

Title (en)  
FUEL-INJECTION SYSTEM FOR INTERNAL COMBUSTION ENGINES

Title (de)  
KRAFTSTOFFEINSPRITZSYSTEM FÜR BRENNKRAFTMASCHINEN

Title (fr)  
SYSTEME D'INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE

Publication  
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Application  
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Abstract (en)  
[origin: WO0188368A1] The invention relates to a fuel-injection system for internal combustion engines, comprising a fuel-distribution pipe and a high-pressure pump that is driven in accordance with the engine speed. Said high-pressure pump generates the fuel pressure and throughput in the fuel-distribution pipe that is necessary in each operating state of the internal combustion engine. The fuel-injection system also comprises a fuel-metering unit assigned to the high-pressure pump. Said fuel-metering unit (10, 11) is based on an electromagnetically actuated control valve (11) and is positioned in the high-pressure pump. The outlet (36) of the control valve (11) opens into the low-pressure region of the high-pressure pump. The inlet (32, 34) of the control valve (11) is connected to the delivery side of a presupply pump. The control valve (11) has a valve plunger (23), which is spring-loaded (25) by pressure in the open position and which can be actuated by an armature pin (14) of the electromagnet (10) against the spring force in the closed position. The invention is characterized in that at least one, and preferably several radial control openings (35) are located in the valve plunger (23), said openings interacting with the induction side of the high-pressure pump.

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