

Title (en)  
High pressure fuel pump especially for direct injection internal combustion engine and fuel system and internal combustion engine

Title (de)  
Hochdruck-Kraftstoffpumpe, insbesondere für direkteinspritzende Brennkraftmaschine, sowie Kraftstoffsystem und Brennkraftmaschine

Title (fr)  
Pompe à carburant à haute pression en particulier pour moteur à combustion interne à injection directe et système de carburant et moteur à combustion interne

Publication  
**EP 1273796 A3 20031119 (DE)**

Application  
**EP 02009419 A 20020425**

Priority  
DE 10124238 A 20010518

Abstract (en)  
[origin: DE10124238A1] The high pressure fuel pump has a non-return valve (36) and a control valve (38) mounted in a common valve module (44) that is at least partly inserted into a pump housing (12) and a common connector (64) to a low pressure inlet (20) for the non-return valve and a control valve. The elements of the non-return valve and a control valve are arranged next to each other in the valve module. An Independent claim is included for the following: A fuel system and an internal combustion engine with an inventive system.

IPC 1-7  
**F02M 59/36; F02M 59/46; F02M 63/02**

IPC 8 full level  
**F02M 59/02** (2006.01); **F02M 59/36** (2006.01); **F02M 59/46** (2006.01); **F02M 63/02** (2006.01); **F04B 1/04** (2006.01); **F04B 49/22** (2006.01)

CPC (source: EP)  
**F02M 59/366** (2013.01); **F04B 1/0452** (2013.01); **F04B 49/225** (2013.01)

Citation (search report)  
• [XA] EP 0078983 A1 19830518 - BOSCH GMBH ROBERT [DE]  
• [X] EP 0816672 A2 19980107 - NIPPON SOKEN [JP]  
• [XA] WO 0006894 A1 20000210 - BOSCH GMBH ROBERT [DE], et al

Cited by  
US8475142B2; WO2008107065A1

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

DOCDB simple family (publication)  
**DE 10124238 A1 20021128**; DE 50203241 D1 20050707; EP 1273796 A2 20030108; EP 1273796 A3 20031119; EP 1273796 B1 20050601;  
JP 2002349391 A 20021204

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