

Title (en)

Fuel injection system for internal combustion engine

Title (de)

Kraftstoffeinspritzeinrichtung für eine Brennkraftmaschine

Title (fr)

Dispositif d'injection de carburant pour un moteur à combustion interne

Publication

EP 1389683 A3 20051130 (DE)

Application

EP 03018429 A 20030814

Priority

DE 10237592 A 20020816

Abstract (en)

[origin: EP1389683A2] The fuel injection arrangement for a combustion engine has a transport pump (12) for delivery of fuel to the inlet of a high pressure pump (14). A bypass (60) is provided via which a small fuel quantity is diverted to the high pressure pump drive (38, 40, 42, 44, 46) for cooling and lubrication. The drive has two fuel return lines (66, 80) for returning the lubrication fuel to the fuel tank (10). The first line has a choke (70) for setting the flow rate, while the second has a valve (82) for varying the return flow.

IPC 1-7

F04B 1/04; **F04B 53/18**; **F04B 23/04**

IPC 8 full level

F04B 1/04 (2006.01); **F04B 23/04** (2006.01); **F04B 53/18** (2006.01)

CPC (source: EP)

F04B 1/0404 (2013.01); **F04B 23/04** (2013.01); **F04B 53/18** (2013.01)

Citation (search report)

- [X] DE 19926308 A1 20001221 - BOSCH GMBH ROBERT [DE]
- [X] WO 02063158 A1 20020815 - BOSCH GMBH ROBERT [DE], et al
- [A] DE 19746563 A1 19990429 - BOSCH GMBH ROBERT [DE]

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JP2013515191A; ITMI20081281A1; EP1911964A1; CN102713295A; ITMI20092271A1; US9133804B2; WO2009068448A1; WO2006053792A1; WO2011076526A1; WO2009141188A1

Designated contracting state (EPC)

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