Title (en)

ROTARY DISPLACEMENT PUMP

Title (de)

ROTATIONSVERDRÄNGERPUMPE

Title (fr)

POMPE VOLUMETRIQUE ROTATIVE

Publication

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Application

EP 97925979 A 19970604

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Abstract (en)

[origin: US6030190A] PCT No. PCT/EP97/02871 Sec. 371 Date Feb. 4, 1998 Sec. 102(e) Date Feb. 4, 1998 PCT Filed Jun. 4, 1997 PCT Pub. No. WO97/46808 PCT Pub. Date Dec. 11, 1997A rotary displacement pump has a stator having a base plate and two clamping plates. The base plate is clamped between the two clamping plates. A first clamping plate forms an outer wall of the pump. The base plate has an annular surface extending over a part circle or a full circle. An inlet opens into the annular surface and an outlet extends away from the annular surface. A diaphragm spans the annular surface and has edges tightly clamped to the base plate by a second one of the clamping plates. A driven rotor is arranged above the annular surface and rotates about the axis of the annular surface. The rotor has a plurality of rollers positioned at a regular spacing along the annular surface above the base plate. The rollers are freely rotatably supported in a common support. A circumferential arrangement of individually moveable pressure transmitting members is provided. The rollers are positioned at a back side of the pressure transmitting members and act thereon to press the diaphragm sequentially locally against the annular surface so that the diaphragm interrupts the path from the inlet to the outlet. An adjusting device for adjusting the pumping pressure and pumping output of the pump is arranged at a side of the second clamping plate facing away from the first clamping plate.

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