

Title (en)

FUEL INJECTION VALVE FOR AN INTERNAL COMBUSTION ENGINE

Title (de)

BRENNSTOFF-EINSPIRZVENTIL FÜR BRENNKRAFTMASCHINEN

Title (fr)

SOUPAPE D'INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE

Publication

EP 1618298 A1 20060125 (DE)

Application

EP 04707203 A 20040202

Priority

- EP 2004000929 W 20040202
- DE 10319285 A 20030429

Abstract (en)

[origin: DE10319285B3] The valve needle (22) is spring-loaded (40) toward its closed position and has a conical end (20a) fitting into a conical valve seat (20b). An actuator (24) at its top end has a circular armature (24c) extending between ring-shaped upper (26a) and lower (26b) magnetic coils. The high-pressure fuel supply enters a side channel (12) and passes downward through an annular space (16) toward the injection nozzle.

IPC 1-7

F02M 51/06; F02M 45/08

IPC 8 full level

F02M 45/08 (2006.01); **F02M 51/06** (2006.01)

CPC (source: EP KR US)

F02M 45/08 (2013.01 - EP KR US); **F02M 51/0621** (2013.01 - EP KR US); **F02M 51/0653** (2013.01 - EP KR US);
H01F 2007/1676 (2013.01 - EP KR US)

Citation (search report)

See references of WO 2004097207A1

Cited by

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DOCDB simple family (publication)

DE 10319285 B3 20040923; CN 1780979 A 20060531; DE 502004007492 D1 20080814; EP 1618298 A1 20060125; EP 1618298 B1 20080702;
JP 2006524771 A 20061102; KR 20060021303 A 20060307; US 2007175436 A1 20070802; US 7533834 B2 20090519;
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