

**KHWAJA MOINUDDIN CHISHTI LANGUAGE UNIVERSITY, LUCKNOW**



# **PATENTS|DESIGNS AN OVERVIEW**

## **NAAC Peer Team**





# **AN OVERVIEW TO THE PATENTS AND DESIGN**





## ***VISION***

To cultivate a dynamic ecosystem of innovation, creativity, and intellectual excellence by empowering students, researchers, and faculty to create, protect, and commercialize their intellectual property. The IP Cell envisions becoming a leading center for knowledge-driven innovation, where ideas are transformed into impactful solutions for society, industry, and the nation. Through education, policy support, and strategic partnerships, the Cell aims to foster a culture of responsible invention and entrepreneurship that contributes to academic excellence, societal advancement, and national growth.

## ***MISSION***

Our mission is to promote and protect the innovation by supporting the intellectual property rights (IPR) of students, researchers, and faculty. We aim to:

- **Educate** the academic community about the importance of intellectual property and its role in innovation and entrepreneurship.
- **Facilitate** the identification, documentation, filing, and protection of novel ideas, inventions, and creative works.
- **Encourage** translational research and the commercialization of university-born technologies through industry collaboration and startup incubation.
- **Build** a robust IP culture that values originality, ethical practices, and global competitiveness.
- **Support** policymakers and university leadership in formulating IP-friendly policies.



## **OVERVIEW**

**TITLE- METHOD FOR PROVIDING DEFINITIVE BLOOD CIRCULATION  
OF HEART USING MACHINE LEARNING MODEL**

APPLICATION NO- 202311046518 A

GRANT OR PUBLICATION DATE -04/08/2023

### *APPICANT/INVENTORS*

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**MR. RAMAKANT SONI**

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**DR. VIKASDEEP YADAV**

**DR. PUSHPENDRA KUMAR**

**DR. AJENDER KUMAR MALIK**





## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

This invention introduces a cutting-edge medical system that leverages artificial intelligence, specifically machine learning, to model and analyze human heart blood circulation patterns with clinical accuracy. The method aims to enhance diagnostic precision in cardiology by creating a predictive model trained on real patient data. The system uses curated datasets, collected and validated by healthcare professionals, to simulate cardiovascular dynamics and detect anomalies such as blockages, irregular blood flow, or early signs of cardiac disease. By processing physiological inputs like pulse rate, blood pressure, and electrocardiogram signals, the machine learning algorithm can predict potential cardiac issues before they become critical. This approach bridges the gap between computational modeling and human medical expertise, empowering doctors with a reliable, non-invasive tool to make timely and informed clinical decisions. The invention stands as a significant step toward personalized medicine, where AI complements the judgment and experience of physicians to improve patient care and outcomes.



(12) PATENT APPLICATION PUBLICATION (21) Application No.202311046518 A  
(19) INDIA  
(22) Date of filing of Application :11/07/2023 (43) Publication Date : 04/08/2023

(54) Title of the invention : METHOD FOR PROVIDING DEFINITIVE BLOOD CIRCULATION OF HEART USING MACHINE LEARNING MODEL

	(71)Name of Applicant : 1)Dr. Raghvendra Singh Address of Applicant :School of Sciences, UP Rajarshi Tandon Open University, Shantipuram, Prayagraj, Uttar Pradesh, India-211021 Prayagraj ----- 2)Mr. Ramakant Soni 3)Dr. Rakesh Kumar 4)Dr. Archana Shukla 5)Dr. Rajendra Kumar Tripathi 6)Dr. Vikasdeep Yadav 7)Dr. Pushpendra Kumar 8)Dr. Ajender Kumar Malik Name of Applicant : NA Address of Applicant : NA Address of Inventor : 1)Dr. Raghvendra Singh Address of Applicant :School of Sciences, UP Rajarshi Tandon Open University, Shantipuram, Prayagraj, Uttar Pradesh, India-211021 Prayagraj ----- 2)Mr. Ramakant Soni Address of Applicant :Computer Science and Engineering Department, B K Birla Institute of Engineering & Technology, Pilani, Rajasthan, India Pilani ----- 3)Dr. Rakesh Kumar Address of Applicant :Shaheed Bhagat Singh State University, Firozpur, Punjab, India-152004 Firozpur ----- 4)Dr. Archana Shukla Address of Applicant :Nehru gram bharati (deemed to be) university, Prayagraj, Uttar Pradesh, India Prayagraj ----- 5)Dr. Rajendra Kumar Tripathi Address of Applicant :Faculty of Engineering and Technology Khwaja Moinuddin chishti Language university, Lucknow, Uttar Pradesh, India-226013 Lucknow ---- 6)Dr. Vikasdeep Yadav Address of Applicant :Dronacharya Govt. College Gurugram, Haryana, India Gurugram ----- 7)Dr. Pushpendra Kumar Address of Applicant :Shri Khushal Das University, Pilibangan, Hanumangarh, Rajasthan, India-335801 Hanumangarh ----- 8)Dr. Ajender Kumar Malik Address of Applicant :School of Sciences, UP Rajarshi Tandon Open University, Shantipuram, Prayagraj, Uttar Pradesh, India-211021 Prayagraj -----
(51) International classification :A61B 060000, A61M 604000, G06N 030400, G06N 030800, G06N 200000 (86) International Application No.:NA Filing Date :NA (87) International Publication No : NA (61) Patent of Addition to Application Number :NA Filing Date :NA (62) Divisional to Application Number :NA Filing Date :NA	

(57) Abstract :  
"METHOD FOR PROVIDING DEFINITIVE BLOOD CIRCULATION OF HEART USING MACHINE LEARNING MODEL" Accordingly, embodiments herein disclose a method for providing definitive blood circulation of heart using machine learning (ML) model. The method involves locating the heart between lungs of human body. The function of heart is to pump the blood to all parts of the body. Further, the proposed method may involve dividing the heart into four chambers such that the oxygenated blood and deoxygenated blood do not mix inside the heart. Further, the proposed method may involve dividing the heart into two separate sides where the left side of the heart pumps oxygenated blood to the body, and the right side of the heart pumps deoxygenated blood to the lungs from the body parts. Further, the proposed method may involve receiving the oxygenated blood by the left atrium through pulmonary veins such that the right and left lungs are pumped the blood into the right and left ventricle, respectively. Figure to be published with Abstract: Figure 1

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



## **OVERVIEW**

### **TITLE- SMART PORTABLE INDUSTRIAL HYDRAULIC DRUM LIFT MACHINE**

APPLICATION NO- 6295324

GRANT OR PUBLICATION DATE - 17 July 2023

#### *APPLICANT/INVENTORS*

Prof. Dr. Ushaa Eswaran

Dr. Shashi Kant Gupta

Mr. Vivek Kumar Bajpai

Dr. Milind Bapna

Dr. Rupesh Shukla

Dr. Amit Garg

Dr. Rajendra Kumar Tripathi

Mr. Prabhdeep Singh





## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

This invention presents a **smart, portable, and ergonomically designed hydraulic drum lifting machine** tailored for industrial environments. It is developed with a human-centric approach to address the common physical strain and safety risks faced by workers while handling heavy industrial drums. The machine integrates **smart sensors and hydraulic controls** that assist operators in lifting, transporting, and positioning drums with minimal manual effort, thereby reducing the risk of musculoskeletal injuries and fatigue. Portability and compact design ensure it can be easily maneuvered in tight factory spaces, improving workflow efficiency. The intuitive interface allows even semi-skilled workers to operate the machine safely and effectively. By combining traditional hydraulic power with modern control systems, this device enhances productivity while prioritizing human comfort, safety, and ease of use. It's a practical solution for industries seeking to modernize material handling operations without compromising the well-being of their workforce.



Certificate of Registration for a UK Design

Design number: 6295324  
Grant date: 17 July 2023  
Registration date: 09 July 2023

**This is to certify that,**  
in pursuance of and subject to the provision of Registered Designs Act 1949, the design of which a representation or specimen is attached, had been registered as of the date of registration shown above in the name of

Prof. Dr. Ushaa Eswaran, Dr. Shashi Kant Gupta, Mr. Vivek Kumar Bajpai, Dr. Milind Bapna, Dr. Rupesh Shukla, Dr. Amit Garg, Dr. Rajendra Kumar Tripathi, Mr. Prabhdeep Singh

in respect of the application of such design to:

Smart Portable Industrial Hydraulic Drum Lift Machine  
International Design Classification:  
Version: 14-2023  
Class: 12 MEANS OF TRANSPORT OR HOISTING  
Subclass: 05 ELEVATORS AND HOISTS FOR LOADING OR CONVEYING

**Adam Williams**  
Comptroller-General of Patents, Designs and Trade Marks  
Intellectual Property Office  
The attention of the Proprietor(s) is drawn to the important notes overleaf.





## **OVERVIEW**

### **TITLE- : IMPLEMENTATION OF IMAGE PROCESSING TECHNIQUES FOR IDENTIFYING THE SECURITY ASPECTS IN INTERNET OF THINGS**

APPLICATION NO- 202311012923 A  
GRANT OR PUBLICATION DATE -04/08/2023

#### *APPLICANT/INVENTORS*

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**Dr. Suman Kumar Mishra**

**Dr. Durga Puja Tripathi**

**Irfan Ahmed**

**Gyanendra Tiwary**

**Husna Sultana**

**Dr. Gaurav Londhe**

**Dr. Rinku kumar**





## DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS

This invention proposes a novel method for enhancing the **security of Internet of Things (IoT) systems** by implementing **image processing techniques** as an added layer of defense. Designed with a user-focused approach, the system leverages visual data—such as real-time camera feeds or sensor-based images—to monitor, detect, and analyze suspicious activity within an IoT network environment.

Unlike traditional cybersecurity methods that focus solely on software-level vulnerabilities, this system adds **visual intelligence** to observe unauthorized physical access, device tampering, or environmental anomalies. For example, if a smart home camera detects unfamiliar movements or if an industrial sensor picks up unexpected visual cues, the system uses image analysis algorithms to flag potential security threats instantly.



(12) PATENT APPLICATION PUBLICATION	(21) Application No.202311012923 A
(19) INDIA	
(22) Date of filing of Application :25/02/2023	(43) Publication Date : 17/03/2023
(54) Title of the invention : IMPLEMENTATION OF IMAGE PROCESSING TECHNIQUES FOR IDENTIFYING THE SECURITY ASPECTS IN INTERNET OF THINGS	
(51) International classification :B42D 252900, G06F 162800, G06T 050000, H04L 472425, H04N 071800	(71)Name of Applicant : 1)Dr Raghav Mehra Address of Applicant :Professor/Bhagwant Institute of Technology, Muzaffamaga-251315(UP) Muzaffamagar -----
(86) International Application No :NA Filing Date :NA	2)Dr. Shivani 3)Dr. Suman Kumar Mishra 4)Dr. Durga Puja Tripathi 5)Irfan Ahmed 6)Gyanendra Tiwary 7)Husna Sultana 8)Dr Gaurav Londhe 9)Dr. Rinku kumar Name of Applicant : NA Address of Applicant : NA
(87) International Publication No : NA (61) Patent of Addition to Application Number :NA Filing Date :NA	(72)Name of Inventor : 1)Dr Raghav Mehra Address of Applicant :Professor/Bhagwant Institute of Technology, Muzaffamaga-251315(UP) Muzaffamagar -----
(62) Divisional to Application Number :NA Filing Date :NA	2)Dr. Shivani Address of Applicant :Associate Professor/Bhagwant Institute of Technology, Muzaffamagar Muzaffamagar -----
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(57) Abstract : Implementation of Image Processing Techniques for Identifying the Security aspects in Internet of Things is the proposed invention. The invention focuses on implementing framework of Image processing techniques for identifying security aspects of network.	
No. of Pages : 13 No. of Claims : 5	



## **OVERVIEW**

### **TITLE- DEVICE WITH ARTIFICIAL INTELLIGENCE FOR PET CARE FACILITY MONITORING**

APPLICATION NO- 374069-001

GRANT OR PUBLICATION DATE - 14/11/2022

#### *APPLICANT/INVENTORS*

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## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

This invention introduces an intelligent, human-centered device designed specifically to **enhance the care, comfort, and safety of pets** in veterinary clinics, shelters, and pet boarding facilities. Using the power of **Artificial Intelligence (AI)**, the device continuously monitors various environmental and behavioral parameters relevant to the well-being of animals.

With a focus on empathy and responsiveness, the system is capable of tracking vital signs, movements, eating habits, and stress indicators of pets. AI algorithms analyze this data in real time to detect signs of discomfort, illness, or unusual behavior, and immediately alert caretakers for timely intervention. The system can also recognize specific needs based on species and breed, making care more personalized and effective.








सत्यमेव जयते

भारत सरकार  
GOVERNMENT OF INDIA  
पेटेंट कार्यालय  
THE PATENT OFFICE  
डिजाइन के पंजीकरण का प्रमाणपत्र  
CERTIFICATE OF REGISTRATION OF DESIGN

ORIGINAL

मूल/No : 128009



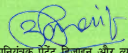
डिजाइन सं. / Design No.	:	374069-001
तारीख / Date	:	14/11/2022
पारस्परिकता तारीख / Reciprocity Date*	:	
देश / Country	:	

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो **DEVICE WITH ARTIFICIAL INTELLIGENCE FOR PET CARE FACILITY MONITORING** से संबंधित है, का पंजीकरण, श्रेणी **10-05** में 1.Dr.K.Tharini 2. Shital S Chavan 3.Dr. Prashant B Shamkuwar 4.Dr.L. Sujatha 5.Dr J Thilagavathi 6.Mrs.Lavanya.K 7.Prof. Sanjeev Kumar Trivedi 8.V.Kiran Kumar 9.Samata Gadde 10.Dr Chandra Kumar Dixit 11.Dr. Leji. J 12.G.Ramachandran, और अन्य के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class **10-05** in respect of the application of such design to **DEVICE WITH ARTIFICIAL INTELLIGENCE FOR PET CARE FACILITY MONITORING** in the name of 1.Dr.K.Tharini 2. Shital S Chavan 3.Dr. Prashant B Shamkuwar 4.Dr.L. Sujatha 5.Dr J Thilagavathi 6.Mrs.Lavanya.K 7.Prof. Sanjeev Kumar Trivedi 8.V.Kiran Kumar 9.Samata Gadde 10.Dr Chandra Kumar Dixit 11.Dr. Leji. J 12.G.Ramachandran, et al.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्याधीन प्रावधानों के अनुसरण में।  
In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

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GEOGRAPHICAL INDICATIONS



महानिर्देशक पेटेंट डिजाइन और व्यापार चिह्न  
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निर्गमन की तारीख/Date of Issue : 31/01/2023

पारस्परिकता तारीख (यदि कोई हो) जिसकी अनुमति देन के नाम पर की गई है। डिजाइन का सत्वाधिकार पंजीकरण की तारीख से दस वर्षों के लिए होगा जिसका विस्तार, अधिनियम एवं नियम के निबंधनों के अधीन, पाँच वर्षों की अवधिक अवधि के लिए किया जा सकेगा। इस प्रमाण पत्र का उपयोग विधिक कार्यवाहियों अथवा विदेश में पंजीकरण प्राप्त करने के लिए नहीं हो सकता है।  
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## **OVERVIEW**

**TITLE- METHOD FOR CONVERTING A THREE-DIMENSIONAL LIDAR DATASET TO A PROJECTION SHAPE, AND A MULTI-CHANNEL TWO-DIMENSIONAL IMAGE FOR PERFORMING SEGMENTATION**

APPLICATION NO- .202241075293 A  
GRANT OR PUBLICATION DATE - 13/01/2023

### *APPLICANT/INVENTORS*

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**Mr. Anurag Sinha**

**LAXMI MISHRA**

**R. L. KARTHICK**





## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

This invention presents an advanced computational method that transforms complex **3D LiDAR datasets** into **structured 2D image formats** to facilitate accurate **object detection and segmentation**. LiDAR (Light Detection and Ranging) technology, widely used in autonomous vehicles, robotics, and geospatial mapping, generates vast amounts of point cloud data. However, processing this raw 3D data efficiently for real-time applications is a significant challenge.

The proposed method intelligently converts the 3D LiDAR point cloud into a **projection shape**, such as a bird's-eye view or panoramic image, and further processes it into a **multi-channel 2D image**. This transformation allows for easier and faster analysis using conventional image segmentation techniques powered by AI and deep learning.



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241075293 A

(19) INDIA

(22) Date of filing of Application :25/12/2022

(43) Publication Date : 13/01/2023

(54) Title of the invention : METHOD FOR CONVERTING A THREE-DIMENSIONAL LIDAR DATASET TO A PROJECTION SHAPE, AND A MULTI-CHANNEL TWO-DIMENSIONAL IMAGE FOR PERFORMING SEGMENTATION

(51) International classification	:G01S0017890000, G06K0009620000, G06T0007110000, G06T0007500000, G06T0007194000	(71)Name of Applicant : 1)Dr R ARRAVIND Address of Applicant :PROFESSOR AERONAUTICAL ENGINEERING PAAVAI ENGINEERING COLLEGE NAMAKKAL 637018 ----- 2)Dr. R.S. Jayaram 3)Mr. Satyam 4)Prof Sanjeev Kumar Trivedi 5)Mr.S.Suresh 6)Aabha Sahu 7)Mr. B. Kannadasan 8)Dr. Atiwar ul Islam 9)Mr. Anurag Sinha 10)LAXMI MISHRA 11)MR. L. KARTHICK Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr R ARRAVIND Address of Applicant :PROFESSOR AERONAUTICAL ENGINEERING PAAVAI ENGINEERING COLLEGE NAMAKKAL 637018 ----- 2)Dr. R.S. Jayaram Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Amrita College of Engineering and Technology, Amritagiri, Erachakulam Post, Tamil Nadu 629901. -- ----- 3)Mr. Satyam Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Sree Vidyanikethan Engineering College, Sree Sainath Nagar Tirupati-517102 Andhra Pradesh. ----- 4)Prof Sanjeev Kumar Trivedi Address of Applicant :Department of Electronics, Faculty of Engineering and Technology, Khwaja MoINUDDIN chishti Language University, Lucknow 226013 ----- 5)Mr.S.Suresh Address of Applicant :Assistant Professor Department of Civil Engineering, Velalar College of Engineering and Technology, Thindal, Erode - 638012 ----- 6)Aabha Sahu Address of Applicant :Assistant Professor, Department of Electrical Engineering, Kalinga University, Nava Raipur, Chhattisgarh - 492101 ----- 7)Mr. B. Kannadasan Address of Applicant :CEO and Subject Matter Expert (SME), Department of Civil Engineering, Kannadasan Balakrishnan Research Foundation, Kalieswari Nagar, Peraiyur Madurai - 625703 ----- 8)Dr Atiwar ul Islam Address of Applicant :Associate Professor, Department of Computer Science and Electronics, University of Science and Technology, Meghalaya, Ri-Bhoi, Techni city, Killing Road, Baridua, Meghalaya - 793101. ----- 9)Mr. Anurag Sinha Address of Applicant :Research Scholar, Department of CSIT, IGNOU, New Delhi- 110068 India ----- 10)LAXMI MISHRA Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF ELECTRONICS AND COMMUNICATION, Khwaja MoINUDDIN Chishti Language University, Lucknow- 226013, Uttar Pradesh, India ----- 11)MR. L. KARTHICK Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF MECHANICAL ENGINEERING, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY. COIMBATORE - 641 032. TAMILNADU --- -----
(86) International Application No	:PCT// Filing Date :01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA Filing Date :NA	
(62) Divisional to Application Number	:NA Filing Date :NA	

(57) Abstract :  
METHOD FOR CONVERTING A THREE-DIMENSIONAL LIDAR DATASET TO A PROJECTION SHAPE, AND A MULTI-CHANNEL TWO-DIMENSIONAL IMAGE FOR PERFORMING SEGMENTATION A method for converting a three-dimensional lidar dataset to a projection shape, and a multi-channel two-dimensional image for performing segmentation. Combining a semantic segmentation frame of the vehicle-mounted point cloud and the image. Reconstructing the three-dimensional building fine geometry by integrating the onboard and onboard three-dimensional laser point clouds and the streetscape images. Acquiring and processing dense point cloud data, wherein the acquisition of initial data information of the surface of a target object is efficiently completed. Reconstructing the fine geometry of the three-dimensional building by integrating the airborne and vehicle-mounted three-dimensional laser point clouds and the streetscape images. Generating, by the processor, an attention region in the two-dimensional image data, the attention region marking an object of interest. Classify the object of interest based on a combination of features from the attention region of the two-dimensional image data and the three-dimensional depth data within and around the regressed boundary.

No. of Pages : 15 No. of Claims : 1



## **OVERVIEW**

### **TITLE-ELECTRONIC COMMERCE SUPPLY CHAIN MANAGEMENT SYSTEM FOR DECORATIVE MATERIALS USING MACHINE LEARNING**

Gebrauchsmuster Nr. 20 2022 106 961 – Germany

GRANT OR PUBLICATION DATE - 09/01/2023

#### *APPLICANT/INVENTORS*

**Dr. Kapil Kumar Gupta**

**Dr. Shashi Kant Gupta**

**Dr. Imran Ullah Khan**

**Dr. Upendra Kumar**

**Nupur Mittal**

**Jarina Begum Khan Mohamed**

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**Dr. Nitin Purohit**

**Dr. Raghvendra Singh**

**Dr. Chithik Raja Mohamed Sinnaiya**

**Dr. Shailendra Tahilyani**

**Dr. Rajendra Kumar Tripathi**



## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

This invention introduces a **smart, AI-enabled supply chain management system** specifically designed for the **electronic commerce of decorative materials**. Recognizing the complexities and fragmented nature of supply chains in the decor industry—ranging from procurement and inventory to delivery—this system uses **machine learning algorithms** to streamline operations, predict demand, and optimize logistics.

The approach is centered on **human business challenges**—like supplier reliability, customer preferences, fluctuating trends, and delivery bottlenecks. By learning from historical data and real-time inputs, the system intelligently automates decision-making processes such as stock replenishment, vendor selection, and route planning. It offers tailored solutions for both sellers and buyers, improving efficiency, reducing costs, and enhancing customer satisfaction.





— Bundesrepublik Deutschland —

## Urkunde

über die Eintragung des  
Gebrauchsmusters Nr. 20 2022 106 961

**Bezeichnung:**

System zur Verwaltung der Lieferkette für Dekorationsmaterialien im  
elektronischen Handel mit Hilfe von maschinellem Lernen

**IPC:**

G06Q 30/06

**Inhaber/Inhaberin:**

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**Tag der Anmeldung:**

13.12.2022

**Tag der Eintragung:**

09.01.2023

Die Präsidentin des Deutschen Patent- und Markenamts

*Cornelia Rudloff-Schäffer*

Cornelia Rudloff-Schäffer

München, 09.01.2023





## **OVERVIEW**

**TITLE- IOT ENABLED HANDY PROJECTOR**

**APPLICATION NO- 370918-001**

**GRANT OR PUBLICATION DATE - 16/09/2022**

*APPICANT/INVENTORS*

Dr. Swapnil Srivastava

Dr. Shashi Kant Gupta

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Dr. Hemant Kumar Singh





## DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS

This invention introduces a **compact, portable projector** integrated with **Internet of Things (IoT) capabilities**, designed to deliver smart, seamless, and user-friendly visual experiences across various environments. Unlike conventional projectors that rely solely on manual control or limited connectivity, this handy device leverages IoT technology to enable **remote access, wireless operation, and intelligent interaction** with other connected devices.


It is especially useful in educational, professional, and home settings where mobility, automation, and ease of use are essential. Users can operate the projector through smartphones or cloud-based platforms, making it possible to **schedule presentations, stream content, and adjust settings remotely**. The system can also gather and respond to environmental data—like lighting or room occupancy—to automatically optimize projection quality.





ORIGINAL

मूल/No : 124201



भारत सरकार  
GOVERNMENT OF INDIA  
पेटेंट कार्यालय  
THE PATENT OFFICE  
डिजाइन के पंजीकरण का प्रमाणपत्र  
CERTIFICATE OF REGISTRATION OF DESIGN

डिजाइन सं. / Design No.

:

370918-001

तारीख / Date

:

16/09/2022

पारस्परिकता तारीख / Reciprocity Date\*

:

देश / Country

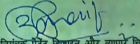
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प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो IOT ENABLED HANDY PROJECTOR से संबंधित है, का पंजीकरण, श्रेणी 14-02 में 1.Dr. Swapnil Srivastava 2. Dr. Shashi Kant Gupta 3.Dr. Rajendra Kumar Tripathi 4.Dr. Hemant Kumar Singh के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 14-02 in respect of the application of such design to IOT ENABLED HANDY PROJECTOR in the name of 1.Dr. Swapnil Srivastava 2. Dr. Shashi Kant Gupta 3.Dr. Rajendra Kumar Tripathi 4.Dr. Hemant Kumar Singh.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्याधीन प्रावधानों के अनुसरण में।  
In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

INTELLECTUAL  
PROPERTY INDIA  
PATENTS | DESIGNS | TRADE MARKS  
GEOGRAPHICAL INDICATIONS

  
नियंत्रक पेटेंट डिजाइन और वापस विभाग  
Controller of Patents, Designs and Trade Marks

निर्माण की तारीख/Date of Issue : 09/01/2023

पारस्परिकता तारीख (यदि कोई हो) जिसकी अनुमति देश के नाम पर की गई है। डिजाइन का संपादित पंजीकरण की तारीख से दस वर्षों के लिए होगा जिसका विस्तार, अधिनियम एवं नियम के निबन्धनों के अंतर्गत, दस वर्षों की अतिरिक्त अवधि के लिए किया जा सकेगा। इस प्रमाण पत्र का उपयोग विधिक कार्यवाही में अथवा विदेश में पंजीकरण प्राप्त करने के लिए नहीं हो सकता है।

\*The reciprocity date (if any) which has been allowed and the name of the country Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years. This Certificate is not for use in legal proceedings or for obtaining registration abroad.



## **OVERVIEW**

### **TITLE- INTRANASAL DRUG DELIVERY DEVICE WITH ARTIFICIAL INTELLIGENCE BASED CONTROLLED ADMINISTRATION.**

**APPLICATION NO- 366066-001**

**GRANT OR PUBLICATION DATE - 15/06/2022**

#### ***APPICANT/INVENTORS***

Dr. M Ravichandran

Dr. Ashutosh Vitthal More

Sathyanarayana Kaliprasad

Dr. Om Prakash Verma

Mohammed Shafeeq Ahmed

Prof. Sanjeev Kumar Trivedi

Dr. D. Revathi

Dr. Sonia Singla

Dr. Anuja Chopra

Sapna Kataria

Dr. Shailesh Solanki

Dr. Ganesh Ramesh Teltumbade







## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

This invention presents an innovative **intranasal drug delivery device** that incorporates **Artificial Intelligence (AI)** to achieve precise, personalized, and efficient administration of medications through the nasal route. Traditional intranasal delivery methods often lack accuracy in dosage, timing, and responsiveness to individual patient needs. This device addresses those challenges by using AI to monitor, analyze, and control the drug delivery process in real-time.

The system is designed to **automatically adjust dosage parameters** based on patient-specific factors such as age, health condition, breathing patterns, or prior dosage history. AI algorithms ensure that the medication is delivered at the right time, in the right quantity, and under optimal conditions to maximize therapeutic effectiveness and minimize side effects.








सत्यमेव जयते

भारत सरकार  
GOVERNMENT OF INDIA  
पेटेंट कार्यालय  
THE PATENT OFFICE  
डिजाइन के पंजीकरण का प्रमाणपत्र  
CERTIFICATE OF REGISTRATION OF DESIGN

ORIGINAL

मूल/No : 123199



डिजाइन सं. / Design No.	:	366066-001
तारीख / Date	:	15/06/2022
पारस्परिकता तारीख / Reciprocity Date*	:	
देश / Country	:	

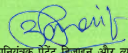
प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो **INTRANASAL DRUG DELIVERY DEVICE WITH ARTIFICIAL INTELLIGENCE BASED CONTROLLED ADMINISTRATION**. से संबंधित है, का पंजीकरण, श्रेणी **24-01** में 1.Dr. M Ravichandran 2. Dr. Ashutosh Vitthal More 3.Sathyanarayana Kaliprasad 4.Dr. Om Prakash Verma 5.Mohammed Shafeeq Ahmed 6.Prof. Sanjeev Kumar Trivedi 7.Dr.D.Revathi 8.Dr. Sonia Singla 9.Dr Anuja Chopra 10.Sapna Kataria 11.Dr Shailesh Solanki 12.Dr. Ganesh Ramesh Teltumbade, और अन्य के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class **24-01** in respect of the application of such design to **INTRANASAL DRUG DELIVERY DEVICE WITH ARTIFICIAL INTELLIGENCE BASED CONTROLLED ADMINISTRATION**. in the name of 1.Dr. M Ravichandran 2. Dr. Ashutosh Vitthal More 3.Sathyanarayana Kaliprasad 4.Dr. Om Prakash Verma 5.Mohammed Shafeeq Ahmed 6.Prof. Sanjeev Kumar Trivedi 7.Dr.D.Revathi 8.Dr. Sonia Singla 9.Dr Anuja Chopra 10.Sapna Kataria 11.Dr Shailesh Solanki 12.Dr. Ganesh Ramesh Teltumbade, et al.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्याधीन प्रावधानों के अनुसरण में।  
In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

INTELLECTUAL  
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PATENTS | DESIGNS | TRADE MARKS  
GEOGRAPHICAL INDICATIONS

निर्गमन की तारीख/Date of Issue : 04/01/2023

  
मानियंत्रक पेटेंट डिजाइन और व्यापार चिह्न  
Controller General of Patents, Designs and Trade Marks

पारस्परिकता तारीख (यदि कोई हो) जिसकी अनुमति देज के नाम पर की गई है। डिजाइन का सत्वाधिकार पंजीकरण की तारीख से दस वर्षों के लिए होगा जिसका विस्तार, अधिनियम एवं नियम के निर्बंधनों के अर्थान, पाँच वर्षों की अवधिक अवधि के लिए किया जा सकेगा। इस प्रमाण पत्र का उपयोग विधिक कार्यवाहियों अथवा विदेश में पंजीकरण प्राप्त करने के लिए नहीं हो सकता है।  
\*The reciprocity date (if any) which has been allowed and the name of the country.Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years.This Certificate is not for use in legal proceedings or for obtaining registration abroad.



## **OVERVIEW**

**TITLE- SMART LOCKING MECHANISM IN ELECTRICAL MOTORCYCLE**

**APPLICATION NO- 6250532**

**GRANT OR PUBLICATION DATE - 18/12/2022**

***APPLICANT/INVENTORS***

**RADHEY SHYAM MEENA**

**DR. RAKHI MUTHA**

**DR. PURAN SINGH**

**DR.REVATI RAMRAO RAUTRAO**

**DR. VAIBHAV SHAHAJI PATIL**

**PROF.SANJEEV KUMAR TRIVEDI**

**UDIT MAMODIYA**



## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

The Smart Locking Mechanism in an electrical motorcycle is an advanced security system designed to enhance rider safety and prevent unauthorized use. Integrating modern technologies such as Bluetooth, biometric sensors, and mobile app connectivity, this mechanism allows riders to lock and unlock their motorcycles seamlessly without traditional keys.

Using a smartphone or a dedicated smart key fob, the rider can remotely control the lock system, ensuring convenience and added protection against theft. The system can include features like fingerprint recognition, facial recognition, or proximity sensors to automatically unlock the motorcycle when the authorized user approaches.



## Certificate of Registration for a UK Design

Design number: 6250532

Grant date: 03 January 2023

Registration date: 18 December 2022

### This is to certify that,

in pursuance of and subject to the provision of Registered Designs Act 1949, the design of which a representation or specimen is attached, had been registered as of the date of registration shown above in the name of

RADHEY SHYAM MEENA, DR. RAKHI MUTHA, DR. PURAN SINGH, DR.

REVATI RAMRAO RAUTRAO, DR. VAIBHAV SHAHAJI PATIL, PROF.

SANJEEV KUMAR TRIVEDI, UDIT MAMODIYA

in respect of the application of such design to:

Smart Locking Mechanism in Electrical Motorcycle

International Design Classification:

Version: 13-2021

Class: 08 TOOLS AND HARDWARE

Subclass: 07 LOCKING OR CLOSING DEVICES

**Adam Williams**

Comptroller-General of Patents, Designs and Trade Marks

Intellectual Property Office

The attention of the Proprietor(s) is drawn to the important notes overleaf.



Intellectual Property Office is an operating name of the Patent Office

[www.gov.uk/ipo](http://www.gov.uk/ipo)





## **OVERVIEW**

**TITLE- AI BASED CAR TIRE BLOWOUT SECURITY SYSTEM**

**APPLICATION NO- 202241067480 A**

**GRANT OR PUBLICATION DATE - 23/12/2022**

### ***APPLICANT/INVENTORS***

**Mrs.K.KOWSALYA**

**Mrs.S.Suganya**

**MS.P.Umamaheshwari**

**R.Ganesh Kishore**

**Dr Atowar ul Islam**

**Mr. Sumanth Ratna. Kandavalli**

**Ramesh hicet**

**Mr. J. Yogaraja**

**Prof Sanjeev Kumar Trivedi**

**Athuluri Sai Kushal**

**MR. L. KARTHICK**



## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

The AI-Based Car Tire Blowout Security System is an innovative safety solution designed to detect and respond to tire blowouts in real-time, significantly reducing the risk of accidents caused by sudden tire failures. Using advanced sensors embedded in the tires or wheel assemblies, the system continuously monitors critical parameters such as tire pressure, temperature, and vibrations.

Artificial Intelligence algorithms analyze this data to identify early warning signs of potential blowouts, such as rapid pressure loss or unusual tire behavior. When a risk is detected, the system immediately alerts the driver through dashboard notifications or smartphone alerts, allowing them to take preventive action.



(12) PATENT APPLICATION PUBLICATION	(21) Application No.202241067480 A
(19) INDIA	
(22) Date of filing of Application :24/11/2022	(43) Publication Date : 23/12/2022
(54) Title of the invention : AI BASED CAR TIRE BLOWOUT SECURITY SYSTEM	
(51) International classification :B60C0023040000, B60W0010200000, B60C0023060000, B60C0023000000, B62D0011080000	(71)Name of Applicant : 1)Mrs.K.KOWSALIYA Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore - 641032 ----- 2)Mrs.S.Suganya 3)MS.P.Umamaheshwari 4)R.Ganesh Kishore 5)Dr Atowar ul Islam 6)Mr. Sumanth Ratna, Kandavalli 7)Ramesh hicut 8)Mr. J. Yogaraja 9)Prof Sanjeev Kumar Trivedi 10)Athuluri Sai Kushal 11)MR. L. KARTHICK Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Mrs.K.KOWSALIYA Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore - 641032 ----- 2)Mrs.S.Suganya Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore -641032 ----- 3)MS.P.Umamaheshwari Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Hindusthan Institute of Technology, Coimbatore-641032 ----- 4)R.Ganesh Kishore Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Gnanamani College of Technology, Namakkal ----- 5)Dr Atowar ul Islam Address of Applicant :Assistant Professor, Department of Computer Science and IT, Cotton University, Panbazar, Guwahati-01 ----- 6)Mr. Sumanth Ratna, Kandavalli Address of Applicant :Department of Mechanical & Aerospace Engineering, Tandon School of Engineering, New York University, Brooklyn, 6 Metro Tech Center, New York, (H) 50 Farmers Avenue, Bethpage, NY, United States of America, 11714 ----- 7)Ramesh hicut Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore - 641 032, Tamilnadu ----- 8)Mr. J. Yogaraja Address of Applicant :Assistant Professor, Department of Automobile Engineering, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore - 641 032, Tamilnadu ----- 9)Prof Sanjeev Kumar Trivedi Address of Applicant :Department of Electronics, Faculty of Engineering and Technology, Khwaja Moinuddin chishti Language University, Lucknow 226013 ----- 10)Athuluri Sai Kushal Address of Applicant :Student, Department of Computer Science and Engineering, VIT-AP University, G-30, Inavolu, Beside AP Secretariat Amaravati, Andhra Pradesh - 522237 ----- 11)MR. L. KARTHICK Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF MECHANICAL ENGINEERING, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE - 641 032, TAMILNADU -----
(86) International Application No :PCT/ Filing Date :01/01/1900 (87) International Publication No : NA (61) Patent of Addition to Application Number :NA Filing Date :NA (62) Divisional to Application Number :NA Filing Date :NA	
(57) Abstract : AI BASED CAR TIRE BLOWOUT SECURITY SYSTEM A method of AI based car tire blowout security system, wherein the method comprises a first control unit is mounted on the vehicle braking, driving, steering and suspension system, (ii) a vehicle control system comprises a sensor to control and check the blowing out or condition of the tire, (iii) blow control unit control the blow out of the tire and control the steering, brake and suspension system to stabilize the vehicle, (iv) monitoring unit that monitors the tire pressure and tire condition and updates to the control unit to control the vehicle speed and stability, (v) a flat tire control unit that comprises an air bag that is equipped with stay bearing plate and described stay bearing plate with several rubber antiskid pads and each air bag is thickening air bag.	
No. of Pages : 15 No. of Claims : 1	



## **OVERVIEW**

**TITLE- SMART ELECTRICAL SCOOTER DRIVEN BY BATTERY**

**APPLICATION NO- 6247612**

**GRANT OR PUBLICATION DATE - 29/11/2022**

***APPLICANT/INVENTORS***

**DR. DEEPIKA SONI**

**MAJOR DR. SANJAY DHANSING CHAUDHARY**

**AKANKSHA SINGH**

**PROF. SANJEEV KUMAR TRIVEDI**

**TRIPTI TIWARI**

**MOHIT TIWARI**

**UDIT MAMODIYA**

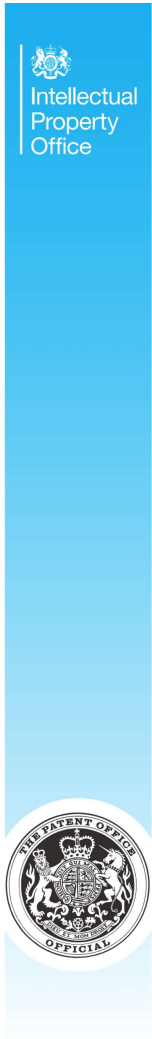


## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

The Smart Electrical Scooter driven by battery is a cutting-edge personal transportation device designed for eco-friendly, efficient, and convenient urban mobility. Powered entirely by a rechargeable lithium-ion battery, this scooter offers a clean and silent ride with zero emissions, making it an ideal choice for reducing environmental impact.

Equipped with smart features such as Bluetooth connectivity, GPS tracking, and mobile app integration, riders can easily monitor battery status, control speed modes, and even lock or unlock the scooter remotely. Advanced sensors provide real-time feedback on speed, battery health, and route navigation, enhancing safety and user experience.





Certificate of Registration for a UK Design

Design number: 6247162  
Grant date: 08 December 2022  
Registration date: 29 November 2022

This is to certify that,  
in pursuance of and subject to the provision of Registered Designs Act 1949, the design of which a representation or specimen is attached, had been registered as of the date of registration shown above in the name of

DR. DEEPIKA SONI, MAJOR DR. SANJAY DHANSING CHAUDHARY,  
AKANKSHA SINGH, PROF. SANJEEV KUMAR TRIVEDI, TRIPTI TIWARI,  
MOHIT TIWARI, UDIT MAMODIYA

In respect of the application of such design to:

Smart Electrical Scooter Driven by Battery  
International Design Classification:  
Version: 13-2021  
Class: 12 MEANS OF TRANSPORT OR HOISTING  
Subclass: 11 CYCLES AND MOTORCYCLES

*Adam Williams*

Adam Williams  
Comptroller-General of Patents, Designs and Trade Marks  
Intellectual Property Office  
The attention of the Proprietor(s) is drawn to the important notes overleaf.



## **OVERVIEW**

**TITLE- A SYSTEM AND METHOD FOR HIGH-SPEED NEURON  
IMPLEMENTATION USING VEDIC MATHEMATICS**

**APPLICATION NO- 202211055169 A**

**GRANT OR PUBLICATION DATE - 07/10/2022**

***APPLICANT/INVENTORS***

**Dr. Raghvendra Singh**

**Dr Rajendra Kumar Tripathi**

**Dr. P.N. Pathak**

**Dr. Chandrakant Kumar Singh**



## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

This innovative system introduces a human-inspired approach to artificial intelligence by accelerating neural computations through ancient Vedic Mathematics. Drawing from time-tested mental math techniques, the system enhances the speed and efficiency of neural network operations—especially multiplication and addition, which are core to how artificial neurons function.

By integrating Vedic math sutras such as “Urdhva Tiryakbhyam” (vertical and crosswise) into hardware or software implementations of neural networks, this method mirrors the way humans simplify complex calculations mentally. The result is a faster, lightweight, and resource-efficient neural processing model that significantly reduces computational time and power consumption.



(12) PATENT APPLICATION PUBLICATION	(21) Application No.202211055169 A
(19) INDIA	
(22) Date of filing of Application :26/09/2022	(43) Publication Date : 07/10/2022
(54) Title of the invention : A SYSTEM AND METHOD FOR HIGH-SPEED NEURON IMPLEMENTATION USING VEDIC MATHEMATICS	
(51) International classification	(71)Name of Applicant : 1)Dr. Raghvendra Singh Address of Applicant :Assistant Professor (Mathematics), School of Sciences, Uttar Pradesh Rajarshi Tandon Open University, Prayagraj, Uttar Pradesh- 211013, India Prayagraj ----- 2)Dr. Rajendra Kumar Tripathi 3)Dr. P.N. Pathak 4)Dr. Chandrakant Kumar Singh Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr. Raghvendra Singh Address of Applicant :Assistant Professor (Mathematics), School of Sciences, Uttar Pradesh Rajarshi Tandon Open University, Prayagraj, Uttar Pradesh- 211013, India Prayagraj ----- 2)Dr. Rajendra Kumar Tripathi Address of Applicant :Associate Professor, Applied science and Humanities (Mathematics), Faculty of Engineering and Technology, Khwaja Moinuddin chishti Language university LUCKNOW, Uttar Pradesh-226013, India LUCKNOW ----- 3)Dr. P.N. Pathak Address of Applicant :Assistant Professor Mathematics, CSJM University, Kanpur, Uttar Pradesh- 208012. India Kanpur ----- 4)Dr. Chandrakant Kumar Singh Address of Applicant :Assistant professor Computer Science, Uttar Pradesh Rajarshi Tandon Open University, Prayagraj, Uttar Pradesh- 211013, India Prayagraj -----
(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	
(57) Abstract : The high-speed neuron implementation system comprises an artificial neuronal encoder to encode an input data into a neuronal code; a pre-processing unit to pre-process a code deviation data of the neuronal code; a Vedic multiplier to determine a first product and a second product of a component of a code deviation accumulation data, a masking factor, and a component of a code deviation data; a first Vedic adder to calculate a first sum of first products; a second Vedic adder to calculate second product of an entry of a code covariance matrix, a masking factor, and a component of a code deviation data; and a central processing unit to determine a second sum of second products obtained by the second Vedic adder, and to use the second sum and first sum determined by the central processing unit to calculate representation of empirical probability distribution of a component of labelled data.	
No. of Pages : 17 No. of Claims : 10	



## **OVERVIEW**

### **TITLE-AN HERBAL FORMULATION FOR PREVENTION AND TREATMENT OF DIABETICS**

APPLICATION NO- 202211035751

GRANT OR PUBLICATION DATE - 01/07/2022

#### ***APPICANT/INVENTORS***

**Dr. Awanish Kumar Singh**

**Dr. Nikhil Agnihotri**

**Dr. Deepak Kumar Srivastava**

**Dr Rajiv Ranjan**

**Dr Rakesh Kumar Srivastava**

**Dr. Mamta Shukla**





## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

This herbal formulation is a scientifically developed blend of natural plant-based ingredients traditionally known for their anti-diabetic and blood sugar-regulating properties. Designed to support both the prevention and management of diabetes, the formulation works by improving insulin sensitivity, regulating glucose metabolism, and supporting pancreatic function.

Comprising carefully selected herbs such as *Gymnema sylvestre*, *Momordica charantia* (bitter gourd), *Trigonella foenum-graecum* (fenugreek), and *Cinnamomum verum* (true cinnamon), the formulation helps reduce postprandial blood sugar spikes, enhances glucose uptake by cells, and may protect against complications related to diabetes.



(12) PATENT APPLICATION PUBLICATION	(21) Application No.202211035751 A
(19) INDIA	
(22) Date of filing of Application :22/06/2022	(43) Publication Date : 01/07/2022
(54) Title of the invention : AN HERBAL FORMULATION FOR PREVENTION AND TREATMENT OF DIABETICS	
(51) International classification	:A61K0036282000, A01H0005120000, A23L0033000000, A23L0002520000, A01N0065000000
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA
(71)Name of Applicant :	
1)Dr. Awanish Kumar Singh	Address of Applicant :Assistant Professor & Head, Department of Botany, S.G.N.Government P.G. College, Muhammadabad Gohna, Mau-276403, Uttar Pradesh Mau -----
2)Dr. Nikhil Agnihotri	
3)Dr. Deepak Kumar Srivastava	
4)Dr Rajiv Ranjan	
5)Dr Rakesh Kumar Srivastava	
6)Dr. Mamta Shukla	
Name of Applicant : NA	
Address of Applicant : NA	
(72)Name of Inventor :	
1)Dr. Awanish Kumar Singh	Address of Applicant :Assistant Professor & Head, Department of Botany, S.G.N.Government P.G. College, Muhammadabad Gohna, Mau-276403, Uttar Pradesh Mau -----
2)Dr. Nikhil Agnihotri	Address of Applicant :Assistant Professor, Department of Botany, SKJD Mahavidyalaya, Mangalpur Kanpur Dehat Kanpur -----
3)Dr. Deepak Kumar Srivastava	Address of Applicant :Principal, Department of Botany, Career Convent Girls P.G. College, Sector-5, Vikash Nagar, Lucknow-226022, Uttar Pradesh Lucknow -----
4)Dr Rajiv Ranjan	Address of Applicant :Assistant Professor, Department of Botany, M. L. K. (P.G.) College, Balrampur, Tulsipur Road, Near Balark Hotel, Balrampur-271201 Balrampur -----
5)Dr Rakesh Kumar Srivastava	Address of Applicant :Assistant Professor Stage 2nd & Head, Department of Ayurveda, Mahatma Gandhi Chitrakoot Gramodaya Vishwavidyalaya, Chitrakoot, District- Satna (M.P.)-485334, India Satna -----
6)Dr. Mamta Shukla	Address of Applicant :Associate Professor, Department of Biotechnology, Engineering & Technology Khwaja Moinuddin Chishti Language University, Lucknow-226013 Lucknow -----
(57) Abstract :	
The present invention discloses an Herbal formulation for prevention and treatment of diabetes. Disclosed herein is a formulation that provides at least 1 x 104 to 1 x 105 Insulin Equivalent units in 1 milliliter where the herbal extract comprises extracts from Artemisia dracunculus, Cichoria endivia and Lactuca sativa and a metal (e.g., chromium, iron, manganese, zinc, or copper). In certain embodiments, the extracts from Artemisia dracunculus, Cichoria endivia and Lactuca sativa are dried aqueous extracts where the aqueous extracts are produced by a process comprising extracting leaves of Artemisia dracunculus, Cichoria endivia and Lactuca sativa.	
No. of Pages : 18 No. of Claims : 6	



## **OVERVIEW**

**TITLE- SYSTEMS FOR CHARGING ELECTRIC VEHICLES USING ELECTRIC ENERGY FROM EXTERNAL SOURCES.**

**APPLICATION NO- 202211055169 A**

**GRANT OR PUBLICATION DATE - 20/05/2022**

### ***APPLICANT/INVENTORS***

**Dr. Satish Kumar Awasthi**

**Dr. Ram Sharan Bajpai**

**Dr. Vivek Kumar Bajpai**

**Dr. Chandra Bhan**

**Dr. Amarjeet Singh**

**Dr. Pavan Kumar Singh**

**Ms. Amisha Srivastava**

**Mr. Rami Suremani**

**Dr. Rakesh Varma**



# DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS

This system is designed to efficiently charge electric vehicles (EVs) by drawing electric energy from various external sources such as the power grid, renewable energy systems (solar, wind), or dedicated EV charging stations. It enables safe, fast, and controlled delivery of electricity to the vehicle's onboard battery management system.

The system typically comprises a power interface, charging controller, communication module, and safety mechanisms. Smart features allow for real-time monitoring of charging status, load balancing, and energy optimization. Integration with IoT platforms enables remote access, scheduling, and billing.



 Bundesrepublik Deutschland 

## Urkunde

über die Eintragung des  
Gebrauchsmusters Nr. 20 2022 102 515

**Bezeichnung:**

Solarstrombasiertes netzintegriertes Gleichstrom-Schnelladesystem für  
Elektrofahrzeuge mit fortschrittlichen Gleichstrom-Gleichstrom-  
Resonanzwandlern

**IPC:**

B60L 53/50

**Inhaber/Inhaberin:**

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**Tag der Anmeldung:**

07.05.2022

**Tag der Eintragung:**

20.05.2022

Die Präsidentin des Deutschen Patent- und Markenamts



Cornelia Rudloff-Schäffer

München, 20.05.2022







## **OVERVIEW**

**TITLE- NOVEL CHYAWANPRASH COMPOSITION WITH HIGH  
SHELF-LIFE & LOW CALORIFIC VALUE AND METHOD OF  
PREPARATION THEREOF**

**APPLICATION NO- 202221020976 A**

**GRANT OR PUBLICATION DATE - 24/06/2022**

### ***APPLICANT/INVENTORS***

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**Dr Mamta Shukla**

**Dr Rajesh Kumar Dubey**



## DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS

This invention relates to a novel formulation of **Chyawanprash**, an Ayurvedic health supplement, with significantly enhanced **shelf-life** and **reduced calorific value**, while retaining its traditional therapeutic benefits. The composition is designed to cater to health-conscious consumers, diabetics, and individuals managing calorie intake, without compromising the immunity-boosting and rejuvenating effects associated with classical Chyawanprash.

The formulation utilizes natural preservatives, low-glycemic sweeteners (such as stevia or isomalt), and modified herbal extracts to maintain potency and stability over extended storage periods. Ingredients like *Amla (Emblica officinalis)*, *Ashwagandha*, *Guduchi*, *Pippali*, and other classical herbs are processed using optimized temperature and pH-controlled methods to preserve bioactive compounds and enhance absorption.



(12) PATENT APPLICATION PUBLICATION		(21) Application No.202221020976 A
(19) INDIA		
(22) Date of filing of Application :07/04/2022		(43) Publication Date : 24/06/2022
(54) Title of the invention : NOVEL CHYAWANPRASH COMPOSITION WITH HIGH SHELF-LIFE & LOW CALORIFIC VALUE AND METHOD OF PREPARATION THEREOF		
<div>(51) International classification :A61K0036258000, A23L0033105000, C10L0005440000, A61K0035644000, A23L0027140000</div> <div>(86) International Application No :NA</div> <div>(87) International Publication No : NA</div> <div>(61) Patent of Addition to Application Number :NA</div> <div>(62) Divisional to Application Number :NA</div>		<div>(71)Name of Applicant : <b>1)MAHAKAUSHAL UNIVERSITY</b> Address of Applicant :Village-Aithakheda, Mukunwara Road, Post- Tilwara Jabalpur(M.P.) 482003, India ----- <b>Name of Applicant : NA</b> <b>Address of Applicant : NA</b> (72)Name of Inventor : <b>1)Akanksha Soni</b> Address of Applicant :Research Scholar, Swami Vivekanand University, Sagar, Madhya Pradesh ----- <b>2)Dr. Bhaskar Jyoti</b> Address of Applicant :Assistant Professor , Mahakaushal University, Jabalpur, M.P., India ----- <b>3)Dr. Ramesh Chandra Mishra</b> Address of Applicant :Vice-Chancellor, Mahakaushal University, Jabalpur, Madhya Pradesh ----- <b>4)Dr. Swati Agarwal</b> Address of Applicant :Assistant Professor (Ag), Mahakaushal University, Jabalpur, Madhya Pradesh ----- <b>5)Akanksha</b> Address of Applicant :Research scholar, Mahakaushal University, Jabalpur, Madhya Pradesh ----- <b>6)Shivani Shukla</b> Address of Applicant :Research scholar, Swami Vivekanand University, Sagar, MP ----- <b>7)Sanskriti Srivastava</b> Address of Applicant :MSc Biotechnology (Research Scholar), Maa Gayatri Mahavidhyalaya, Mawaiya Road, Naini Prayagraj, Uttar Pradesh ----- <b>8)Dr. Vani Mishra</b> Address of Applicant :Assistant Professor, Shyam Kumari P.G. College, Asepur,Prayagraj, Uttar Pradesh ----- <b>9)Dr Mamta Shukla</b> Address of Applicant :Associate Professor, Department Of Biotechnology, Faculty of Engineering and Technology, Khwaja Moinuddin Chishti Language University, Lucknow-226013 ----- <b>10)Dr. Rajesh Kumar Dubey</b> Address of Applicant :Director, UGC-HRDC JNVU, Jodhpur, Rajasthan -----</div>
(57) Abstract : The present invention relates to Novel chyawanprash composition with high shelf-life & low calorific value and method of preparation thereof. The objective of the present invention is to solve the problems in the prior art chyawanprash composition. The present invention discloses a chyawanprash composition with made is purely nutraceutical carrying numerous herbs, spices, ginseng root extract, stevia leaves powder, jaggery and honey incorporated at different levels which contribute to Chyawanprash's therapeutic properties in several ways.		
No. of Pages : 25 No. of Claims : 8		



## **OVERVIEW**

**TITLE- A SMART CUP**

**APPLICATION NO- 358114-001**

**GRANT OR PUBLICATION DATE - 08/02/2022**

***APPLICANT/INVENTORS***

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**Dr. Ashish Mishra**



## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

The invention relates to a **Smart Cup**—an intelligently designed beverage container that seamlessly integrates technology with everyday use to enhance user convenience, health monitoring, and lifestyle efficiency. Engineered with a sleek, ergonomic form, the smart cup combines **aesthetic appeal with functional innovation**, making it suitable for both home and on-the-go usage.

The cup is embedded with sensors capable of detecting liquid temperature, volume, and type (e.g., water, coffee, tea). It can sync with a mobile app or smartwatch via Bluetooth to provide real-time data such as hydration tracking, temperature alerts, and consumption reminders. The design includes an LED ring or display panel to notify users visually, with customizable colors or symbols.





		ORIGINAL
		No. 111328
<p>भारत सरकार GOVERNMENT OF INDIA पेटेंट कार्यालय THE PATENT OFFICE</p>		
CERTIFICATE OF REGISTRATION OF DESIGN		
Design No.	358114-001	
Date	08/02/2022 17:00:08	
Reciprocity Date*		
Country		
<p>Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 07-01 in respect of the application of such design to CUP in the name of 1. ARYA DUBEY, STUDENT, CSE DEPT., GGITS, JABALPUR, M. P. INDIA 482003 2. DR. SHISHIR DIXIT, ASSO. PROF., EE DEPT., MITS, GWALIOR, M. P. INDIA 474005 3. DR. MAMTA SHUKLA, ASSO. PROF., DEPT. OF BIOTECHNOLOGY, FACULTY OF ENGINEERING AND TECHNOLOGY, KMCLU, U. P. INDIA 226013 4. DR. ASHISH MISHRA, PROFESSOR, CSE DEPT., GGITS, JABALPUR, M. P. INDIA 482003, ET AL.</p>		
in pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.		
		
Controller General of Patents, Designs and Trade Marks		
<p>*The reciprocity date (if any) which has been allowed and the name of the country. Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years. This Certificate is not for use in legal proceedings or for obtaining registration abroad</p>		
<p>VIKAS ASAWAT, 3/183 GANESH TALAB, BASANT VIHAR, KOTA RAJASTHAN PIN 324009, INDIA</p>		
Date of Issue 06/04/2022 15:24:30		



## **OVERVIEW**

**TITLE- METHOD AND SYSTEM FOR AUTOMATICALLY IDENTIFYING A  
BLOOD DONOR IN VICINITY OF A PATIENT**

**APPLICATION NO- 202121053094 A**

**GRANT OR PUBLICATION DATE - 03/12/2021**

### ***APPLICANT/INVENTORS***

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**Dr. Deepak Gaur**

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**Dr. Mahendra Kumar**

**Dr. Neha Sharma**

**Dr. Ankur Saxena**



# DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS

This invention relates to a method and system designed to automatically identify blood donors located near a patient in need of blood. It works by:

- Maintaining a registered database of blood donors and their geolocation.
- Matching patient requirements (e.g., blood group, proximity, urgency) with available donors.
- Using a controller, interactive platform, and geolocation services to identify suitable donors.
- Notifying potential donors in real-time through the platform.

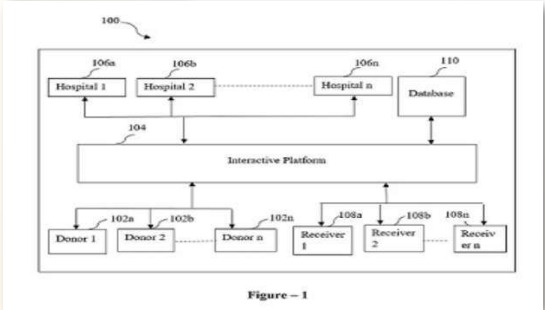


(12) PATENT APPLICATION PUBLICATION (21) Application No.202121053094 A  
(19) INDIA  
(22) Date of filing of Application :18/11/2021 (43) Publication Date : 03/12/2021

(54) Title of the invention : METHOD AND SYSTEM FOR AUTOMATICALLY IDENTIFYING A BLOOD DONOR IN VICINITY OF A PATIENT

(51) International classification	G06Q030020000, A61B000600000, G16H040200000, A61F000246000, C06F000300000	(71)Name of Applicant : 1)Dr. Ashish Mishra Address of Applicant :Professor, Department of Computer Science and Engineering, Gyan Ganga Institute of Technology and Sciences, Jabalpur M.P. India Pin 482003 ----- 2)Chaitanya Rai 3)Dr. Rachna Kamble 4)Dr. Ashok Verma 5)Dr. Mamta Shukla 6)Dr. Shishir Dixit 7)Ankur Pandey 8)Dr. Ritu Agarwal 9)Vedant Jain 10)Yashika Jotwani Name of Applicant : NA Address of Applicant : NA
(86) International Application No	NA	(72)Name of Inventor : 1)Dr. Ashish Mishra Address of Applicant :Professor, Department of Computer Science and Engineering, Gyan Ganga Institute of Technology and Sciences, Jabalpur M.P. India Pin 482003 ----- 2)Chaitanya Rai Address of Applicant :Department of Computer Science and Engineering, Gyan Ganga Institute of Technology and Sciences, Jabalpur M.P. India Pin 482003 ----- 3)Dr. Rachna Kamble Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Technocrats Institute of Technology, Bhopal M.P. India Pin 462021 ----- 4)Dr. Ashok Verma Address of Applicant :Professor, Department of Computer Science and Engineering, Gyan Ganga Institute of Technology and Sciences, Jabalpur M.P. India Pin 482003 ----- 5)Dr. Mamta Shukla Address of Applicant :Associate Professor, Department of Biotechnology, Faculty of Engineering and Technology, Khwaja Moinuddin Chishti Language University- Lucknow 206013 U.P. India ----- 6)Dr. Shishir Dixit Address of Applicant :Associate Professor, Department of Electrical Engineering, Madhav Institute of Technology and Science, Gwalior 474005 M.P. India ----- 7)Ankur Pandey Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, University Institute of Technology (UIT), RGPV Shahdol. M.P. India Pin 484001 ----- 8)Dr. Ritu Agarwal Address of Applicant :Assistant Professor, Malaviya National Institute of Technology, JLN Marg, Jaipur-302017 Rajasthan India ----- 9)Vedant Jain Address of Applicant :Department of Computer Science and Engineering, Gyan Ganga Institute of Technology and Sciences, Jabalpur M.P. India Pin 482003 ----- 10)Yashika Jotwani Address of Applicant :Department of Computer Science and Engineering, Gyan Ganga Institute of Technology and Sciences, Jabalpur M.P. India Pin 482003 -----
(87) International Publication No	NA	
(61) Patent of Addition to Application Number	NA	
(62) Divisional to Application Number	NA	
Filing Date	NA	

(57) Abstract :  
The present invention is related to a method and system for automatically identifying an at least one donor in vicinity of a patient utilizing an interactive platform 10. To start with, a plurality of users is registered utilizing a registration module 208 by collecting the details of a plurality of donors, a plurality of hospitals, and a plurality of receivers. Subsequently, validating the plurality of users utilizing verification module 210 by transmitting an email. The details corresponding to the plurality of users are encrypted utilizing a data encryption module 212 using a unique identification. Further, the details corresponding to a patient along with a prescribed prescription are collected utilizing a patient data collection module 214 and stored in database 110. Thereafter, the details corresponding to the patient are correlated with a list of donors stored in database 110 utilizing a data matching module 216 based on the location of the patient.



No. of Pages : 28 No. of Claims : 9



## **OVERVIEW**

### **TITLE- ENHANCED CYBERSECURITY SYSTEM FOR DATA COMMUNICATION TO SECURE IOT DEVICES**

APPLICATION NO- 202141051872 A

GRANT OR PUBLICATION DATE - 26/11/2021

#### ***APPLICANT/INVENTORS***

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## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

This invention relates to an advanced cybersecurity system specifically designed to safeguard Internet of Things (IoT) devices and their communication channels from a wide range of cyber threats. As IoT networks continue to expand in scale and complexity—connecting billions of devices across smart homes, industrial environments, and urban infrastructure—the need for a robust, real-time, and adaptive security framework becomes increasingly critical. The proposed system addresses this need through a comprehensive, multi-layered approach. It incorporates strong encryption techniques to secure data transmission, effectively preventing interception and unauthorized access. The system also features an intelligent Intrusion Detection and Prevention System (IDPS), powered by machine learning algorithms capable of identifying and mitigating abnormal behavior or attack patterns in real time. To further enhance access security, it utilizes advanced authentication protocols, including biometric and multi-factor authentication, ensuring that only authorized users and devices can interact with the network. Additionally, the integration of blockchain technology provides an immutable record of all communications between IoT nodes, ensuring data integrity and preventing tampering. This holistic cybersecurity solution offers a scalable and intelligent defense mechanism tailored to the evolving demands of IoT ecosystems.



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :12/11/2021

(21) Application No.202141051872 A

(43) Publication Date : 26/11/2021

(54) Title of the invention : ENHANCED CYBERSECURITY SYSTEM FOR DATA COMMUNICATION TO SECURE IOT DEVICES

(51) International classification :H04L0029080000, H04L0029060000, H04W0004700000, G06F0021620000, G06F0009540000

(86) International Application No :NA

(87) International Publication No :NA

(61) Patent of Addition to Application Number :NA

(62) Divisional to Application Number :NA

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(57) Abstract :  
Modern era is conquered by the fairly disruptive technology of Internet of Things (IoT) which has unimaginable capability, growth and impact. Devices using this technology demands incredible security and data privacy as same cloud connects several devices; hence there is possibility of data leakage. This invention presents the implementation of Representational State Transfer (REST) Application Programming Interface for IoT devices based on the concepts used in IoT technology which keeps record of events of the devices along with count of everything. These devices are connected to the cloud server utilizing the concept of middleware. But new applications using IoT in the cloud brings security threats for data privacy. Hence there is requirement of innovative system for securing innovative IoT devices which avoids hackers from entering the network via IoT devices along with securing transit of data into the cloud from the IoT devices. This invention provides the method of securing IoT devices connected to cloud and users by exposing them using REST API. Device data is primarily exposed using middleware via REST thereby hiding details acting as an interface between sensor data and the user.

No. of Pages : 11 No. of Claims : 6

The Patent Office Journal No. 48/2021 Dated 26/11/2021 56433



## **OVERVIEW**

### **TITLE- AUTOMATIC HUMAN PERSONALITY DETECTION SYSTEM USING MACHINE LEARNING**

APPLICATION NO- 202111028620 A

GRANT OR PUBLICATION DATE - 23/07/2021

#### ***APPLICANT/INVENTORS***

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**Mr. Shashi Kant Gupta**

**Mr. D Saravanan**



# DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS

This invention relates to an intelligent system designed to automatically detect and classify human personality traits using machine learning algorithms. The system aims to assist in various domains such as recruitment, education, mental health analysis, and personalized marketing by providing accurate personality insights based on user data.

The core of the system utilizes supervised and unsupervised learning techniques trained on large datasets, including textual inputs (e.g., social media posts, written responses), speech patterns, facial expressions, and behavioral data. These inputs are analyzed to identify key personality indicators aligned with psychological models like the Big Five Personality Traits (Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism).

The system comprises modules for data acquisition, preprocessing, feature extraction, model training, and real-time prediction. It ensures adaptability to different languages, cultural contexts, and user interfaces. Additionally, privacy and ethical considerations are embedded within the design to protect user data and provide transparent, interpretable results.



(12) PATENT APPLICATION PUBLICATION		(21) Application No.202111028620 A
(19) INDIA		
(22) Date of filing of Application :25/06/2021		(43) Publication Date : 23/07/2021
(54) Title of the invention : AUTOMATIC HUMAN PERSONALITY DETECTION SYSTEM USING MACHINE LEARNING		
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		7)Dr. ANITA SHARMA
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		7)Dr. ANITA SHARMA
		8)Dr. MANUJ DARBARI
		9)Dr. DIWAKAR YAGYASEN
		10)Mr. RAGHVENDRA KUMAR SINGH
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		12)Mr. D SARAVANAN
(57) Abstract :		
The automated analysis of video interviews to identify individual personality features eliminated many issues now with progress in artificial intelligence. In personality computing and psychological assessment, AI has used. The speech agent is intelligent, easy to use, integrated Google Assistant, Amazon Alexa and LG's ThinQ deep learning AI technology. Whether you purchase meals, look for YouTube or watch the weather, the tools and material we enjoy are simpler to reach via AI. We have created an AI interview system in this invention which is aimed at hiring staff using the CNN model and Tensorflow engine in a specific business. The technology recognizes simple human nonverbal indications like attribute and stance. Many candidates' appearances and polls have been automatically developed based on the characteristics retrieved that prepare the character scores.		
No. of Pages : 23 No. of Claims : 5		





## **OVERVIEW**

### **TITLE- IOT BASED AUTOMATED GREEN ENERGY MANAGEMENT OF PUBLIC GARDENS**

APPLICATION NO- 2021107102

GRANT OR PUBLICATION DATE - 2<sup>ND</sup> DAY OF NOVEMBER 2021

#### ***APPLICANT/INVENTORS***

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**Dr. Chidurala Srinivas**

**Vilas Kisanrao Tembhurne**

**Dr. Venkata Suresh Chinni**

**Dr. Gaurav Indra**



## **DISCRIPTION ACCORDING TO THE INVENTORS/APPLICANTS**

This invention presents a human-centric solution for the sustainable and intelligent management of public gardens using Internet of Things (IoT) technology combined with green energy sources. The system is designed to reduce human effort, optimize energy usage, and enhance the overall experience for visitors, while promoting environmental responsibility.

The invention integrates IoT sensors and controllers to monitor and manage various garden functions such as lighting, irrigation, air quality, and energy consumption in real-time. Powered by renewable energy sources like solar panels, the system ensures that the garden's operations remain eco-friendly and energy-efficient. Smart sensors track soil moisture, temperature, humidity, and sunlight, enabling automated irrigation only when necessary—conserving water and preserving plant health.



Australian Government  
IP Australia

## CERTIFICATE OF GRANT INNOVATION PATENT

**Patent number:** 2021107102

The Commissioner of Patents has granted the above patent on 2 November 2021, and certifies that the below particulars have been registered in the Register of Patents.

**Name and address of patentee(s):**

Dr. P. Sanjeeva Rayudu, Chadalawada Ramanamma Engineering College- Autonomous, Tirupati, India  
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**Title of invention:**

IOT BASED AUTOMATED GREEN ENERGY MANAGEMENT OF PUBLIC GARDENS

**Name of inventor(s):**

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**Term of Patent:**

Eight years from 25 August 2021



Dated this 2<sup>nd</sup> day of November 2021

Commissioner of Patents

**PATENTS ACT 1990**

The Australian Patents Register is the official record and should be referred to for the full details pertaining to this IP Right.



**THANK YOU**