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(54) **Title**: AUTONOMUS FLUID CONTROL DEVICE HAVING A MOVABLE VALVE PLATE FOR DOWNHOLE FLUID SELECTION

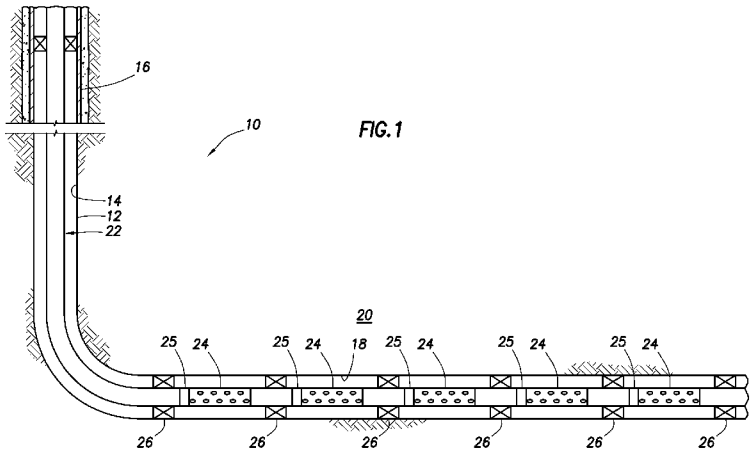


FIG. 1

(57) **Abstract**: An apparatus and method are described for autonomously controlling flow of fluid in a subterranean well, where fluid flow is controlled based on a fluid characteristic, such as viscosity or density, which changes over time. Fluid flows into a vortex assembly where a centrifugal force is imparted to the fluid. A less viscous fluid will have a relatively greater velocity and centrifugal force than a more viscous fluid. The fluid exits the vortex chamber by both a vortex outlet and a peripheral outlet. An autonomous valve element moves between an open position, in which fluid flows freely through the peripheral outlet, and a closed position, in which fluid flow through the peripheral outlet is restricted. The valve element is moved by the centrifugal force of the fluid, such that a fluid having a higher centrifugal force moves the valve element to the closed position, thereby reducing the total fluid flow through the vortex assembly.