

Title (en)
VALVE FOR CONTROLLING LIQUIDS

Title (de)
VENTIL ZUM STEUERN VON FLÜSSIGKEITEN

Title (fr)
SOUPAPE SERVANT A DIRIGER DES LIQUIDES

Publication
EP 1276983 A1 20030122 (DE)

Application
EP 01921223 A 20010321

Priority
• DE 0101074 W 20010321
• DE 10019767 A 20000420

Abstract (en)
[origin: WO0181751A1] The invention relates to a valve for controlling liquids, comprising a piezoelectric unit (3) for actuating a valve member (2) displaceably disposed in the bore (8) of a valve body (9) with at least one adjusting piston (7) and at least one actuating piston (10) for actuating a valve-closing member (9). A hydraulic compartment (11) is provided between the adjusting piston (7) and the actuating piston (10) and functions as a hydraulic coupler. The actuating piston (10) limits the hydraulic compartment (11) and is displaceably mounted in a blind bore (12) of the adjusting piston (7) that is open in the direction of the valve seat. A cross-sectional area (A0) of the adjusting piston (7) neighboring the hydraulic compartment (11) and a smaller cross-sectional area (A1) of the actuating piston (10) and a cross-sectional area (A2) of at least one reducing element (14) determine a translation for the travel of the actuating piston (10) while the at least one reducing element (14) is supported by a stop (15) in the bore (8).

IPC 1-7
F02M 47/02; **F02M 59/46**

IPC 8 full level
F02M 47/00 (2006.01); **F02M 47/02** (2006.01); **F02M 51/06** (2006.01); **F02M 59/46** (2006.01)

CPC (source: EP US)
F02M 47/025 (2013.01 - EP US); **F02M 47/027** (2013.01 - EP US); **F02M 61/167** (2013.01 - EP US); **F02M 63/0026** (2013.01 - EP US); **F02M 2200/704** (2013.01 - EP US)

Citation (search report)
See references of WO 0181751A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0181751 A1 20011101; AT E299239 T1 20050715; CZ 20014520 A3 20030312; DE 10019767 A1 20011031; DE 50106694 D1 20050811; EP 1276983 A1 20030122; EP 1276983 B1 20050706; JP 2003532000 A 20031028; US 2003098429 A1 20030529; US 6651950 B2 20031125

DOCDB simple family (application)
DE 0101074 W 20010321; AT 01921223 T 20010321; CZ 20014520 A 20010321; DE 10019767 A 20000420; DE 50106694 T 20010321; EP 01921223 A 20010321; JP 2001578809 A 20010321; US 1865502 A 20020311