

Title (en)
VALVE FOR CONTROLLING LIQUIDS

Title (de)
VENTIL ZUM STEUERN VON FLÜSSIGKEITEN

Title (fr)
SOUPAPE DESTINEE A COMMANDER DES LIQUIDES

Publication
EP 1135595 B1 20041215 (DE)

Application
EP 00975772 A 20000916

Priority
• DE 0003226 W 20000916
• DE 19946841 A 19990930

Abstract (en)
[origin: WO0123745A1] The invention relates to a valve for controlling liquids, comprising a valve member (2) which can be axially displaced in a bore (7) of a valve body (6) and which has a valve-closing member (8) at one end. Said valve-closing member interacts with a seat (9, 10) that is provided on the valve body (6) for opening and closing the valve (1). The inventive valve also comprises a piezoelectric unit (3) for actuating the valve member (2) and a tolerance compensating element (22) for compensating the extension tolerances of the piezoelectric unit (3). The movement of the piezoelectric unit (3) can be transferred to the valve member (2) through a deviating element (20), said piezoelectric unit (3) being located substantially within a longitudinal extension of the deviating element (20) in the direction of motion of the valve member (2), with its piezo head (17) turned towards said valve member, and being connected to the same by the tolerance compensation element (22). The latter is situated parallel to the piezoelectric unit (3) and has the same type of tolerance-related length-varying behaviour.

IPC 1-7
F02M 45/04; **F02M 47/02**; **F02M 59/46**

IPC 8 full level
F02M 47/00 (2006.01); **F02M 45/04** (2006.01); **F02M 47/02** (2006.01); **F02M 51/00** (2006.01); **F02M 59/46** (2006.01); **F02M 61/16** (2006.01); **F02M 61/20** (2006.01); **H02N 2/04** (2006.01)

CPC (source: EP US)
F02M 47/027 (2013.01 - EP US); **F02M 63/0026** (2013.01 - EP US); **F02M 2200/703** (2013.01 - EP US)

Cited by
CN102979941A

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

DOCDB simple family (publication)
WO 0123745 A1 20010405; AT E285034 T1 20050115; CZ 20011878 A3 20020313; CZ 295448 B6 20050817; DE 19946841 A1 20010503; DE 50008956 D1 20050120; EP 1135595 A1 20010926; EP 1135595 B1 20041215; JP 2003510508 A 20030318; KR 100806058 B1 20080221; KR 20010101058 A 20011114; US 6454239 B1 20020924

DOCDB simple family (application)
DE 0003226 W 20000916; AT 00975772 T 20000916; CZ 20011878 A 20000916; DE 19946841 A 19990930; DE 50008956 T 20000916; EP 00975772 A 20000916; JP 2001527103 A 20000916; KR 20017006489 A 20010524; US 85679201 A 20010524