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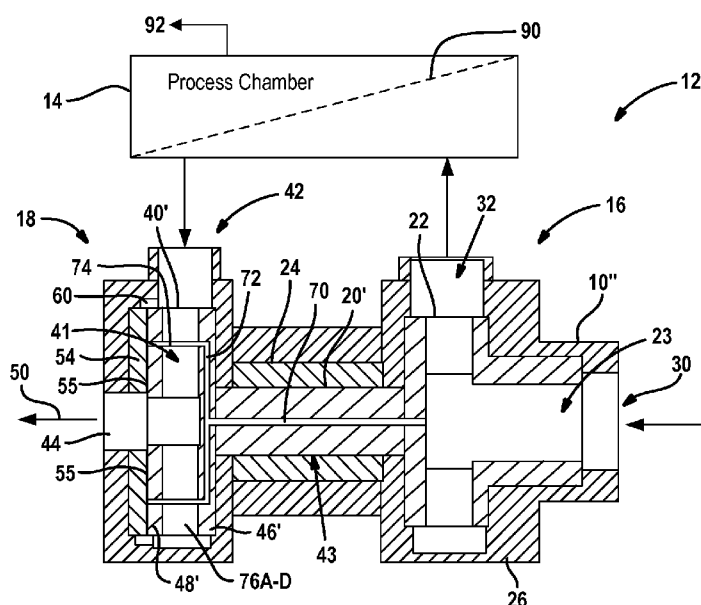
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(54) Title: METHOD AND APPARATUS FOR LUBRICATING A THRUST BEARING FOR A ROTATING MACHINE USING PUMPAGE

**FIG. 3**

(57) Abstract: A fluid machine and method of operating the same includes a pump portion (16) having a pump impeller chamber (23), a pump inlet (30) and a pump outlet (32) and a turbine portion (18) having a turbine impeller chamber (41), a turbine inlet (42) and a turbine outlet (44). A shaft (20) extends between the pump impeller chamber and the turbine impeller chamber. The shaft has a shaft passage (70) therethrough. A turbine impeller (40) is coupled to the impeller end of the shaft disposed within the impeller chamber. The turbine impeller has vanes (76 A-D) at least one of which comprises a vane passage (74) therethrough. A thrust bearing (54) is in fluid communication with said vane passage.