

Title (en)  
FUEL INJECTION VALVE

Title (de)  
BRENNSTOFFEINSPRITZVENTIL

Title (fr)  
INJECTEUR DE CARBURANT

Publication  
**EP 2126332 B1 20120926 (DE)**

Application  
**EP 08708598 A 20080201**

Priority  
• EP 2008051293 W 20080201  
• DE 102007008863 A 20070223

Abstract (en)  
[origin: WO2008101791A1] The invention relates to a fuel injection valve for fuel injection systems of internal combustion engines. The fuel injection valve comprises an electromagnetic actuating element having a magnet coil (1), having a core (2) and having a valve jacket (5) as outer magnetic circuit component, and a movable valve closing body (19) which interacts with a valve seat face (16) which is assigned to a valve seat body (15). The core (2) and a connecting tube (44) are connected fixedly in an inner opening (11) of a thin-walled valve sleeve (6) and the valve jacket (5) on the outer circumference of the valve sleeve (6) by being pressed into/onto the valve sleeve (6). The fixed press joint of in each case two of these metallic components (2, 5, 6, 44) of the fuel injection valve is distinguished by the fact that at least one of the component partners has a structure with furrows (61) in its pressing region (a, b, c, a', b', c') and/or the respective pressing region (a, b, c, a', b', c') has a run-in rounded portion (59) in at least one transition to an adjoining component section. In order to reliably enclose abrasion dirt which is produced during pressing in, starting from the pressing region (a, b, c, a', b', c') of one component partner, first of all a depressed region (64) and, following this, a pressing lip (65) which protrudes radially further to the outside adjoin the outer contour of said one component partner.

IPC 8 full level  
**F02M 51/06** (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP US)  
**F02M 51/061** (2013.01 - EP US); **F02M 51/0682** (2013.01 - EP US); **F02M 61/168** (2013.01 - EP US); **F02M 2200/8061** (2013.01 - EP US)

Citation (examination)  
• DE 10349633 A1 20050519 - BOSCH GMBH ROBERT [DE]  
• US 2003141390 A1 20030731 - MATSUO TETSU HARU [JP], et al

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**DE 102007008863 A1 20080828**; CN 101617117 A 20091230; CN 101617117 B 20130619; EP 2126332 A1 20091202;  
EP 2126332 B1 20120926; JP 2010519451 A 20100603; JP 5312350 B2 20131009; US 2011259299 A1 20111027; US 9200604 B2 20151201;  
WO 2008101791 A1 20080828

DOCDB simple family (application)  
**DE 102007008863 A 20070223**; CN 200880005887 A 20080201; EP 08708598 A 20080201; EP 2008051293 W 20080201;  
JP 2009550260 A 20080201; US 30863308 A 20080201