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(54) Title: CATALYST CONTROL AND WITHDRAWAL VALVE WITH TIGHT SHUTOFF CAPABILITY

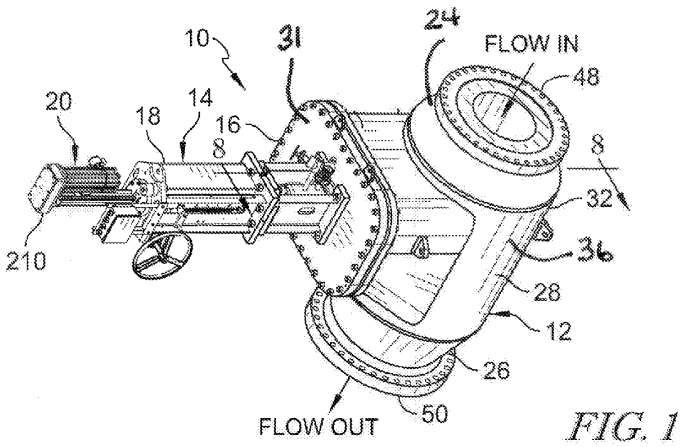


FIG. 1

(57) Abstract: A slide valve having a valve disc that is slidably movable between a fully-retracted fully-open position and a fully-extended fully-closed tight shutoff position by an actuating stem. The actuating stem is flexibly coupled to the valve disc. The valve disc is selectively modulated between the fully-extended fully-closed tight shutoff position and a partially-retracted non-tight shutoff position to prevent sticking of the valve disc in the fully-extended fully-closed tight shutoff position.

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