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(57) Abstract :

A staircase ascending aid device for elderly, comprising a first and second platform 2 interconnected with each other via plurality of electromagnetic springs 3, a handle 4 is installed over first platform 1 via an L-shaped telescopically operated rod 5 which is gripped by user, a camera 6 mounted on rod 5 for decoding the height of the user and accordingly the rod 5 is extended/retracted as per height of user for adjusting the height of handle 4, a laser sensor mapped on handle 4 for detecting dimension of the user's hand, a motorized roller 7 wrapped with a strap for tightening/loosening the strap, an angle sensor mapped on first platform 1 for detecting angle of first platform 1 with respect to second platform 2 and based on detected angle the springs 3 expands/retracts for maintaining the proper angle of first platform 1.

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