पेटेंट कार्यालय
शासकीय जर्नल

OFFICIAL JOURNAL
OF
THE PATENT OFFICE

निर्गमन सं. 43/2024	शुक्रवार	दिनांक: 25/10/2024
ISSUE NO. 43/2024	FRIDAY	DATE: 25/10/2024

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/10/2024
(21) Application No.202441079538 A
(43) Publication Date : 25/10/2024

(54) Title of the invention : Automated Water Heater Safety Surveillance System with Real-Time Hazard Detection and Alerts

(51) International classification :G08B0013196000, H04N0007180000, H04L0012280000, F24H0009200000, A47J0036320000
(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)CMR COLLEGE OF ENGINEERING & TECHNOLOGY
Address of Applicant :KANDLAKOYA, MEDCHAL ROAD, HYDERABAD, TELANGANA, INDIA, 501401. Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)B.SURESH RAM
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad Hydrerabad ---------- ----------
2)K.RAVI KIRAN
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad Hydrerabad ---------- ----------
3)R.SATHIYAKALA
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad Hydrerabad ---------- ----------
4)K SATHISH
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad Hydrerabad ---------- ----------
5)P. MAHESH BABU
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad Hydrerabad ---------- ----------
6)G.VARUN REDDY
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad Hydrerabad ---------- ----------
7)B.HARSHITH
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad Hydrerabad ---------- ----------
8)C.SAHITH
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad Hydrerabad ---------- ----------

(57) Abstract :
AUTOMATED WATER HEATER SAFETY SURVEILLANCE SYSTEM WITH REAL-TIME HAZARD DETECTION AND ALERTS ABSTRACT The Water Heater Safety Surveillance system is designed to enhance the safety and operational efficiency of water heaters by continuously monitoring temperature and proximity. Utilizing a DHT11 temperature sensor and ultrasonic sensors, the system detects abnormal conditions, such as overheating or the presence of obstructions. When these conditions are identified, the system automatically shuts off the water heater, activates a buzzer, and illuminates an LED to alert users. Controlled by an Arduino microcontroller, the system ensures real-time processing of sensor data for rapid response to potential hazards. This affordable solution aims to prevent accidents, improve energy efficiency by minimizing unnecessary operation, and offers applications in both residential and commercial settings. The system's design allows for integration into smart home technologies, further enhancing its utility and accessibility. Overall, the Water Heater Safety Surveillance system showcases the potential of affordable sensors and microcontrollers to improve household appliance safety and energy management.

No. of Pages : 14 No. of Claims : 10