

Title (en)

FUEL INJECTION DEVICE FOR A COMBUSTION ENGINE

Title (de)

KRAFTSTOFFEINSPRITZEINRICHTUNG FÜR EINE BRENNKRAFTMASCHINE

Title (fr)

DISPOSITIF D'INJECTION DE CARBURANT POUR MOTEUR A COMBUSTION INTERNE

Publication

**EP 1476654 B1 20071219 (DE)**

Application

**EP 02804534 A 20021205**

Priority

- DE 0204456 W 20021205
- DE 10205186 A 20020208

Abstract (en)

[origin: US7044110B2] The fuel injection device has a fuel-supply pump that delivers fuel from a fuel tank to a high-pressure pump which delivers fuel to a reservoir connected to at least one injector that injects fuel into the internal combustion engine. A fuel filter is disposed between the fuel-supply pump and the high-pressure pump, wherein a return for fuel from the at least one injector and/or from the reservoir to a low-pressure region is provided. The return is provided with an additional fuel filter and downstream of the fuel filter, the return feeds into the connection between the fuel-supply pump and the high-pressure pump.

IPC 8 full level

**F02M 37/00** (2006.01); **F02M 55/02** (2006.01); **F02M 37/04** (2006.01); **F02M 37/22** (2006.01); **F02M 53/00** (2006.01); **F02M 55/00** (2006.01); **F02M 63/00** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP KR US)

**F02M 53/00** (2013.01 - EP US); **F02M 55/002** (2013.01 - EP US); **F02M 55/02** (2013.01 - KR); **F02M 63/00** (2013.01 - KR); **F02M 63/0001** (2013.01 - EP US); **F02M 63/02** (2013.01 - KR); **F02M 63/0225** (2013.01 - EP US); **F02M 2200/315** (2013.01 - EP US)

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 SI SK TR

DOCDB simple family (publication)

**WO 03067072 A1 20030814**; **WO 03067072 A9 20040610**; AT E381669 T1 20080115; BR 0208724 A 20040720; BR 0208724 B1 20110628; CN 100335774 C 20070905; CN 1498308 A 20040519; DE 10205186 A1 20030821; DE 50211417 D1 20080131; EP 1476654 A1 20041117; EP 1476654 B1 20071219; JP 2005517120 A 20050609; KR 100941534 B1 20100210; KR 20040080328 A 20040918; US 2004103883 A1 20040603; US 7044110 B2 20060516

DOCDB simple family (application)

**DE 0204456 W 20021205**; AT 02804534 T 20021205; BR 0208724 A 20021205; CN 02806744 A 20021205; DE 10205186 A 20020208; DE 50211417 T 20021205; EP 02804534 A 20021205; JP 2003566397 A 20021205; KR 20037013117 A 20021205; US 47432203 A 20031008