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## (54) Title of the invention : SHIFT TREADS BASED DYNAMIC STAIRCASE (71)Name of Applicant : 1)Chitkara University Address of Applicant : Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----2)Chitkara Innovation Incubator Foundation Name of Applicant : NA Address of Applicant : NA :H02K0007116000, B61C0017120000, (51) International (72)Name of Inventor : B60C0001000000, H04L0067560000, classification 1)Rajwinder Kaur H04M0001724000 Address of Applicant : Chitkara College Of Pharmacy, Chitkara (86) International :NA University, Chandigarh-Patiala National Highway, Village Application No Jhansla, Rajpura, Punjab - 140401, India Rajpura ------:NA Filing Date ---(87) International : NA 2)Madhay Khurana Publication No Address of Applicant : Chitkara College Of Pharmacy, Chitkara (61) Patent of Addition :NA to Application Number :NA University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ------Filing Date (62) Divisional to :NA 3)Thakur Gurjeet Singh Application Number Address of Applicant : Chitkara College Of Pharmacy, Chitkara :NA Filing Date University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ------4)Chanpreet Singh

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## (57) Abstract :

ABSTRACT Shift Tread Based Dynamic Staircase The present disclosure introduces Shift Tread Based Dynamic Staircase to novel approach to staircase design, prioritizing safety, adaptability, and user experience. It comprises of treads 102, DC geared motor 104, flexible couplings 106, motor driver 108, controller 110, limit switch 112, camera 114 and wall stopper 116. Enabled by dynamically adjustable treads 102 which are controlled by a sophisticated system of components, the system seamlessly adjusts the stairs' inclination based on detected activity. REFERENCE FIG 1

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