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(57) Abstract:

A climbing assistive device, comprising a cuboidal body 1 configured with multiple suction cups 4 for fixing with landing portion 2, an artificial intelligence-based imaging unit 5 attached on body 1 for capturing and detecting presence of user, a pair of L-shaped telescopic rods 7 attached with multiple plates 6 for withdrawing plates 6, a motorized slider attached between plates 6 for positioning plates 6 over stair-case 3, a platform 8 attached with upper-most plate 9 for standing the user, a motorized sliding arrangement 10 attached with platform 8 to provide movement over an auxiliary sliding rail, a pair of L-shaped telescopic bars 11 attached with a gripping unit 12 for gripping wheel-chair, a handle 13 installed with platform 8 provides grip to user, and a FBG (Fiber Bragg Grating) sensor installed on handle 13 for detecting vital parameters of user.

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