

Title (en)  
FUEL INJECTION SYSTEM

Publication  
**EP 0361199 A3 19901010 (DE)**

Application  
**EP 89116828 A 19890912**

Priority  
DE 3833011 A 19880929

Abstract (en)  
[origin: EP0361199A2] Fuel injection systems of this kind are subject to high requirements as regards accurate and fault-free adaptation of the fuel to the engine demand, the obstacles to this being the great expense of the components and the failures induced by heat. The new fuel injection system therefore has a metering distributor unit with the following features: an electromagnetically actuated metering valve is provided as metering unit, and a distributor rotating synchronously with the cam shaft of the internal-combustion engine is provided as distributor unit, fuel is fed under pressure to the metering valve via a fuel line and carried away via a return line in which a pressure regulating valve is arranged which, downstream of the pressure regulating valve but upstream of an element bringing about a pressure drop, has a flushing- line connection from the return line, which flushing-line connection leads to the metering distributor unit and there opens into a distributor groove of the distributor, the distributor groove communicates with the distributor line of the injection valves for which no injection is envisaged, the injection valves have return flushing lines which open into the metering distributor unit and are connected to a return line leading to the fuel return line downstream of the element by a distributor groove of the distributor in the same way as provided for the distributor groove and the distributor lines, a connection to the metering valve existing for the injection valve for which injection is envisaged. By means of these measures, the injection valves are cooled and kept free of bubbles. The system can be constructed with little expenditure on components. <IMAGE>

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**F02M 51/02**; **F02M 69/14**

IPC 8 full level  
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CPC (source: EP)  
**F02M 51/02** (2013.01); **F02M 69/14** (2013.01); **F02M 69/145** (2013.01)

Citation (search report)

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- [A] FR 1243468 A 19601014
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- [A] PATENT ABSTRACTS OF JAPAN vol. 10, no. 163 (M-487)(2219) 11 Juni 1986, & JP-A-61 16259 (DIESEL KIKI K.K.) 24 Januar 1986,

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