the hand in place of any other method like buttons or joystick. Here one only needs to move the hand to operate the robot. A transmitting device is placed in the user's hand, which contains the RF Transmitter and accelerometer to transmit a command to the robot so that it can perform the required task of moving forward, back, turning left, right and stop. These tasks will be identified using the hand gesture. One is transmitter part and another is receiver part. A transmitter, transmit appropriate signal. This signal received by the receiver. Accelerometer is connected to arduino board, which is programmed to take analog readings from accelerometer and transmit them using RF transmitter to the receiving unit. The movement of robot is achieved by the motor. We can conclude that when user movements his hand in Left, Right, Down, Up then accelerometer detect variations and send particular signal to the arduino board and that signal sent to the receiver part of the system then based on transmitted signal robot moves and robotic arm move

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No. of Pages : 5 No. of Claims : 4

The Patent Office Journal No. 19/2022 Dated 13/05/2022



Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India

(http://ipindia.nic.in/index.htm)



(http://ipindia.nic.in/index.htm)

	Application Details
APPLICATION NUMBER	202141021959
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	15/05/2021
APPLICANT NAME	<ol> <li>Kakirala Durga Bhavani</li> <li>Mr. V.C.Eugin Martin Raj</li> <li>SAI GEETHA LAKSHMI VALLURU</li> <li>PAWAN KUMAR GOEL</li> <li>Mr. Mahendra Pratap Swain</li> <li>Mrs.S.SS.SINDHU</li> <li>Mr.M.Kumaresan</li> <li>Mohamed Ibrahim A</li> <li>Dr. C. Balaji</li> <li>Dr. H. Kanagasabapathy</li> </ol>
TITLE OF INVENTION	Human Activity Recognition using Spiking Neural Network
FIELD OF INVENTION	COMPUTER SCIENCE
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**Application Status** 

APPLICATION STATUS	Awaiting Request for Examination	
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(21) Application No.202141023144 A

(19) INDIA

(22) Date of filing of Application :24/05/2021

(43) Publication Date : 18/06/2021

#### (54) Title of the invention : A SYSTEM AND METHOD FOR AUTOMATIC ATTENDANCE USING SMART CHAIR APPLICATION

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No <ul> <li>Filing Date</li> </ul> </li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application</li> <li>Number <ul> <li>Filing Date</li> </ul> </li> <li>(62) Divisional to Application Number <ul> <li>Filing Date</li> </ul> </li> </ul>	:G07C0001100000, G08B0021220000, A43B0003000000, A61B0005010000, G08B0015000000 :NA :NA :NA :NA :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>1)C P THAMIL SELVI Address of Applicant :D/o. P PALANICHAMY,</li> <li>ASSOCIATE PROFESSOR, ASSISTANT HEAD OF THE DEPARTMENT, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, VSB COLLEGE OF ENGINEERING TECHNICAL CAMPUS, COIMBATORE -642109, TAMIL</li> <li>NADU, INDIA. Tamil Nadu India</li> <li>(72)Name of Inventor :</li> <li>1)C P THAMIL SELVI</li> <li>2)Dr. S RAMASAMY</li> <li>3)Dr. T M NITHYA</li> <li>4)Dr. D PRASANNA</li> <li>5)V PRIYA</li> <li>6)Dr. M AMUTHA</li> <li>7)S PRIYA</li> <li>8)M S VINU</li> <li>9)S GOWDHAM KUMAR</li> <li>10)T DHARMAPRABHAKARAN</li> <li>11)M R RAVEENDRAN</li> <li>12)G THILAK</li> </ul>
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#### (57) Abstract :

Current Technologies of IoT are transforming our houses are smart. In present invention, the smart chair for monitoring and automation of attendance contains the idea of monitoring the appearance of the person and can monitor the presence of a person. Additionally, this idea will help to find the body temperature, heart beat and weight of a human being. According to the invention, the system automatically tracs and monitors the person and takes attendance using ITO module. In automatic attendance system contains GPS, Micro controller, GSM and Sensors. When the user sit on the chair, the touch sensor and vibrating sensor activates and sends alert message to the mobile and also alert the environment with alarm sound. Also if the user sits in the chair weighing sensor, sense the weight and if the weight is less then it sends the alert message to the concern person automatically the person is absented. The chair is already embedded with GPS, Micro controller which is used to track the person.

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

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(22) Date of filing of Application :04/05/2022

#### (54) Title of the invention : INDUSTRIAL INSPECTION OF MACHINED WORK PIECE USING COMPUTER VISION

<ul> <li>(51) International classification</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:B65G0043080000, B65C0009400000, B65B0057040000, G01B0005000000, B25B0027000000 :NA :NA :NA : NA n <sup>n</sup> :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>1)Hindusthan College of Engineering and Technology Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032</li></ul>
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#### (57) Abstract :

ANNEXURE3 The approach to this idea involves the perfect solution to the issues and constraints that other quality inspection technologies have. The sensors are used to measure the material dimensions and this signal is given to control Unit. The control unit gives the appropriate signal to the pneumatic cylinder. The pneumatic cylinder is used to collecting mechanism of the improper dimension materials. The inspection conveyor is very useful for material handling in modern engineering industries. The motor is used to drive the conveyor. The materials are transferred from one place to another place by using conveyor. In this top of the conveyor, sensors are used to measure the dimension. This system gives smooth operation and smooth movement of the belts to the jobs at required time. This is a very efficient instrument for checking the dimensions like length, breadth, height etc., to be used in modern engineering industries. The manual efforts can be completely avoided by using this modern equipment. It also reduces the inspection time and manual inspection errors. If the work piece is defective, the pneumatic cylinder placed next to the sensor will be actuated to remove the defective work piece.

(19) INDIA

(22) Date of filing of Application :04/05/2022

(43) Publication Date : 20/05/2022

(54) Title of the invention : IOT BASED AUTOMATION IN DOMESTIC SEWAGE TREATMENT OF OPTIMIZE WATER QUALITY

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classification	C02F0103000000	CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU,
(86) International	0210105000000	INDIA - 641032
Application No	:NA	3)Mr. M. KARTHIKEYAN
Filing Date	:NA	Address of Applicant :ASSISTANT PROFESSOR/ MECHT,
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Publication No	: NA	VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL
(61) Patent of Addition	to	NADU, INDIA - 641032
Application Number		4) Mrs. S. S. S. SINDHU
Filing Date	:NA	Address of Applicant :ASSISTANT PROFESSOR/ MECHT,
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Application Number	:NA	VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL
Filing Date	:NA	NADU, INDIA - 641032
6		5) DHINAKARAN V
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		AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY,
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		Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING
		AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY,
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(57) Ale stars at a		

(57) Abstract :

According to a research, a large number of people die from waterborne diseases in most of the developing and undeveloped countries. The flips in the sewage treatment cause the treatment of water, which in turn affects living. Automation will help in improving the treatment of water. Every year over a million people suffer from waterborne diseases and a number of them are mainly because of untreated water. Hence it is a necessity to deal with this problem and to make sure most of the sewage is treated before use. The water quality is monitored in sewage water and supply to plant. If any gases detected automatically buzzer alert and led indication is provided

(54) Title of the invention : MARS ROVER USING 6 WHEELED DRIVE MECHANISM

#### (19) INDIA

(22) Date of filing of Application :04/05/2022

COIMBATORE, TAMIL NADU, INDIA - 641032 7)JEEVAS.T Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032	<ul> <li>(86) International</li> <li>Application No Filing Date</li> <li>(87) International</li> </ul>	:C02F0001140000, H02S0020300000, H01L0031054000, F24S0023740000, G05F0001670000 :NA :NA :NA :NA :NA :NA :NA	7)JEEVAS.T Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA - 641032 8)MOHAMMED MUSTHAQEEM
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#### (57) Abstract :

The approach to this idea involves the perfect solution to the issues and constraints that the existing solar panel systems have. Despite the advantages, solar PV energy is still far from replacing traditional sources on the market. It is still a challenge to maximise power output of PV systems in areas that don't receive a large amount of solar radiation. We have included LDRs and motors to make the solar panel system more effective by now being able to track the movements of the sun with the help of Arduino programming in order to orient itself to the position where it can absorb the maximum amount of solar energy from the sun. Not only can it track where there's more light intensity, our system is also portable, which enables a person to be able to carry it around individually without the need of any machinery to transport it. The user just has to place the system in the desired location, and the rest will be taken care of automatically. Therefore giving the advantage of being able to transport and absorb maximum solar energy from the sun.

(22) Date of filing of Application :04/05/2022

(43) Publication Date : 20/05/2022

(54) Title of the invention : MICROCONTROLLER BASED INDU (51) International classification G05B0019042000 (86) International Application No :NA Filing Date (87) International : NA Publication No :NA (61) Patent of Addition to Application Number :NA Filing Date (62) Divisional to :NA Filing Date :NA Filing Date :NA Filing Date :NA Filing Date :NA Filing Date :NA	<ul> <li>(71)Name of Applicant :</li> <li>(71)Name of Applicant : Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032,</li></ul>
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#### (57) Abstract :

Annexure 3 In an industry, a person would be employed to check the failures occur in machines, to appear if that particular machine makes any abnormal or undesirable noises, to identify that the machine is releasing any unwanted gas or gases which are very harmful to human, to check the unbalanced increase in temperature or decrease in temperature in a machine, to check if the machine is broken in a specific place or the machine is completely broke down or not. There would be some places where the person hired for this job won't be able to check. Places like where machines operate in very high temperature, machines which are very tall, machines which releases often very terminal fume. This project is a design of simple robot which uses Raspberry Pi controller to control and process the input and output devices. A list of sensors is connected to the controller like temperature sensor to detect the temperature changes happening in the machine, gas detection sensor to identify the leakage of toxic fumes from a machine, motion detection sensor to notice any blockage . in the path of our robot, IR sensor is used in this robot to keep the robot in its own path and sound sensor is also used to pick up any undesirable clatters happens in machines.

#### (19) INDIA

(22) Date of filing of Application :13/07/2022

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(57) Abstract :

(37) Abstract : [014] This work aims to present a proposal for a system for monitoring electrical equipment in a production line, aiming at carrying out predictive maintenance through early detection of failures. The system measures the electric current consumed by such equipment, using a wireless sensor network, supervised by a concentrator node, which in turn processes the data through current signature analysis techniques. When a deviation in current consumption behavior is detected, correlated to some type of potential failure, the system generates alarms and additional information to the maintenance supervisor, who, in a planned way, proceeds with the maintenance of the equipment without prejudice to production. This predictive maintenance approach is part of the Internet of Things [IoT] context. Accompanied Drawing [FIG. 1] [FIG. 2] [FIG. 3] [FIG. 5]

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(57) Abstract :

ANNEXURE3 Unmanned Ariel Vehicles (UAVs) are increasingly used in recent times. Though this technology has many pros and it also brings new challenges in industries. After drones were released for non-military usages, drone incidents in the unarmed population are gradually increasing. However, it is unaffordable to construct a military grade anti-drone system for every private or public facility due to installation and operation costs, and regulatory restrictions. We focus on analyzing anti-drone system that does not use military weapons, investigating a wide range of anti-drone technologies, and deriving proper system models for reliable drone defense The Even critical situations, they can easily overcome existing infrastructural barriers and be a potential harm to society. Therefore, we focus on developing a Drone Protection System (DPS). we propose a hypothetical anti-drone system that presents the guidelines for adaptable and effective drone defense operations. Further, we discuss drone-side safety and security schemes that could nullify current anti-drone methods, and propose future solutions to resolve these challenges.

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#### (57) Abstract :

This work discusses the history of planetary rovers, including research vehicles. General characteristics and their evolution are discussed including mission drivers, technology limitations, controls approach, mobility and overall performance. Special emphasis is given to the next generation mission of rovers, the Mars Science Laboratory rover. It is designed to visit numerous sites, with a science payload capable of making measurements that will enable understanding the past or present habitability of Mars. Inspired from nature, a reflex mechanism has also been integrated into the rover design to minimize damage, by automated safety reflexes. The arm is so designed to switch between three different end effectors depending upon the task to be performed. The 6-wheeled rover combines the. rocker bogie mechanism and four rocker wheels and four spider-leg wheels. The spider-legs ensures that it can traverse over a considerable height greater than the chassis height which could be as much as thrice the diameter of the wheels whereas the current NASA'S curiosity rocker bogie system can only traverse over a height twice the diameter of the wheel. Additionally, as they are actuator-powered, the slope of the rover can be adjusted in such a way that it does not topple for a wide range of inclination and allows the rover to traverse over highly rugged terrain.

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TITLE OF INVENTION	PREDICTING THE USER PREFERENCES ON ECOMMERCE SITES USING MACHINE LEARNING APPROACH			
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(54) Title of the invention : SMART TROLLEY BAG

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(57) Abstract :

ANNEXURE 3 In today's world, the infrastructure of College and Industries are becoming large so if one has to travel or visit from one place to another, he has to walk a long distance and sometimes it becomes very hasty and inconvenient. Sometimes after too many travelling on campus, it causes strain and pain in the body. So, to travel these distances two-wheeled or threerwheeled electric scooter like Segway PT, Irrway were introduced. But these scooters are very costly such as they start from 50,000. Another problem with that vehicle is that they are difficult to handle when we drive the first time. So, in alternate to this product, we developed whole newly designed product and this is Reliable, Eco-friendly, a Compact vehicle for the campus. Its utilities are college campus, Airports, Industries, Recreational Parks, Sanctuaries, Museums, Palaces, Villas etc. The concept of the model taken from children's scooter bicycle. The complete body looks like a scooter is intended to use in indoors areas as well as in outdoor areas, due to the absence of any type of pollution causing drive mechanism such as petrol engines. All the robotic inventions are to reduce manual effort upon mechanical work and to create an interaction between human and machine. This bag can use as portable electric scooter and, also location can be identified using GPS. It facilitates charging of mobile phones and laptops when there is no way of a power source, especially during the travelling and Bluetooth module.

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#### (54) Title of the invention : SOLAR REFRIGERATOR USING PELTIER EFFECT

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( <b>5</b> 1) Internetional	:F25B0021020000, H02N0011000000,	TAMIL NADU, INDIA - 641032
(51) International	F25B0027000000, H01L0035320000,	2)Dr. P.T. SARAVANA KUMAR
classification	H01L0023380000	Address of Applicant :PROFESSOR & HEAD - MECHT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY,
(86) International		COIMBATORE, TAMIL NADU, INDIA - 641032
Application No	:NA	3)Mr. M.M. JEGAN
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Filing Date	:NA	5)MUNIYAPPAN N
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Application Number	:NA	NADU, INDIA - 641032
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#### (57) Abstract :

In the recent years, we have many problems such as energy crises and environment degradation due to the increasing C02 emission and ozone layer depletion has become the primarily concern to both developed and developing countries. Our project utilizes the solar energy for its operation. Solar refrigeration using thermoelectric module is going to be one of the most cost effective, clean and environment friendly system. When electrical current passes through the cube junction ,heat is transferred from one metal to the other This project does not need any kind of refrigerant and mechanical device like compressor, prime mover, etc for its operation. The main purpose of this project is to provide refrigeration to the remote areas where power supply is not possible. The Peltier effect is a temperature difference created by applying a voltage between two electrodes connected to a sample of semiconductor material to a sample of semiconductor material to create a sample of semiconductor material to create a hot side and a cold side. The cold side of the thermoelectric module is utilized for air conditioning purposes provide cooling to the cold space.

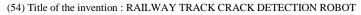
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<ul> <li>(51) International classification</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Number Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:A61B0005000000, H04W0084180000, A61B0005024000, H04W0004700000, H04W0004800000 :NA :NA :NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>1)Hindusthan College of Engineering and Technology</li> <li>Address of Applicant :Hindusthan College of Engineering and</li> <li>Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu,</li> <li>India 641032</li></ul>

#### (57) Abstract :

Annexure 3 The Embedded is a combination of software and hardware; when technology is used to do a particular task, it is called an embedded system. Embedded system is widely used in automobiles, industrial automation, home appliances, mobile, and aeronautics. Embedded technology uses a PC or a controller to do the specified task, and the programming is done using assembly language programming or embedded C. Wireless Sensor Network technologies have become the latest research area in health care industries due to rapid maturity in improving the quality of life of a patient. When working in the medical field. Wireless Sensor Networks provide continuous monitoring of vital health parameters, which over a long period provide doctors much-needed help to make an accurate diagnosis and give better treatment using the Internet of things.

(54) Title of the invention : VITAL SIGN COGNIZER

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#### (57) Abstract :

ANNEXURE 3 The use of wearable equipment and sensing devices to monitor vital signs and atmospheric quantities, whether for well-being, sports monitoring, or medical rehabilitation, has expanded rapidly due to the evolution of sensing techniques, cheaper integrated circuits, and the development of connectivity technologies. In this scenario, our project integrates various sensors and technology for health monitoring. Our focus was on analyzing the implementation of sensors and health monitoring applications. Our proposed system consists of 2 circuits, The Node MCU is used here as the master controller, all the sensors (Heart rate sensor, BMP 180 pressure sensor, MQ7 gas sensor, DHT 11 temperature sensor, and LM35 temperature sensor) are connected with it so that the master controller collects all the vital sign of a human body and other atmospherically parameter and send the data to the remote server through the Wi-Fi module present in the Node MCU. After that, the data is used by our mobile application for further analysis (like Anomaly detection) and visualization. Our proposed alert the person when it detects any anomalous data. The primary circuit also consists of NRF24L01 module which will help to send the data to the secondary circuit when a worker goes out of range. The secondary circuit consists of NRF24L01 module & Wi-Fi module and here Arduino Nano microcontroller is used to handle the processing. The secondary circuit collects the data from the primary circuit with the RF module and sends it to the server with the help of the Wi-Fi module.