

Title (en)
FUEL INJECTOR WITH A MULTIPART, DIRECTLY CONTROLLED INJECTION VALVE ELEMENT

Title (de)
KRAFTSTOFFINJEKTOR MIT MEHRTEILIGEM, DIREKTGESTEUERTEM EINSPRITZVENTILGLIED

Title (fr)
INJECTEUR DE CARBURANT DOTE D'UN ELEMENT DE SOUPAPE D'INJECTION EN PLUSIEURS PARTIES, EN COMMANDE DIRECTE

Publication
EP 1682769 A1 20060726 (DE)

Application
EP 04786717 A 20040906

Priority

- DE 2004001995 W 20040906
- DE 10348925 A 20031018

Abstract (en)
[origin: US2007204837A1] A fuel injector for a common rail injection system for injecting fuel into a combustion chamber of an internal combustion engine includes an injector body and a nozzle body with an injection valve member embodied in multiple parts received in the nozzle body. A hydraulic booster assembly connected downstream of a piezoelectric actuator. Control chambers are associated with the multi-part injection valve member for actuating it. The hydraulic booster assembly actuated by the piezoelectric actuator has booster chambers, which are each directly connected hydraulically with control chambers that actuate the needle parts of the injection valve member.

IPC 8 full level
F02M 45/08 (2006.01); **F02M 47/02** (2006.01); **F02M 51/06** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP KR US)
F02M 45/086 (2013.01 - EP KR US); **F02M 47/027** (2013.01 - EP KR US); **F02M 51/0603** (2013.01 - EP KR US); **F02M 2200/21** (2013.01 - KR); **F02M 2200/46** (2013.01 - EP KR US); **F02M 2200/703** (2013.01 - EP KR US)

Citation (search report)
See references of WO 2005040595A1

Cited by
CN107940798A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2007204837 A1 20070906; AT E372457 T1 20070915; DE 10348925 A1 20050512; DE 502004004907 D1 20071018; EP 1682769 A1 20060726; EP 1682769 B1 20070905; JP 2007508487 A 20070405; JP 4273153 B2 20090603; KR 20060096049 A 20060905; WO 2005040595 A1 20050506

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