

Title (en)
Electromagnetic metering pump with motion and speed control

Title (de)
Bewegungs- und geschwindigkeitsgeregelter Magnetdosierpumpe

Title (fr)
Pompe doseuse électromagnétique avec réglage du mouvement et de la vitesse

Publication
EP 1757809 B1 20091209 (DE)

Application
EP 06119285 A 20060822

Priority
DE 102005039772 A 20050822

Abstract (en)
[origin: EP1757809A1] 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)

Cited by
DE102013109412A1; DE102016113214A1; DE102013109411A1; DE102016117357A1; WO2018015000A1; CN102425553A; CN105492768A; CN105570960A; CH702437A1; EP2725227A1; EP3073112A1; EP2362102A1; CN102762864A; DE102013109410A1; US9382904B2; WO2014063859A1; WO2014159682A1; WO2011101118A1; WO2015028386A1; US10299964B2; US10702418B2; WO2018050525A1; US10143783B2; US11253639B2; US11648342B2; DE102016008781A1; WO2018015285A1; EP2515970A1; US11027051B2; US11534540B2; US11623039B2; US9642955B2; DE102016008783A1; US10130526B2; US10682446B2; US10737002B2; US10780202B2; US10973965B2; US11141325B2; US11333143B2; US11654228B2; EP3039287B1; EP3039288B1; EP3488107B1; EP2167820B1; EP2889481B1; EP2889481B2

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

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

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