

Title (en)
Common rail injector

Title (de)
Common-Rail-Injektor

Title (fr)
Injecteur à rampe commune

Publication
EP 1772618 B1 20081105 (DE)

Application
EP 06123003 A 20000802

Priority
• EP 00958210 A 20000802
• DE 19936668 A 19990804

Abstract (en)
[origin: US6705551B1] The invention relates to a common rail fuel injector having an injector housing with a fuel inlet in communication with a central high-pressure fuel reservoir outside the injector housing and with a pressure chamber inside the injector housing. A control valve assures that a nozzle needle lifts from a seat when the pressure in the pressure chamber is greater than the pressure in a control chamber that communicates with the fuel inlet via an inlet throttle. The control chamber is defined by a bush that is displaceable, causing a sealing action, on the end of the nozzle needle remote from the combustion chamber and that is kept in contact against the injector housing with the aid of the nozzle spring.

IPC 8 full level
F02M 47/00 (2006.01); **F02M 47/02** (2006.01); **F02M 61/16** (2006.01); **F02M 61/12** (2006.01)

CPC (source: EP KR US)
F02M 47/02 (2013.01 - EP US); **F02M 47/027** (2013.01 - EP KR US); **F02M 61/042** (2013.01 - EP KR US); **F02M 61/12** (2013.01 - KR);
F02M 61/168 (2013.01 - KR); **F02M 61/12** (2013.01 - EP US); **F02M 61/168** (2013.01 - EP US); **F02M 2200/16** (2013.01 - EP KR US);
F02M 2200/28 (2013.01 - EP KR US); **F02M 2547/001** (2013.01 - EP KR US); **F02M 2547/006** (2013.01 - EP KR US)

Cited by
WO2009016004A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
US 6705551 B1 20040316; AT E355455 T1 20060315; AT E413526 T1 20081115; CZ 20011135 A3 20020116; DE 19936668 A1 20010222;
DE 50014113 D1 20070412; DE 50015444 D1 20081218; EP 1117920 A1 20010725; EP 1117920 B1 20070228; EP 1772618 A1 20070411;
EP 1772618 B1 20081105; JP 2003506622 A 20030218; JP 4746230 B2 20110810; KR 20010075570 A 20010809; WO 0111222 A1 20010215

DOCDB simple family (application)
US 80669701 A 20010905; AT 00958210 T 20000802; AT 06123003 T 20000802; CZ 20011135 A 20000802; DE 0002580 W 20000802;
DE 19936668 A 19990804; DE 50014113 T 20000802; DE 50015444 T 20000802; EP 00958210 A 20000802; EP 06123003 A 20000802;
JP 2001515448 A 20000802; KR 20017004243 A 20010403