

Title (en)
COMMON RAIL INJECTOR

Title (de)
COMMON-RAIL-INJEKTOR

Title (fr)
INJECTEUR COMMON RAIL

Publication
EP 1740821 A1 20070110 (DE)

Application
EP 05716732 A 20050218

Priority
• EP 2005050715 W 20050218
• DE 102004018931 A 20040420

Abstract (en)
[origin: WO2005103479A1] The invention relates to a common rail injector, having an injector body (1), provided with a fuel inlet (23), communicating with a central high-pressure fuel source, outside the injector body and with a pressure chamber (17), inside said injector body, from which, depending on the pressure in the control chamber (50), high-pressure fuel is injected into a combustion chamber of an internal combustion engine, when an injector needle (8) lifts from its seat (11), whereby the pressure in the control chamber (50) is directly controlled by an actuator (56), in particular, a piezoelectric actuator. The aim of the invention is to create a common rail injector, requiring less installation space than conventional injectors. Said aim is achieved, whereby a reciprocating control chamber limitation sleeve (38) is received in the end of the injector needle (8), away from the combustion chamber, by means of which the face of the injector needle (8), away from the combustion chamber and under the control chamber pressure, is reduced.

IPC 8 full level
F02M 47/02 (2006.01); **F02M 47/06** (2006.01); **F02M 51/06** (2006.01); **F02M 61/20** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP KR US)
F02M 47/027 (2013.01 - EP KR US); **F02M 51/0603** (2013.01 - EP KR US); **F02M 61/205** (2013.01 - EP KR US); **F02M 2200/21** (2013.01 - KR); **F02M 2547/001** (2013.01 - EP KR US)

Citation (search report)
See references of WO 2005103479A1

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

DOCDB simple family (publication)
WO 2005103479 A1 20051103; AT E406516 T1 20080915; CN 100443711 C 20081217; CN 1946931 A 20070411; DE 102004018931 A1 20051117; DE 502005005197 D1 20081009; EP 1740821 A1 20070110; EP 1740821 B1 20080827; KR 20060134166 A 20061227; US 2007215116 A1 20070920

DOCDB simple family (application)
EP 2005050715 W 20050218; AT 05716732 T 20050218; CN 200580012553 A 20050218; DE 102004018931 A 20040420; DE 502005005197 T 20050218; EP 05716732 A 20050218; KR 20067021669 A 20061019; US 58700206 A 20061020