



ORIGINAL
क्रम सं/ Serial No. : 170319



पेटेंट कार्यालय, भारत सरकार

The Patent Office, Government Of India

डिजाइन के पंजीकरण का प्रमाण पत्र | Certificate of Registration of Design

डिजाइन सं. / Design No. : 412477-001

तारीख / Date : 03/04/2024

पारस्परिकता तारीख / Reciprocity Date* :

देश / Country :

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो **DEVICE FOR DETECTION OF NEUROLOGICAL DISORDERS** से संबंधित है, का पंजीकरण, श्रेणी 24-01 में 1.Ms. Mitali Singh 2. Dr. Runjhun Pallavi 3.Dr. Sippy Singh 4.Dr. Durgesh Singh 5.Mr. Vikram Singh Yadav 6.Dr. Sunil Kumar Singh 7.Dr. Avadhut Suresh Aiya 8.Dr. Kiran. B 9.Mr. Vishal Nanasaheb Kushare 10.Mr. Subrat Kumar Mahapatra 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 **DEVICE FOR DETECTION OF NEUROLOGICAL DISORDERS** in the name of 1.Ms. Mitali Singh 2. Dr. Runjhun Pallavi 3.Dr. Sippy Singh 4.Dr. Durgesh Singh 5.Mr. Vikram Singh Yadav 6.Dr. Sunil Kumar Singh 7.Dr. Avadhut Suresh Aiya 8.Dr. Kiran. B 9.Mr. Vishal Nanasaheb Kushare 10.Mr. Subrat Kumar Mahapatra.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अधधीन प्रावधानों के अनुसरण में।

In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.



डिजाइन की संख्या

जारी करने की तिथि : 17/05/2024
Date of Issue

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

*पारस्परिकता तारीख (यदि कोई हो) जिसकी अनुमति दी गई है तथा देश का नाम। डिजाइन का स्वत्वाधिकार पंजीकरण की तारीख से दस वर्षों के लिए होगा जिसका विस्तार, अधिनियम एवं नियम के निबंधनों के अधीन, पाँच वर्षों की अतिरिक्त 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.

(54) Title of the invention : DETECTION OF SECURITY ATTACKS USING DEEP LEARNING IN WSN NETWORK

<p>(51) International classification :H04W0084180000, G06N0003080000, G06N0003040000, G06N0020000000, H04W0004380000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)Manasa K Address of Applicant :Assistant Professor / BCA, SBRR Mahajana First Grade College (A), Jayalakshmipuram, Mysuru-12, Karnataka ----- 2)Pooja P S 3)Meghana Urs 4)Manasa M Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Manasa K Address of Applicant :Assistant Professor / BCA, SBRR Mahajana First Grade College (A), Jayalakshmipuram, Mysuru-12, Karnataka ----- 2)Pooja P S Address of Applicant :Assistant Professor / BCA, SBRR Mahajana First Grade College (A), Jayalakshmipuram, Mysore-12, Karnataka ----- 3)Meghana Urs Address of Applicant :Assistant Professor, Computer Science, SBRR Mahajana First Grade College (A), Jayalakshmipuram, Mysore-12, Karnataka ----- 4)Manasa M Address of Applicant :Assistant Professor, Computer Science, SBRR Mahajana First Grade College(A), Jayalakshmipuram, Mysuru-12, Karnataka -----</p>
---	--

(57) Abstract :

The proposed invention introduces a groundbreaking system that employs Deep Learning techniques to enhance the security of Wireless Sensor Networks (WSNs). This innovative system leverages neural networks deployed at different layers of the WSN architecture, enabling real-time intrusion detection and prevention. By autonomously analyzing network traffic patterns and anomalies, the system identifies deviations from normal behavior, thereby reducing false positives and adapting to evolving security threats without manual updates. A diverse dataset of normal and anomalous network traffic is used to train the Deep Learning models effectively. This system's adaptability and real-time insights offer a customized and efficient security solution for WSNs, alleviating the administrative burden on network administrators and providing broader applications in Internet of Things (IoT) security, ultimately contributing to a more secure and dependable network communication landscape.

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