

Title (en)
FUEL INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

Publication
EP 1463886 A1 20041006 (DE)

Application
EP 02792620 A 20021129

Priority
• DE 0204385 W 20021129
• DE 10200044 A 20020103

Abstract (en)
[origin: WO03060316A1] The invention relates to a fuel injection valve (1) for directly injecting fuel into the combustion chamber (18) of a mixture-compressing, spark-ignition internal combustion engine. Said fuel injection valve comprises a nozzle body (2) and a sealing ring (15) which seals the fuel injection valve (1) from a cylinder head (11) of the internal combustion engine. An adhesion-reducing coating is provided in an annular gap (14) formed between a wall (13) of the cylinder head (11) and the nozzle body (2) of the fuel injection valve (1).

IPC 1-7
F02M 61/14; **F02M 61/16**; **F02M 51/06**

IPC 8 full level
F02F 1/24 (2006.01); **F02M 51/06** (2006.01); **F02M 61/14** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01); **F02M 69/46** (2006.01)

CPC (source: EP KR US)
F02M 51/0653 (2013.01 - EP KR US); **F02M 61/14** (2013.01 - EP KR US); **F02M 61/16** (2013.01 - EP US); **F02M 61/166** (2013.01 - EP KR US); **F02M 2200/858** (2013.01 - EP KR US)

Citation (search report)
See references of WO 03060316A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT

DOCDB simple family (publication)
WO 03060316 A1 20030724; DE 10200044 A1 20030724; DE 50211577 D1 20080306; EP 1463886 A1 20041006; EP 1463886 B1 20080116; JP 2005515348 A 20050526; KR 20040068608 A 20040731; US 2004124276 A1 20040701

DOCDB simple family (application)
DE 0204385 W 20021129; DE 10200044 A 20020103; DE 50211577 T 20021129; EP 02792620 A 20021129; JP 2003560379 A 20021129; KR 20047010324 A 20021129; US 46945104 A 20040206