(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/08/2023

(21) Application No.202311054092 A
(43) Publication Date : 08/09/2023

(54) Title of the invention : ELECTRONIC LETTER AND PARCEL MAILBOX

(51) International classification :G07C0009000000, A47G0029140000, A47G0029120000, G06Q0010080000, A47G0029200000
(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 :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ---------- ----------
2)Chitkara Innovation Incubator Foundation
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SOHAL, Nitin
Address of Applicant :Department of Mechanical Engineering, Chitkara University of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ---------- ----------
2)GUPTA, Lipika
Address of Applicant :Department of Electronics & Communication Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ---------- ----------
3)TURNA, Niva
Address of Applicant :Department of Architecture, Chitkara School of Planning and Architecture, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ---------- ----------
4)MITTAL, Neeraj
Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ---------- ----------
5)SINGH, Amarinder
Address of Applicant :Department of Mechatronics Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ---------- ----------

(57) Abstract :
The presents disclosure an IoT-based electronic letter and parcel mailbox system. The system (10) comprises a housing with a letter receiving area (12) and a parcel receiving area (14). Automatic motorized rollers (16) in the letter receiving area pull letters inside the housing, activated by a proximity sensor (18). An automatic front window opening (20) beneath the rollers allows parcel drop-off, initiated by a delivery person's call via a mobile communication system 23. Access to the window is controlled through an IoT-enabled door lock access system (22). A door (24) at the back provides access to retrieve mail, and indicators (26) show the presence or absence of letters and parcels. The system offers secure, convenient, and cost-effective mail handling.

No. of Pages : 26 No. of Claims : 10