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(57) Abstract :
An adjustable wheelchair de-boarding assistive device for public vehicles, comprising a frame 1 installed in proximity to door of a public vehicle, a pair of vertical rods 2 for supporting frame 1 on vehicle, two pair of rungs 3 accessed by multiple users for boarding/de-boarding from vehicle, an artificial intelligence-based imaging unit 4 detects presence of a wheelchair in proximity to frame 1, an ultrasonic sensor monitoring distance of wheelchair from frame 1 and a user is required to position wheelchair on upper rung, two motorized clamping units 5 to grip on wheels of wheelchair, two motorized hinge joints 6 for establishing a ramp-like structure and motorized sliding units 7 translate rungs 3 in a downward direction for lower structure upto surface, an extendable flap 9 preventing slipping of wheelchair from structure which is retracted for allowing wheelchair to get de-boarded from vehicle.

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