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(54) Title: VALVE, ACTUATOR AND CONTROL SYSTEM THEREFOR

(57) Abstract: A valve actuator comprising a lower housing comprising a mounting spool that is operable to couple to a valve body. A rotating sleeve is disposed within the lower housing and coupled to a stem connector. A fixed sleeve is disposed within the lower housing and includes a first slot disposed therethrough. A second slot is disposed in the rotating sleeve, wherein at least one of the slots is a helical slot. An axle engages both the first slot and the second slot. A shaft is coupled to the axle and extends through a connector flange that is coupled to an upper end of the lower housing. A piston is coupled to the shaft and movably disposed within an upper housing that is coupled to the connector flange. Axial movement of the piston within the upper housing will result in rotational movement of the rotating sleeve.

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