

Title (en)  
Fuel injection system

Title (de)  
Kraftstoffeinspritzeinrichtung

Title (fr)  
Système d'injection de carburant

Publication  
**EP 1283354 A3 20031126 (DE)**

Application  
**EP 02016623 A 20020725**

Priority  
DE 10139680 A 20010811

Abstract (en)  
[origin: EP1283354A2] The device has an injector (3') and a solenoid valve (8) to control the injection process. The valve interior has a first flow channel to feed fuel through an anchor chamber (16) and at least one second flow channel to return the fuel towards an aperture. The second channel is connected to a fuel return into a fuel tank. The fuel return is located in the injector housing (3). The solenoid valve is positioned at an angle of 90 degrees relative to the injector housing. There is an upper and a lower channel for fuel flow return (S3,4). An injector leakage tube (17) is connected to one of the valve flow channels.

IPC 1-7  
**F02M 47/02**; **F02M 59/46**; **F02M 55/00**

IPC 8 full level  
**F02M 47/00** (2006.01); **F02M 47/02** (2006.01); **F02M 51/00** (2006.01); **F02M 55/00** (2006.01); **F02M 59/46** (2006.01); **F02M 61/10** (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP)  
**F02M 47/027** (2013.01); **F02M 55/002** (2013.01); **F02M 55/005** (2013.01); **F02M 55/007** (2013.01); **F02M 61/168** (2013.01); **F02M 2547/003** (2013.01)

Citation (search report)  
• [X] DE 19917190 A1 20001026 - MTU FRIEDRICHSHAFEN GMBH [DE]  
• [A] EP 0907018 A2 19990407 - ELASIS SISTEMA RICERCA FIAT [IT]  
• [A] EP 0195736 A1 19860924 - STANADYNE INC [US]  
• [A] EP 0844385 A1 19980527 - DENSO CORP [JP]  
• [A] DE 19616812 A1 19961031 - NIPPON SOKEN [JP]

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)  
**EP 1283354 A2 20030212**; **EP 1283354 A3 20031126**; DE 10139680 A1 20030227; JP 2003113762 A 20030418

DOCDB simple family (application)  
**EP 02016623 A 20020725**; DE 10139680 A 20010811; JP 2002231879 A 20020808