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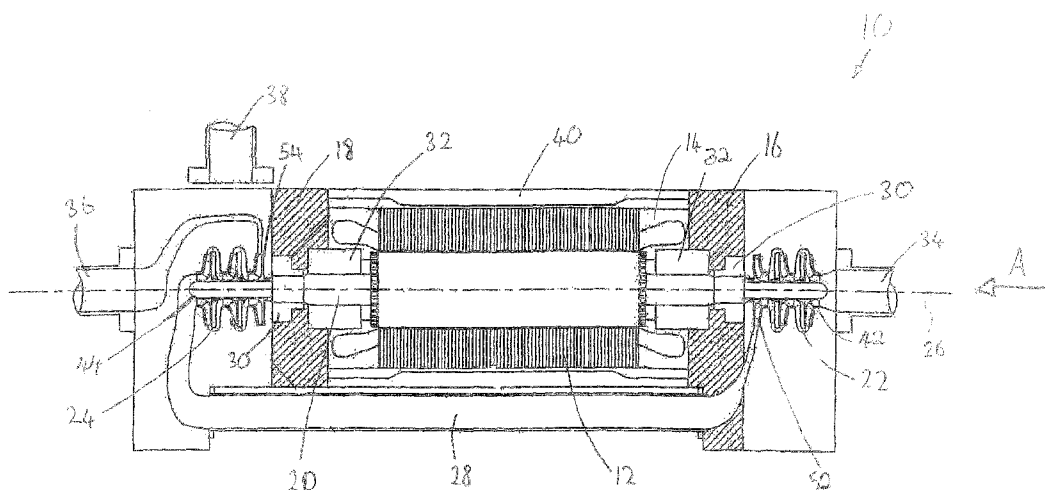
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(54) Title: ROTODYNAMIC FLUID MACHINE



(57) Abstract: A rotodynamic fluid machine comprising a motor arranged for directly driving a shaft, a pressurised motor housing having end walls through which the shaft passes via dry gas seals to enclose the motor, means for maintaining the pressure within the motor housing which pressure is different from the pressure outside the motor housing, a first impeller directly connected to one end of the motor driven shaft, arranged to move process fluid from an inlet to an outlet in a first direction relative to the shaft axis, a second impeller directly connected to the opposite end of the shaft, arranged to move process fluid from a second inlet to a second outlet in an opposite direction to the first direction relative to the shaft axis such that suction is created at both ends of the shaft, and a process fluid conduit connecting the first outlet to the second inlet.