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(54) Cartridge style binary vane pump

(57) A binary vane pump is provided. The binary vane pump includes a pressure plate (50) having a first discharge port (52), a thrust plate (60) having a second discharge port (66), a ring (30) positioned axially between the pressure plate (50) and thrust plate (60), the ring (30) having an inner cam surface (34), and a rotor (40) rotatably disposed within the ring (30), the rotor (40) having a plurality of slots (44) and a plurality of vanes (46), the vanes (46) of the plurality of vanes corresponding to respective slots (44) of the plurality of slots (44) and are radially movable with the respective slots (44). A first and second pump chamber (37,38) are disposed within the ring (30), separated by the rotor (40), vanes (46), pressure plate (50) and thrust plate (60), the first pump chamber (37) configured to discharge fluid to the first discharge port (52) and the second pump chamber (38) configured to discharge fluid to the second discharge port (66). A shaft (42) extends through the pressure plate (50), thrust plate (60), ring (30) and rotor (40) and drives the rotor (40).

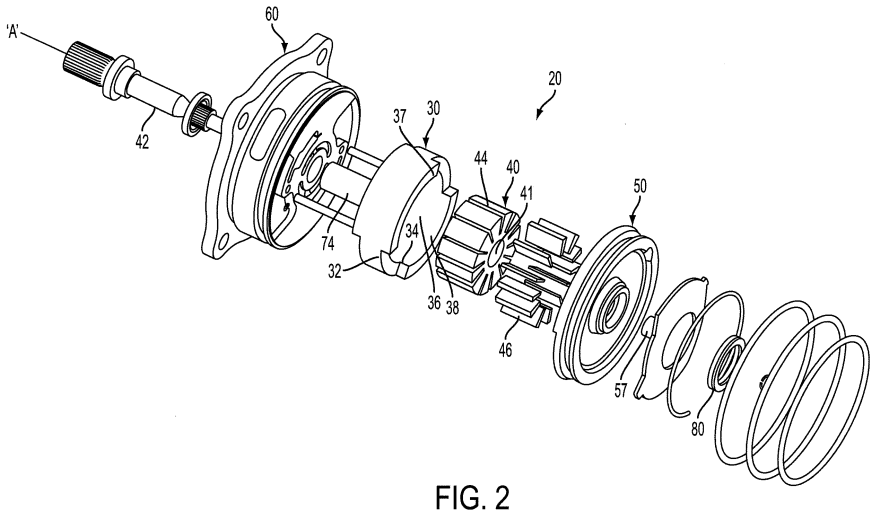

FIG. 2

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EUROPEAN SEARCH REPORT

Application Number
EP 12 18 7369

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
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CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82