

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511078353 A

(19) INDIA

(22) Date of filing of Application :18/08/2025

(43) Publication Date : 05/09/2025

(54) Title of the invention : MEDICINE BOX

(51) International classification :A61L0002100000, G06V0040160000, A61B0005000000, G06F0003010000, G16H0020100000

(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)Dr. Preeti Sharma**

Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----

**2)Dr. Rajeev Kamal Sharma**

Address of Applicant :Professor, Department of Mechanical Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----

**3)Rudakshi Arora**

Address of Applicant :Department of Electronics and Communication Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----

(57) Abstract :

A medicine box, comprising a camera 201, and a RFID scanner 202 that automatically identify and log detailed information of each medicine, a Peltier module and a temperature sensor maintain safe storage conditions, multiple light emitting diodes (LED) 102 generates visual alerts a built-in camera 103 and microphone 104 analyze the user's facial expressions, speech patterns, and physical behavior using machine learning models trained on health-related cues, to continuously monitor for signs of distress of the user, an automated sterilization module employs UV-C light emitters 205 to periodically disinfect internal surfaces and medicine compartments 206, an automated medicine breaker module includes an expandable pulley-platform 203 that adjusts its dimensions in real time to securely hold tablets of various sizes, a set of pneumatic sharp-edged blades 204 with serrated teeth to perform clean and accurate cuts based on the required dose.

No. of Pages : 27 No. of Claims : 10