(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/11/2023

(21) Application No.202311074867 A
(43) Publication Date : 01/12/2023

(54) Title of the invention : LEG EXERCISE TRAINING DEVICE FOR PHYSICALLY-IMPAIRED USER

(51) International classification :A63B0023040000, A63B0069000000, B62K0003000000, A61H0001020000, A63B0021000000
(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)Noida Institute of Engineering and Technology, Greater Noida
Address of Applicant :Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Vivek Ranjan
Address of Applicant :Department of Computer Science and Engineering, Noida Institute of Engineering and Technology, Greater Noida, Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida ---------- ----------
2)Amita Shukla
Address of Applicant :Department of Computer Science and Business System, Noida Institute of Engineering and Technology, Greater Noida, Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida ---------- ----------
3)Alisha Sikri
Address of Applicant :Department of Artificial Intelligence and Machine Learning, Noida Institute of Engineering and Technology, Greater Noida, Plot No. -19, Knowledge Park-II, Institutional Area, Greater Noida, Uttar Pradesh-201306, India. Greater Noida ---------- ----------

(57) Abstract :
A leg exercise training device for physically-impaired user comprises of a platform 1 developed to be positioned on a fixed surface, a camera 4 mounted on the platform 1 for detecting the user's leg on the ball 3, a suction cup 5 mounted on the ball 3 for adhering the user's leg on the ball 3 as a means of facilitating the user to drag the ball 3 along the slot 2 for performing the leg exercise, multiple bearing 6 configured within the slot 2 to rotate for translating the ball 3 along the slot 2 in view of aiding the user in the processes of dragging the ball 3, a pair of L-shaped telescopic clamp 7 configured on the platform 1 for gripping the waist portion of the user, a LED (Light Emitting Diode) light 9 installed on the platform 1 for illuminating to notify user regarding the performance.

No. of Pages : 13 No. of Claims : 7