

Title (en)

INJECTOR FOR HIGH PRESSURE FUEL INJECTION

Title (de)

INJEKTOR ZUR HOCHDRUCKEINSPRITZUNG VON KRAFTSTOFF

Title (fr)

INJECTEUR CONCU POUR UNE INJECTION SOUS HAUTE PRESSION DE CARBURANT

Publication

**EP 1466087 A1 20041013 (DE)**

Application

**EP 02779159 A 20021015**

Priority

- DE 0203882 W 20021015
- DE 10157411 A 20011123

Abstract (en)

[origin: WO03046369A1] The invention relates to an injector for high pressure injection of fuel in auto-igniting internal combustion engines. The injector comprises an actuator valve for opening and closing the injector, an injector needle (17) which seals at least one injection opening (18) when the injector is in a closed state, a metering valve (4) producing a hydraulic connection between the actuator valve and the discharge area (6) of the injector, a pressure maintenance device (33) which is used to maintain the pressure required for the metering valve (4), a first line (20) for control amounts (34) flowing via the actuator valve and a second line (43) for control amounts flowing via the metering valve (4). The pressure maintenance device (33) dynamically separates the control amounts (35) from the metering valve from the control amounts (34) from the actuator valve by means of a hydraulic vibration damper.

IPC 1-7

**F02M 63/00**

IPC 8 full level

**F02M 47/00** (2006.01); **F02M 55/00** (2006.01); **F02M 59/46** (2006.01); **F02M 61/16** (2006.01); **F02M 61/20** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP KR US)

**F02M 55/00** (2013.01 - EP US); **F02M 55/002** (2013.01 - EP US); **F02M 61/205** (2013.01 - EP US); **F02M 63/00** (2013.01 - KR);  
**F02M 63/0003** (2013.01 - EP US); **F02M 63/0005** (2013.01 - EP US); **F02M 63/0007** (2013.01 - EP US); **F02M 63/0029** (2013.01 - EP US);  
**F02M 2200/304** (2013.01 - EP US); **F02M 2200/315** (2013.01 - EP US)

Citation (search report)

See references of WO 03046369A1

Cited by

CN111356832A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

**WO 03046369 A1 20030605**; DE 10157411 A1 20030626; DE 50209448 D1 20070322; EP 1466087 A1 20041013; EP 1466087 B1 20070207;  
ES 2281549 T3 20071001; JP 2005510658 A 20050421; KR 20040062871 A 20040709; US 2004050367 A1 20040318;  
US 6994272 B2 20060207

DOCDB simple family (application)

**DE 0203882 W 20021015**; DE 10157411 A 20011123; DE 50209448 T 20021015; EP 02779159 A 20021015; ES 02779159 T 20021015;  
JP 2003547780 A 20021015; KR 20037009669 A 20030722; US 46691103 A 20030723