

Title (en)

Rotary piston pump with magnetic retaining means

Title (de)

Drehkolbenpumpe mit magnetischer Rotorhalterung

Title (fr)

Pompe à piston rotatif avec des moyens de retenue magnétiques

Publication

**EP 0799998 A1 19971008 (DE)**

Application

**EP 97104154 A 19970312**

Priority

DE 19613148 A 19960403

Abstract (en)

The pump has at least one rotor (10), rotating in a pump chamber (1), and pushed onto the end (9) of a drive shaft (8). The rotor, or a part connected to it, is maintained in its axial position by a magnetic force. The force presses the rotor or part against a stop (14), which prevents movement of the rotor on the shaft in an axial direction. The magnetic force is generated by one or more permanent magnets, or solenoids, acting on ferritic iron or another magnet. One magnet (15) is positioned in the front housing wall (3), another magnet (16) is positioned in the front end face of the rotary piston facing it. The magnets have opposite poles.

Abstract (de)

Drehkolbenpumpe mit zwei in einer Pumpenkammer 1 drehenden Rotoren 10, die auf ein in die Pumpenkammer 1 ragendes Ende 9 einer Antriebswelle 8 aufschiebbar sind und die von einer magnetischen Kraft in ihrer axialen Lage gehalten werden. <IMAGE>

IPC 1-7

**F04C 15/00**

IPC 8 full level

**F04C 15/00** (2006.01)

CPC (source: EP US)

**F04C 15/0042** (2013.01 - EP US); **F04C 15/0073** (2013.01 - EP US); **F04C 2230/60** (2013.01 - EP US); **F04C 2240/10** (2013.01 - EP US); **F04C 2240/20** (2013.01 - EP US); **Y10S 403/01** (2013.01 - EP US)

Citation (search report)

- [A] EP 0157049 A2 19851009 - SSP PUMPS [GB]
- [A] US 5249940 A 19931005 - MATSUDA MIKIO [JP], et al

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CN111946613A; EP0945621A1; US9500208B2; US9617995B2; WO2013120483A1

Designated contracting state (EPC)

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