

Title (en)

VALVE FOR CONTROLLING LIQUIDS

Title (de)

VENTIL ZUM STEUERN VON FLÜSSIGKEITEN

Title (fr)

SOUPAPE POUR COMMANDER LE PASSAGE DE LIQUIDES

Publication

EP 1440237 A1 20040728 (DE)

Application

EP 02754530 A 20020816

Priority

- DE 0203005 W 20020816
- DE 10151688 A 20011019

Abstract (en)

[origin: US6899069B2] A valve for controlling fluids, in particular in an injection valve of an internal combustion engine, including a valve housing (20), in which housing a system region (21) is embodied, in which region a piezoelectric actuator module (22) and a hydraulic coupler module (23) are disposed, which has both an adjusting piston (24), on which the actuator module (22) acts, and an actuating piston (30) that is operatively connected via a hydraulic chamber (29) to the adjusting piston (24) and that is connected to a valve closing member (31) cooperating with a valve seat (37), and the adjusting piston (24) and the actuating piston (30) define the hydraulic chamber (29), and a system pressure for refilling the hydraulic chamber (29) prevails in the system region (21), from which a diversion conduit (38) branches off. The system region (21) is acted upon by a fluid via the diversion conduit (38).

IPC 1-7

F02M 59/46; F02M 63/02

IPC 8 full level

F02M 51/06 (2006.01); **F02M 47/02** (2006.01); **F02M 59/46** (2006.01); **F02M 61/16** (2006.01); **F02M 63/00** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP US)

F01L 9/24 (2021.01 - EP); **F02M 47/027** (2013.01 - EP US); **F02M 55/002** (2013.01 - EP US); **F02M 61/167** (2013.01 - EP US);
F02M 63/0026 (2013.01 - EP US); **F01L 9/24** (2021.01 - US); **F02M 63/0225** (2013.01 - EP US); **F02M 2200/28** (2013.01 - EP US);
F02M 2200/703 (2013.01 - EP US)

Cited by

DE102008001743A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03038269 A1 20030508; AT E310162 T1 20051215; DE 10151688 A1 20030430; DE 50204975 D1 20051222; EP 1440237 A1 20040728;
EP 1440237 B1 20051116; JP 2005507053 A 20050310; US 2004154562 A1 20040812; US 6899069 B2 20050531

DOCDB simple family (application)

DE 0203005 W 20020816; AT 02754530 T 20020816; DE 10151688 A 20011019; DE 50204975 T 20020816; EP 02754530 A 20020816;
JP 2003540516 A 20020816; US 45082204 A 20040126