

Title (en)  
VALVE FOR CONTROLLING A LIQUID

Title (de)  
VENTIL ZUM STEUERN VON FLÜSSIGKEITEN

Title (fr)  
SOUPAPE POUR COMMANDER LE PASSAGE DE LIQUIDES

Publication  
**EP 1135602 A1 20010926 (DE)**

Application  
**EP 00965829 A 20000909**

Priority  
• DE 0003065 W 20000909  
• DE 19946827 A 19990930

Abstract (en)  
[origin: WO0123754A1] The invention relates to a valve for controlling liquids comprising a piezoelectric unit (3) for operating a valve member (2) which can be displaced in a bore (8) of a valve body (9) having at least one positioning cylinder (7) and at least one operating cylinder (10) in order to operate a valve closing member (13). A hydraulic chamber (11) operating as a hydraulic coupler is positioned between the positioning cylinder (7) and an actuation cylinder (10), whereby a graduated translation is provided in such a way that the actuation cylinder (10) and the surrounding a casing (14), can be moved along a first partial length of its maximum extension. A first cross-sectional surface area (A1) of the actuation cylinder (10) bordering on the hydraulic chamber (10) and a cross-sectional surface area (A3) pertaining to the casing (14) when combined make up no more than the cross-sectional surface area (A0) of the positioning cylinder (7). A limit stop (34) located in the bore (8) is provided for said casing (14) in the valve seat direction. When the limit stop (34) is reached by said actuation cylinder (10), one last stroke is performed.

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

IPC 8 full level  
**F02M 51/06** (2006.01); **F02M 47/00** (2006.01); **F02M 47/02** (2006.01); **F02M 59/46** (2006.01); **F02M 63/00** (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)

Citation (search report)  
See references of WO 0123754A1

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 0123754 A1 20010405**; CZ 20011877 A3 20020313; DE 19946827 C1 20010621; EP 1135602 A1 20010926; JP 2003510517 A 20030318; KR 20010080619 A 20010822; US 6457699 B1 20021001

DOCDB simple family (application)  
**DE 0003065 W 20000909**; CZ 20011877 A 20000909; DE 19946827 A 19990930; EP 00965829 A 20000909; JP 2001527112 A 20000909; KR 20017006678 A 20010529; US 83122601 A 20010508