

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :13/09/2024

(21) Application No.202411069578 A

(43) Publication Date : 04/10/2024

(54) Title of the invention : ENVIRONMENT FRIENDLY WASTE MANAGEMENT DEVICE

(51) International classification :C11B0003000000, A61P0007000000, G03F0007000000, G06Q0010063100, G06Q0010060000  
(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)Chitkara University**  
Address of Applicant :Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----  
**2)Chitkara Innovation Incubator Foundation**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Muskan Chawla**  
Address of Applicant :Research Scholar, Chitkara University Research and Innovation Network, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----  
**2)Swati Goel**  
Address of Applicant :Research Scholar, Chitkara University Research and Innovation Network, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----  
**3)Sanjeev Verma**  
Address of Applicant :Assistant Professor, Chitkara University Research and Innovation Network, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----  
**4)Surya Narayan Panda**  
Address of Applicant :Professor, Chitkara University Research and Innovation Network, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----  
**5)Rajinder Singh**  
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Punjabi University, NH 64, next to Urban Estate Phase II, Patiala - 147002, Punjab, India. Patiala -----  
**6)Dr. S. Sreenivasa**  
Address of Applicant :Professor, Tumkur University, B.H Road, Tumkur 572103, Karnataka, India. Tumkur -----  
**7)Dr. Prabin Panigrahi**  
Address of Applicant :Professor, IIM Indore, Prabandh Shikhar, Rau-Pithampur Road Indore - 453556, Madhya Pradesh, India. Indore -----

(57) Abstract :

An environment friendly waste management device, comprising a body 101 accessed by user for dumping waste inside the body 101, a par of sections 201 for storing biodegradable and non-biodegradable waste, a vertical sliding unit 202 mounted with an extendable flap 203 establish the flap 203 in between the sections 201 for partitioning waste, an imaging unit 102 to detect any illegal activity or weapons dumped in the body 101, vertical supports 103 supporting solar panels 104 for harnessing solar energy, a pair of fans 105 extract air from surrounding towards the body 101 for maintaining air circulation inside the body 101, a frame 106 allows the extracted air to get in the body 101, an air filtration enabled odor adsorbent filter 107 separates/neutralizes any pollutant discharged from gases for purifying air and an opening 108 for releasing the purified air in surrounding.

No. of Pages : 22 No. of Claims : 5