

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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