

Title (en)
FUEL INJECTION SYSTEM COMPRISING COMPENSATION ELEMENT

Title (de)
BRENNSTOFF-EINSPRITZANLAGE MIT AUSGLEICHSELEMENT

Title (fr)
SYSTÈME D'INJECTION DE CARBURANT AVEC UN ÉLÉMENT DE COMPENSATION

Publication
EP 2176539 A1 20100421 (DE)

Application
EP 08774247 A 20080624

Priority
• EP 2008057996 W 20080624
• DE 102007035714 A 20070730

Abstract (en)
[origin: US2010186717A1] The present invention relates to a fuel injection system for the direct injection of fuel into a combustion chamber of an internal combustion engine. At least one fuel injection valve is arranged on a cylinder head in a receiving bore in order to inject fuel into the combustion chamber. A fuel distribution line is provided for feeding the fuel to the fuel injection valve. A compensation element for a position compensation and/or tolerance compensation, is arranged in the radial direction between the fuel injection valve and the cylinder head and is arranged in the axial direction of the fuel injection valve between a first sealing element, sealing between the fuel injection valve and the cylinder head on a side facing the combustion chamber of the fuel injection valve, and a second sealing element, sealing between the fuel injection valve and the fuel distribution line. Further provided is a support ring, which is arranged between the fuel injection valve and the cylinder head and which provides support for the fuel injection valve in the axial direction on a step of the receiving bore and which has a clearance in the radial direction.

IPC 8 full level
F02M 61/14 (2006.01); **F02M 55/00** (2006.01)

CPC (source: EP US)
F02M 61/14 (2013.01 - EP US); **F02M 2200/858** (2013.01 - EP US)

Citation (search report)
See references of WO 2009015948A1

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

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
US 2010186717 A1 20100729; US 8353272 B2 20130115; AT E554284 T1 20120515; CN 101784787 A 20100721; CN 101784787 B 20120926; DE 102007035714 A1 20090205; EP 2176539 A1 20100421; EP 2176539 B1 20120418; ES 2381610 T3 20120529; JP 2010534789 A 20101111; JP 5200104 B2 20130515; WO 2009015948 A1 20090205

DOCDB simple family (application)
US 67004808 A 20080624; AT 08774247 T 20080624; CN 200880101174 A 20080624; DE 102007035714 A 20070730; EP 08774247 A 20080624; EP 2008057996 W 20080624; ES 08774247 T 20080624; JP 2010518580 A 20080624