

Title (en)
FUEL INJECTION VALVE WITH IMPROVED TIGHTNESS ON THE SEALING SEAT OF A PRESSURE-COMPENSATED CONTROL VALVE

Title (de)
KRAFTSTOFFEINSPRITZVENTIL MIT VERBESSERTER DICHTHEIT AM DICHTSITZ EINES DRUCKAUSGEGLICHENEN STEUERVERTILS

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT AVEC UNE ÉTANCHÉITÉ AMÉLIORÉE AU NIVEAU DU SIÈGE D'ÉTANCHÉITÉ D'UNE SOUPAPE DE COMMANDE À PRESSION COMPENSÉE

Publication
EP 2183476 B1 20130327 (DE)

Application
EP 08774899 A 20080709

Priority
• EP 2008058879 W 20080709
• DE 102007035698 A 20070730

Abstract (en)
[origin: WO2009016003A1] A fuel injection valve for internal combustion engines comprises a valve needle (4) that controls the opening of at least one injection opening (5) with the longitudinal movement thereof, a control chamber (17) connected to a high-pressure side (14), wherein the pressure thereof acts on the valve needle (4) at least indirectly, and a control valve (23) having a valve seat (26), which provided radially between a valve chamber (22) on the high-pressure side connected to the control chamber (17) and a valve chamber (24) on the low-pressure side, and having a valve sleeve (25) that can be guided in a displaceable manner and radially delimits the valve chamber (22) on the high-pressure side and interacts with the valve seat (26). According to the invention, the valve sleeve (25) comprises an annular projection (29) radially protruding into the valve chamber (22) on the high pressure side. The projection surface (29a) of said projection facing the valve seat (26) forms a sealing surface interacting with the valve seat (26).

IPC 8 full level
F02M 47/02 (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)
F02M 47/027 (2013.01); **F02M 63/0021** (2013.01); **F02M 63/008** (2013.01); **F02M 63/004** (2013.01)

Cited by
WO2019211021A1

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 102007035698 A1 20090205; CN 101784785 A 20100721; CN 101784785 B 20130821; EP 2183476 A1 20100512; EP 2183476 B1 20130327; JP 2010534790 A 20101111; JP 2012211597 A 20121101; JP 5193299 B2 20130508; JP 5523518 B2 20140618; RU 2010107374 A 20110910; RU 2485343 C2 20130620; WO 2009016003 A1 20090205

DOCDB simple family (application)
DE 102007035698 A 20070730; CN 200880101171 A 20080709; EP 08774899 A 20080709; EP 2008058879 W 20080709; JP 2010518597 A 20080709; JP 2012176153 A 20120808; RU 2010107374 A 20080709