

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 A3 20071031 (EN)

Application

EP 02027840 A 20021212

Priority

- JP 2001381415 A 20011214
- JP 2002310524 A 20021025

Abstract (en)

[origin: EP1321664A2] 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 8 full level

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CPC (source: EP)

F02D 41/062 (2013.01); **F02D 41/065** (2013.01); **F02D 41/3836** (2013.01); **F02M 37/0052** (2013.01); **F02M 37/20** (2013.01); **F02M 55/00** (2013.01); **F02M 55/007** (2013.01); **F02M 63/0225** (2013.01); **F02D 2200/0606** (2013.01)

Citation (search report)

- [X] JP H10131820 A 19980519 - UNISIA JECS CORP
- [X] US 6058912 A 20000509 - REMBOLD HELMUT [DE], et al
- [X] US 5878718 A 19990309 - REMBOLD HELMUT [DE], et al
- [A] DE 19857260 A1 19990617 - DENSO CORP [JP]

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Designated extension state (EPC)

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