

Title (en)

Electromagnetic metering pump with motion and speed control

Title (de)

Bewegungs- und geschwindigkeitsgeregelte Magnetdosierpumpe

Title (fr)

Pompe doseuse électromagnétique avec réglage du mouvement et de la vitesse

Publication

EP 1757809 A1 20070228 (DE)

Application

EP 06119285 A 20060822

Priority

DE 102005039772 A 20050822

Abstract (en)

The pump has a thrust member (20) fixed to a connecting rod (19), where the member is axially movable in a longitudinal axis in a magnet shroud (17). A magnetizing coil magnetizes a magnet in the shroud, for drawing the thrust member and the rod into the shroud against the force of a recuperating spring (23), so as to make an air gap between the member and the shroud small. A control device influences an actual stroke path executed during a forward motion of the thrust member independent of a measured dead region due to the elastic deformation of a diaphragm (13) connected to the rod.

IPC 8 full level

F04B 35/04 (2006.01)

CPC (source: EP US)

F04B 17/042 (2013.01 - EP US); **F04B 43/04** (2013.01 - EP US); **F04B 2201/0201** (2013.01 - EP US); **F04B 2201/0202** (2013.01 - EP US)

Citation (search report)

- [X] WO 0022298 A2 20000420 - LIQUID METRONICS INC [US]
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- [A] DE 1628175 A1 19710708 - PHILIPS NV
- [A] GB 2352890 A 20010207 - HUNTLIGH TECHNOLOGY PLC [GB]
- [A] US 6135724 A 20001024 - YODER PERRY D [US], et al

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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1757809 A1 20070228; EP 1757809 B1 20091209; AT E451552 T1 20091215; DE 102005039772 A1 20070308; DE 502006005564 D1 20100121; ES 2335800 T3 20100405; JP 2007092750 A 20070412; JP 5284572 B2 20130911; PL 1757809 T3 20100430; US 2007040454 A1 20070222; US 8267667 B2 20120918

DOCDB simple family (application)

EP 06119285 A 20060822; AT 06119285 T 20060822; DE 102005039772 A 20050822; DE 502006005564 T 20060822; ES 06119285 T 20060822; JP 2006224085 A 20060821; PL 06119285 T 20060822; US 50716706 A 20060821