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(54) **APPARATUS FOR DEPLOYING AND RETRIEVING WATER SAMPLER**

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(58) **Field of Classification Search** 254/275, 254/325, 334, 362, 378

See application file for complete search history.

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(57) **ABSTRACT**

An apparatus includes a bi-directional DC motor; a gear reducer connected to the DC motor; a pulley mounted on an output of the gear reducer; an anti-back drive brake mounted on the output of the gear reducer; a reel wound with cable; a second pulley attached to the reel wound with cable; a belt for connecting the pulley and the second pulley; a water measuring device attached to an end of the cable wound on the reel; at least one shaft encoder attached to the motor for measuring the speed and direction of the motor; a DC power source connected to the DC motor; a microprocessor control electronics module connected to the at least one shaft encoder and the DC motor; and a remote control in communication with the microprocessor control electronics module.

6 Claims, 5 Drawing Sheets

