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(57) Abstract:

A mobile crop cultivation device includes a housing 1 installed with multiple omnidirectional wheels 2 which provide motion to housing 1, a primary chamber 3 installed with a motorized sliding lid 4 attached for storing soil, an ultrasonic sensor 5 installed for monitoring amount of soil dispensed, a telescopic spade 6 attached at top portion of housing 1 via motorized guiding rack 7 to spread dispensed soil by means of an AI image capturing module 8, a secondary chamber 9 and a container 10 mounted at top portion for storing seedlings and water, a motorized flap 11 and an ECV 12 pivoted to secondary chamber 9 allows passage of seedlings and water, a pair of telescopic gripper 13 attached for mixing soil, a color sensor 14 installed for detecting color of leaves of seedlings, a vessel 15 installed with baffle plate placed in housing 1 to transfer gripped crop inside it.

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