

Title (en)
Fuel injection valve

Title (de)
Einspritzventil

Title (fr)
Soupape d'injection

Publication
EP 1571328 A3 20060614 (DE)

Application
EP 05101340 A 20050222

Priority
DE 102004010183 A 20040302

Abstract (en)
[origin: EP1571328A2] An automotive fuel injection valve has an actuator (8) acting on a piston within a detent. The assembly further has a jet needle hydraulically linked via a chamber (18) with the piston. When closed the piston shuts off the fuel supply to the injection jet (24). When open, the fuel advances to the jet (24). The chamber (18) is linked to a high-pressure source on one side by a slit to the piston. A pressure compensation gap (34) is located radially outside the slit and hydraulically linked to the high-pressure supply.

IPC 8 full level
F02M 51/06 (2006.01); **F02M 45/08** (2006.01); **F02M 61/16** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)
F02M 45/086 (2013.01); **F02M 51/0603** (2013.01); **F02M 61/16** (2013.01); **F02M 2200/46** (2013.01); **F02M 2200/703** (2013.01); **F02M 2200/704** (2013.01)

Citation (search report)

- [X] EP 1063415 A2 20001227 - DELPHI TECH INC [US]
- [X] DE 10133265 A1 20030123 - BOSCH GMBH ROBERT [DE]
- [X] DE 10145620 A1 20030424 - BOSCH GMBH ROBERT [DE]
- [PX] WO 2005014995 A1 20050217 - BOSCH GMBH ROBERT [DE], et al
- [PX] WO 2004111433 A1 20041223 - BOSCH GMBH ROBERT [DE], et al
- [E] DE 102004005456 A1 20050825 - BOSCH GMBH ROBERT [DE]
- [PX] EP 1407136 A1 20040414 - BOSCH GMBH ROBERT [DE]
- [PX] DE 10310788 A1 20040923 - BOSCH GMBH ROBERT [DE]
- [E] WO 2005026531 A1 20050324 - SIEMENS AG [DE], et al

Cited by
DE102008000301B4; EP1898083A1; DE102008000511B4; EP1837518A1; US7931211B2; WO2006056522A1; US7690587B2; US7699242B2; JP2007255418A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1571328 A2 20050907; EP 1571328 A3 20060614; DE 102004010183 A1 20050929

DOCDB simple family (application)
EP 05101340 A 20050222; DE 102004010183 A 20040302