

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311086966 A

(19) INDIA

(22) Date of filing of Application :19/12/2023

(43) Publication Date : 19/01/2024

(54) Title of the invention : MOUNTABLE CAR ROOF ACCESSING ASSISTIVE DEVICE

(51) International classification :B60R0009042000, B60J0007020000, E05F0015730000, G01B0011060000, A61H0001020000

(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)Somit Pratap Singh

Address of Applicant :Department of Mechanical 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)Rakesh Kumar Singh

Address of Applicant :Department of Mechanical 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 -----

3)Ajay Kumar

Address of Applicant :Department of Mechanical 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 -----

4)Pulkit Srivastava

Address of Applicant :Department of Mechanical 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 -----

(57) Abstract :

A mountable car roof accessing assistive device, comprises of a platform 1 configured with a C-shaped member 2 engaged with a car door striker, a laser sensor configured on member 2 to detect dimensions of striker, a motorized hinge 3 configured between platform 1 and member 2 to tilt the member 2, multiple electromagnets 4 to adhere platform 1 with body of car, a pair of plates 5 accessed by a user to accommodate on the plates 5 for accessing the roof of car, a weight sensor to detect presence of user's foot on the plates 5, a camera to detect height of the user and a motorized slider 7 configured between the plates 5 and platform 1 to translate the plates 5 upwards/downwards for allowing the user to access the roof of car comfortably.

No. of Pages : 14 No. of Claims : 5