

Title (en)

Fuel injection system with an apparatus for removing air from fuel

Title (de)

Kraftstoffeinspritzsystem mit einer Vorrichtung zum Entlüften von Kraftstoff

Title (fr)

Système d'injection de carburant avec dispositif pour extraction d'air du carburant

Publication

**EP 1321664 A2 20030625 (EN)**

Application

**EP 02027840 A 20021212**

Priority

- JP 2001381415 A 20011214
- JP 2002310524 A 20021025

Abstract (en)

A pressure reducing valve (6) of an accumulation type fuel injection system of a multi-cylinder diesel engine opens during an engine starting operation or an idling operation immediately following the engine starting operation for a period corresponding to cooling water temperature or fuel temperature. Thus, the fuel in a high-pressure fuel passage leading from a fuel supply pump (3) to fuel injection valves (2) through the common rail (1) is discharged into a fuel tank (5). Accordingly, air entering the fuel supply pump (3) while the engine is stopped is discharged to the fuel tank (5) through fuel recirculating passages (13, 15, 16). As a result, the air delivered from the fuel supply pump (3) to the injector (2) is minimized and injection quantity control is stabilized when the engine is started.

IPC 1-7

**F02M 63/02**; **F02M 55/00**

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

- JP 2000282929 A 20001010 - DENSO CORP
- JP 2001082230 A 20010327 - DENSO CORP

Cited by

DE102017222467B4; EP1816333A1; DE102004036627B4; CN104141543A; EP2236796A3; DE102017222467A1; CN112922733A; US7891340B2

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