

Title (en)
FUEL INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE COMBUSTIBLE

Publication
EP 1922480 B1 20170517 (DE)

Application
EP 06778090 A 20060801

Priority
• EP 2006064877 W 20060801
• DE 102005040363 A 20050826

Abstract (en)
[origin: WO2007023069A1] 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 with a magnet coil (1), a core (2) and with a valve jacket (5) serving as an outer magnetic circuit component and a moving valve closing body (19), which interacts with a valve seat surface (16) assigned to a valve seat body (15). The core (2) and a connecting tube (44), in an inner opening (11) of a thin-wall valve sleeve (6), and the valve jacket (5), on the outer periphery of the valve sleeve (6), are connected to the valve sleeve (6) in a fixed manner by pressing in/on. The fixed press connection of each of these metallic components (2, 5, 6, 44) of the fuel injection valve is characterized in that at least one of the component partners has, in its press area (a, b, c, a', b', c'), a structure with grooves (61) and/or the respective press area (a, b, c, a', b', c') comprises, in at least one transition to an adjoining component section, an inlet rounding (59).

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

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

Citation (examination)
US 2002030125 A1 20020314 - D ARRIGO ANGELO [US]

Designated contracting state (EPC)
DE FR IT

DOCDB simple family (publication)
DE 102005040363 A1 20070301; **DE 102005040363 B4 20170914**; CN 101248266 A 20080820; EP 1922480 A1 20080521; EP 1922480 B1 20170517; US 2010006068 A1 20100114; US 8272370 B2 20120925; WO 2007023069 A1 20070301

DOCDB simple family (application)
DE 102005040363 A 20050826; CN 200680030956 A 20060801; EP 06778090 A 20060801; EP 2006064877 W 20060801; US 99104706 A 20060801