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United States Patent [19]

Spelt

[11] Patent Number: 6,161,329**[45] Date of Patent: Dec. 19, 2000****[54] AUTOMATIC WATERING DEVICE FOR POTTED PLANTS**

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Related U.S. Application Data

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[51] **Int. Cl.⁷** **A01G 9/02**; A47G 7/02

[52] **U.S. Cl.** **47/67**; 47/79; 141/83;
141/201

[58] **Field of Search** 47/67, 79; 141/201,
141/83

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[57]**ABSTRACT**

An improved watering device is provided for automatically watering one or more potted plants with a predetermined volume or quantity of water, in response to the weight of the potted plant which indicates the moisture content of the plant soil. The watering device comprises a plant carrier for movably suspending the potted plant from a hanger assembly, with a main spring reacting between the plant carrier and hanger assembly for controlling the vertical position of the plant carrier in response to the weight of the potted plant. Upon upward displacement of the carrier as the plant soil dries, an adjustably set and spring-loaded pin engages and operates a control member such as an electrical switch for opening a water flow valve to deliver water to the potted plant, whereupon the carrier translates downwardly as water is added to the plant soil ultimately to result in sufficient disengagement with the control member to close the water flow valve and halt water flow to the potted plant. In an alternative form, the control member may comprise the water flow valve. In either case, adjustment of actuator pin position and the spring force applied thereto permits relatively simple selection of specific weight-responsive set points for turning the water flow on and off.

21 Claims, 4 Drawing Sheets