

Title (en)

Fuel injector for internal combustion engines

Title (de)

Kraftstoffeinspritzventil für Brennkraftmaschinen

Title (fr)

Injecteur de combustible pour moteurs à combustion interne

Publication

EP 1143136 A3 20030910 (DE)

Application

EP 01105727 A 20010308

Priority

DE 10017657 A 20000408

Abstract (en)

[origin: EP1143136A2] The valve has a valve body (10) with an axially movable injection valve element controlling at least one injection opening, a control valve, a connecting bore (74) and an input bore (70) that intersect at an acute angle in a region that is offset relative to an annular chamber (49) between an insert part and the valve body in a direction of the longitudinal axis (11) of the valve body.

IPC 1-7

F02M 47/02; **F02M 61/16**; **F02M 55/00**

IPC 8 full level

F02M 61/10 (2006.01); **F02M 47/00** (2006.01); **F02M 47/02** (2006.01); **F02M 55/00** (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP US)

F02M 47/027 (2013.01 - EP US); **F02M 61/16** (2013.01 - EP US); **F02M 2547/003** (2013.01 - EP US)

Citation (search report)

- [A] DE 19650865 A1 19980610 - BOSCH GMBH ROBERT [DE]
- [A] EP 0916842 A1 19990519 - ELASIS SISTEMA RICERCA FIAT [IT]
- [A] DE 3839635 A1 19900531 - BOSCH GMBH ROBERT [DE]

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1143136 A2 20011010; **EP 1143136 A3 20030910**; **EP 1143136 B1 20041117**; DE 10017657 A1 20011011; DE 50104514 D1 20041223; JP 2001355544 A 20011226; US 2001054653 A1 20011227; US 6488220 B2 20021203

DOCDB simple family (application)

EP 01105727 A 20010308; DE 10017657 A 20000408; DE 50104514 T 20010308; JP 2001107639 A 20010405; US 82504201 A 20010404