

Title (en)
Fuel injection valve

Title (de)
Brennstoffeinspritzventil

Title (fr)
Soupape d'injection de combustible

Publication
EP 1195516 A3 20040102 (DE)

Application
EP 01123836 A 20011005

Priority
DE 10049519 A 20001006

Abstract (en)
[origin: EP1195516A2] The valve has a valve needle guide (31), connected to a valve seat body (5) and containing fuel channels (35). The channels are positioned in several peripheral rows. Number and relative position of the channels have been chosen, so that a characteristic line is adjusted, which represents a dynamic fuel flow through the injection valve dependent upon a valve needle stroke. The needle guide is formed on the intake-sided end face (32) of the valve seat body. This is a hollow cylinder and extends from that end face.

IPC 1-7
F02M 61/18; F02M 61/16; F02M 51/06; F02M 61/12; F02M 45/12

IPC 8 full level
F02M 61/10 (2006.01); **F02M 45/12** (2006.01); **F02M 51/06** (2006.01); **F02M 51/08** (2006.01); **F02M 61/04** (2006.01); **F02M 61/16** (2006.01);
F02M 61/18 (2006.01)

CPC (source: EP)
F02M 45/12 (2013.01); **F02M 51/0671** (2013.01); **F02M 61/162** (2013.01); **F02M 61/18** (2013.01); **F02M 61/188** (2013.01)

Citation (search report)
• [E] WO 0229242 A2 20020411 - BOSCH GMBH ROBERT [DE], et al
• [X] US 5823161 A 19981020 - POTZ DETLEV [DE], et al
• [XY] EP 0789142 A1 19970813 - ISUZU MOTORS LTD [JP]
• [YD] DE 19625059 A1 19980102 - 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 1195516 A2 20020410; EP 1195516 A3 20040102; EP 1195516 B1 20060607; DE 10049519 A1 20020418; DE 10049519 B4 20060112;
DE 50110018 D1 20060720; JP 2002155834 A 20020531

DOCDB simple family (application)
EP 01123836 A 20011005; DE 10049519 A 20001006; DE 50110018 T 20011005; JP 2001312032 A 20011009