

Title (en)  
Fuel injector

Title (de)  
Kraftstoffeinspritzventil

Title (fr)  
Injecteur de combustible

Publication  
**EP 1531258 A3 20061227 (DE)**

Application  
**EP 04105673 A 20041110**

Priority  
DE 10353045 A 20031113

Abstract (en)  
[origin: EP1531258A2] The fuel injection valve (1) has a control chamber (5) bounded by an axially movable operating piston (6), which interacts with an actuator (3), and a control piston (7) with at least one end face (8) and constructed as a part of the nozzle needle (2) and encompassed by the operating piston. The end face at least partially defines the control chamber on one side, through which a deflection of the operating piston in one direction effects a deflection of the nozzle needle in the opposite direction.

IPC 8 full level  
**F02M 47/02** (2006.01); **F02M 51/06** (2006.01); **F02M 45/04** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)  
**F02M 51/0603** (2013.01); **F02M 45/04** (2013.01); **F02M 2200/704** (2013.01)

Citation (search report)

- [X] DE 19519191 A1 19961219 - SIEMENS AG [DE]
- [X] DE 19950760 A1 20010426 - BOSCH GMBH ROBERT [DE]
- [X] US 5697554 A 19971216 - AUWAERTER GERHARD [DE], et al

Cited by  
EP1887213A3; DE102005035671B4; US7946509B2; WO2008017538A1

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

Designated extension state (EPC)  
AL HR LT LV MK YU

DOCDB simple family (publication)  
**EP 1531258 A2 20050518; EP 1531258 A3 20061227; DE 10353045 A1 20050623**

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**EP 04105673 A 20041110; DE 10353045 A 20031113**