

## OFFICIAL JOURNAL OF THE PATENT OFFICE

निर्गमन सं. 41/2023	शुक्रवार	दिनांक: 13/10/2023
ISSUE NO. 41/2023	FRIDAY	DATE: 13/10/2023

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

The Patent Office Journal No. 41/2023 Dated 13/10/2023

(12) PATENT APPLICATION PUBLICATION

## (19) INDIA

(22) Date of filing of Application :27/09/2023

## (54) Title of the invention : A SYSTEM AND METHOD FOR GARBAGE BIN MONITROING AND MAINTENANCE

<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>	:B65F0001140000, B65F0001160000, G07C0005000000, A61B0005020500, G07C0005080000 :NA :NA :NA : NA :NA :NA :NA	<ul> <li>(71)Name of Applicant :</li> <li>1)CMR College of Engineering &amp; Technology</li> <li>Address of Applicant :CMR College of Engineering &amp; Technology,</li> <li>Kandlakoya, Medchal Road, Hyderabad, Telangana-501401, India</li></ul>
Filing Date	:NA	4)PALLERLA SHREEYA
Application Number		Medchal Road, Hyderabad, Telangana-501401, India
Filing Date		
		Medchal Road, Hyderabad, Telangana-501401, India
		Address of Applicant :CMR College of Engineering & Technology, Kandlakoya,
		Medchal Road, Hyderabad, Telangana-501401, India 7)B. Balakrishna
		Address of Applicant :CMR College of Engineering & Technology, Kandlakoya,
		Medchal Road, Hyderabad, Telangana-501401, India 8)Md. Asma
		Address of Applicant :CMR College of Engineering & Technology, Kandlakoya,
		Medchal Road, Hyderabad, Telangana-501401, India
		9)B.Suresh Ram
		Address of Applicant :CMR College of Engineering & Technology, Kandlakoya,
		Medchal Road, Hyderabad, Telangana-501401, India 10)Kayyam Sathish
		Address of Applicant :CMR College of Engineering & Technology, Kandlakoya,
		Medchal Road, Hyderabad, Telangana-501401, India.

(57) Abstract :

Embodiments of this disclosure describe a system for efficient management and maintenance of garbage bin. The system comprises a microcontroller as the central processing unit, along with a power supply, ultrasonic sensors, GPS modules, an LCD, an LED, a buzzer, a GSM module, a WiFi module, and a cloud. These components work together to create an integrated and efficient system for garbage management. The ultrasonic sensors enable accurate detection of the garbage level within a bin, while the GPS modules provide precise tracking and location information of the garbage bin. Notifications and messages can be sent to municipal authorities through the GSM module, keeping them informed about the garbage bin's status and location. The system also utilizes an LCD for displaying relevant information, an LED for visual indications, and a buzzer for auditory alerts. This invention offers a potential solution for optimized waste collection processes and contributes to environmental sustainability. FIG. 1

No. of Pages : 18 No. of Claims : 7