

Title (en)

Fuel injection valve

Title (de)

Brennstoffeinspritzventil

Title (fr)

Souape d'injection de combustible

Publication

**EP 1213474 A3 20040107 (DE)**

Application

**EP 01124664 A 20011016**

Priority

DE 10051896 A 20001019

Abstract (en)

[origin: DE10051896A1] The valve has a closure body (4) with guide journal (31). The journal acts with an aperture (32) in a valve seat body (5), located downstream of the sealing seat, to form an axial guide. A flow-guidance element (33), e.g. a groove, is formed in the guide journal, or in the valve seat body aperture. The groove is formed by grinding or cold-forming. The valve has an injection aperture (7) extending through a jet deflector plat. Guide journal and seat body aperture act to form a hydraulic seal.

IPC 1-7

**F02M 51/06; F02M 61/16; F02M 61/18; F02M 61/12; F02M 61/06**

IPC 8 full level

**F02M 51/06** (2006.01); **F02M 61/06** (2006.01); **F02M 61/12** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP)

**F02M 61/06** (2013.01); **F02M 61/12** (2013.01); **F02M 61/163** (2013.01)

Citation (search report)

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- [X] CH 204340 A 19390430 - SCINTILLA AG [CH]
- [X] GB 676535 A 19520730 - CAV LTD
- [X] JP H01240763 A 19890926 - MITSUBISHI HEAVY IND LTD, et al
- [X] DE 855486 C 19521113 - BOSCH GMBH ROBERT
- [X] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 11 30 September 1998 (1998-09-30)
- [X] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 10 31 October 1996 (1996-10-31)
- [X] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 08 6 October 2000 (2000-10-06)
- [X] PATENT ABSTRACTS OF JAPAN vol. 009, no. 077 (M - 369) 6 April 1985 (1985-04-06)

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)

**DE 10051896 A1 20020502**; EP 1213474 A2 20020612; EP 1213474 A3 20040107; JP 2002138924 A 20020517

DOCDB simple family (application)

**DE 10051896 A 20001019**; EP 01124664 A 20011016; JP 2001322689 A 20011019