

Title (en)

VALVE FOR METERING IN FLUID

Title (de)

VENTIL ZUM ZUMESSEN VON FLUID

Title (fr)

SOUPAPE DE DOSAGE DE FLUIDE

Publication

EP 2820291 B1 20161123 (DE)

Application

EP 13701450 A 20130125

Priority

- DE 102012202909 A 20120227
- EP 2013051458 W 20130125

Abstract (en)

[origin: WO2013127580A1] A valve for metering in fluid is specified, which valve has a valve assembly which meters in the fluid and a hydraulic coupler which is assigned to the valve assembly. The coupler has a housing pot with pot bottom, pot wall and pot opening, a piston which is guided axially displaceably in the housing pot, delimits a liquid-filled coupler gap with respect to the pot bottom and delimits an annular gap with respect to the pot wall, and a cap-shaped diaphragm (32) with cap bottom (321) and cap shell (322), which diaphragm (32) covers the annular gap with the cap bottom (321) at the pot opening, engages over the pot wall of the housing pot with the cap shell (322) and is fixed on piston and pot wall in each case in a liquid-tight manner. In order to achieve a sufficiently large volume of the compensation volume which is enclosed between the diaphragm (32) on one side and the piston and housing pot on the other side, which compensation volume is capable of receiving pressurized volumetric changes in the liquid volume in the coupler gap, the cap shell (322) is provided with elastic deformation regions which are formed by curved depressions (39) which follow one another in the circumferential direction, are directed radially inwards and extend axially.

IPC 8 full level

F02M 61/08 (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP US)

F02M 61/08 (2013.01 - EP US); **F02M 61/167** (2013.01 - EP US); **F02M 63/0026** (2013.01 - US); **F02M 2200/705** (2013.01 - EP US);
F02M 2200/707 (2013.01 - EP US)

Designated contracting state (EPC)

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

DOCDB simple family (publication)

DE 102012202909 A1 20130829; CN 104136760 A 20141105; CN 104136760 B 20170412; EP 2820291 A1 20150107;
EP 2820291 B1 20161123; JP 2015507142 A 20150305; JP 5933763 B2 20160615; US 2015014436 A1 20150115; US 9470198 B2 20161018;
WO 2013127580 A1 20130906

DOCDB simple family (application)

DE 102012202909 A 20120227; CN 201380010978 A 20130125; EP 13701450 A 20130125; EP 2013051458 W 20130125;
JP 2014556971 A 20130125; US 201314381005 A 20130125