

Title (en)

A device for detecting failure in a high pressure fuel supply system

Title (de)

Vorrichtung zur Erkennung von Fehlern in einer Hochdruck-Kraftstoffeinspritzanlage

Title (fr)

Dispositif de detection de défaut dans un système d'alimentation en carburant haute pression

Publication

EP 1201905 A3 20030924 (EN)

Application

EP 01125541 A 20011025

Priority

JP 2000329448 A 20001027

Abstract (en)

[origin: EP1201905A2] Fuel of a high pressure is supplied from a high-pressure fuel injection pump 5 into a common-rail 3, and is, then, supplied to the fuel injection valves 1 from the common-rail. A control circuit (ECU) 20 compares a change in the fuel pressure in the common-rail detected by a fuel pressure sensor 31 during a judging period with an estimated value of change in the pressure during the judging period to judge the leakage of fuel from the common-rail. The judging period is set to take place in a period in which it is estimated that the fuel flows in the least amount into a pressure-accumulating chamber in the former half or in the latter half of the fuel supply stroke of the fuel pump. This minimizes the effect of fuel flowing into the common-rail, and improves the accuracy of leakage detection. <IMAGE>

IPC 1-7

F02D 41/38; **F02D 41/22**

IPC 8 full level

F02D 45/00 (2006.01); **F02D 41/22** (2006.01); **F02D 41/38** (2006.01)

CPC (source: EP)

F02D 41/22 (2013.01); **F02D 41/3809** (2013.01); **F02D 2041/224** (2013.01); **F02D 2041/225** (2013.01)

Citation (search report)

- [X] EP 1039117 A2 20000927 - TOYOTA MOTOR CO LTD [JP]
- [A] EP 0969195 A2 20000105 - ISUZU MOTORS LTD [JP]
- [A] EP 1036923 A2 20000920 - TOYOTA MOTOR CO LTD [JP]
- [DA] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 02 26 February 1999 (1999-02-26)

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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)

EP 1201905 A2 20020502; **EP 1201905 A3 20030924**; **EP 1201905 B1 20051214**; DE 60115812 D1 20060119; DE 60115812 T2 20060810; ES 2252131 T3 20060516; JP 2002130023 A 20020509; JP 3798615 B2 20060719

DOCDB simple family (application)

EP 01125541 A 20011025; DE 60115812 T 20011025; ES 01125541 T 20011025; JP 2000329448 A 20001027