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Hale et al.

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[54] **METHOD AND APPARATUS FOR REMOTE MONITORING OF VALVES AND VALVE OPERATORS**

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Related U.S. Application Data

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[58] Field of Search .... 73/168, 862.27, 862.28, 73/862.31, 862.32; 137/551; 324/127, 142, 158 MG; 318/729; 251/129.11, 129.12; 364/550, 551

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[57] **ABSTRACT**

A method and apparatus for providing a previously unattainable yet desirable function of monitoring, at a remote location and/or in a remote (non-intrusive) manner, the condition of a valve operator to signal a need for more thorough inspection and for possible maintenance of the valve or valve operator; the method and apparatus including the relating of output power (motor load) of the valve operator motor to the valve operator stem load, setting up a threshold value for the power parameter based on a maximum allowable operator thrust depletion; and periodically monitoring actual power parameter values at a remote location for comparison to the threshold value.

29 Claims, 13 Drawing Sheets