

Title (en)

Adjustment valve for adjusting the supply volume of a pressure pump

Title (de)

Verstellventil für die Verstellung des Fördervolumens einer Verdrängerpumpe

Title (fr)

Souape de réglage pour le réglage du volume d'alimentation d'une pompe volumétrique

Publication

**EP 2014919 A3 20100901 (DE)**

Application

**EP 08159994 A 20080709**

Priority

DE 102007033146 A 20070713

Abstract (en)

[origin: EP2014919A2] The valve (20) has a valve housing (21), and a valve piston (22) that is movably supported in the valve housing, where the valve piston exhibits an absorption surface (23) for the valve adjustment pressure of the fluid. A valve spring (25) works along the force that is exerted by the valve adjustment pressure on the valve piston. A magnetic coil (27) and an anchor (28) are provided for adjusting the valve piston in a direction of force that is exerted by the valve adjustment pressure, where the coil and the anchor are elastically adjustable. An independent claim is also included for a displacement pump with an adjustable supply volume.

IPC 8 full level

**F04C 2/18** (2006.01); **F04C 14/18** (2006.01)

CPC (source: EP US)

**F04C 14/185** (2013.01 - EP US); **F04C 14/223** (2013.01 - EP US); **F04C 2210/14** (2013.01 - EP US); **F04C 2270/18** (2013.01 - EP US); **F04C 2270/20** (2013.01 - EP US); **Y10T 137/86622** (2015.04 - EP US); **Y10T 137/86702** (2015.04 - EP US)

Citation (search report)

- [XY] DE 102005029086 A1 20070104 - PORSCHE AG [DE], et al
- [Y] EP 1555436 A2 20050720 - VOLKSWAGEN AG [DE]
- [X] DE 3109045 A1 19820916 - TEVES GMBH ALFRED [DE]
- [X] JP S57131890 A 19820814 - TOKYO KEIKI KK
- [X] DE 10324092 A1 20041216 - VOIGT DIETER [DE]

Cited by

US9678511B2; US10451471B2; EP2836945A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 2014919 A2 20090114**; **EP 2014919 A3 20100901**; **EP 2014919 B1 20170104**; **EP 2014919 B2 20200108**; DE 102007033146 A1 20090115; DE 102007033146 B4 20120202; EP 3173624 A2 20170531; EP 3173624 A3 20170621; EP 3173624 B1 20220126; HU E035833 T2 20180528; JP 2009019773 A 20090129; US 2009041605 A1 20090212; US 8523535 B2 20130903

DOCDB simple family (application)

**EP 08159994 A 20080709**; DE 102007033146 A 20070713; EP 16206318 A 20080709; HU E08159994 A 20080709; JP 2008182053 A 20080711; US 17155908 A 20080711