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(54) Title: BUTTERFLY VALVE

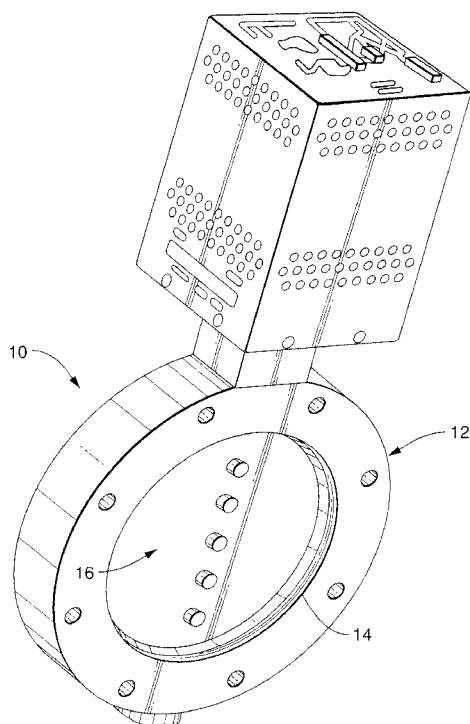


FIG. 1

(57) Abstract: A butterfly valve comprises: a body (12) including a valve opening (14); and a flapper (16) rotatably mounted about a rotation axis (22) so as to be movable relative to the valve opening. The flapper is rotatable at least 180° about the rotation axis so that the flapper is movable to at least one fully opened position, at least one fully closed position 90° apart from the fully opened position, and a third position, either fully opened or fully closed, 180° from the other like position.. In one embodiment the flapper is rotatable at least 360° about the rotation axis so that the flapper is movable to each of two opened positions 180° apart, and two closed positions 180° apart from each other and 90° and 270° apart from each of the fully opened positions. The valve can be easily calibrated and controlled, and cleaned to extend the useful service life between cleanings.



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