

Publication

EP 0741244 A3 19961127

Application

EP 96106549 A 19960425

Priority

- DE 19516245 A 19950503
- DE 19541819 A 19951109

Abstract (en)

[origin: EP0741244A2] A fuel injector (12) for application in a common-rail (8) fuel distribution system for e.g. a six-cylinder IC engine as illustrated in Fig. 1, is regulated by a controller (20) having the usual performance monitoring/control inputs (22, 24) to result in fuel from the tank (2) being delivered via the feed pump (4), HP pump (6) and rail (8) to the injectors (12) via the pipes (10). The system employs a fuel return line (14) controlled by a valve (36) which is actuated by means of a piezo-electric or magnetostrictive pile (40). Fuel at injection pressure is connected by the six pipes (10) to the injector pistons (30) via the cross-ducts (34) and to the injector nozzle cavities/seats (28) to be injected as each valve (36) opens.

IPC 1-7

F02M 47/02; **F02M 45/04**; **F02M 59/46**

IPC 8 full level

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CPC (source: EP US)

F02M 45/04 (2013.01 - EP US); **F02M 47/027** (2013.01 - EP US); **F02M 63/0026** (2013.01 - EP US); **F02M 63/0036** (2013.01 - EP US); **F02M 63/0056** (2013.01 - EP US); **F02D 41/3809** (2013.01 - EP US); **F02M 63/0225** (2013.01 - EP US)

Citation (search report)

- [A] DE 2028442 A1 19711216 - DAIMLER BENZ AG
- [AP] DE 4434892 A1 19960411 - SIEMENS AG [DE]
- [A] EP 0647780 A2 19950412 - LUCAS IND PLC [GB]
- [A] US 4022166 A 19770510 - BART HANS U
- [A] EP 0199632 A1 19861029 - ALSACIENNE CONSTR MECA [FR]

Cited by

EP0911511A3; DE19929589C2; DE10157886B4; DE10131631A1; DE10133682B4; DE19983014B4; DE102004042189A1; DE102004042189B4; EP0845077B1

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