

Title (en)

Fluid control valve

Title (de)

Ventil zum Steuern von Flüssigkeiten

Title (fr)

Soupape de commande de fluides

Publication

EP 1079101 A3 20030305 (DE)

Application

EP 00115980 A 20000726

Priority

DE 19939476 A 19990820

Abstract (en)

[origin: EP1079101A2] The valve has a piezo actuator (4) and a gear mechanism used to operate a valve member (14) in contact with a piston (13). The gear mechanism includes a diaphragm (11) which transmits the stroke of the piezo actuator to the piston of the valve member. The diaphragm may be formed as a flexible beam. The diaphragm may be pivotably mounted on a support or ring bearing. The ring bearing may divide the diaphragm into two lever arms.

IPC 1-7

F02M 59/46; **F02M 57/02**; **F02M 47/02**

IPC 8 full level

F02M 47/02 (2006.01); **F02M 59/46** (2006.01)

CPC (source: EP)

F02M 47/027 (2013.01); **F02M 63/0026** (2013.01); **F02M 2200/701** (2013.01)

Citation (search report)

- [X] EP 0790402 A2 19970820 - ISUZU MOTORS LTD [JP]
- [X] US 4720077 A 19880119 - MINOURA MIKIO [JP], et al
- [E] WO 0052322 A1 20000908 - SIEMENS AG [DE], et al
- [A] DE 19538791 A1 19970424 - DAIMLER BENZ AG [DE]
- [A] DE 4228214 A1 19930401 - SIEMENS AG [DE]
- [A] WO 9815018 A1 19980409 - SIEMENS AG [DE], et al

Cited by

DE102010051742A1; CN115182407A; US7032833B2; WO02093002A1; WO02092993A1; WO03033905A1; EP1473460B1

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)

EP 1079101 A2 20010228; **EP 1079101 A3 20030305**; DE 19939476 A1 20010405; DE 19939476 C2 20030220

DOCDB simple family (application)

EP 00115980 A 20000726; DE 19939476 A 19990820