

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511065093 A

(19) INDIA

(22) Date of filing of Application :08/07/2025

(43) Publication Date : 25/07/2025

(54) Title of the invention : AUTOMATED PLANT POT SYSTEM

<p>(51) International classification :G01N0033240000, A01G0009240000, A01G0009020000, A01G0027000000, A01G0027020000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)Chitkara University Address of Applicant :Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----</p> <p>2)Chitkara Innovation Incubator Foundation Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Kamini Address of Applicant :Research Scholar, Chitkara University Research & Innovation Network (CURIN), Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----</p> <p>2)Akashdeep Singh Address of Applicant :Department of Computer Science & Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----</p> <p>3)Shalli Rani Address of Applicant :Professor, Chitkara University Research & Innovation Network (CURIN), Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura -----</p>
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(57) Abstract :

An automated plant pot system, comprising a rectangular planter box 101, utilized by a user to grow specific plant types, an active root zone heating/cooling plate 103 keeps soil temperature within optimal range by employing thermoelectric modules (Peltier elements), multiple soil condition detection sensors 102 to monitor soil moisture, temperature, NPK (nitrogen, phosphorus, potassium) levels, and other relevant metrics, a fertilizer chamber 114, storing different types of fertilizers and release them automatically as required, a built-in water storage compartment 110 to collect water from external sources and stores it for regulated use, a series of conduits with nozzles, ensure that water and nutrients are delivered accurately, a 360-degree rotated artificial intelligence (AI) enabled camera 104, monitors plant health, growth, and environmental conditions, a motorized scissor 115, trims excess stems and branches of plant, a movable shade 120 regulates sunlight exposure based on plant's requirements.

No. of Pages : 29 No. of Claims : 10