

Title (en)
FUEL INJECTION DEVICE FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
KRAFTSTOFFEINSPRITZEINRICHTUNG FÜR EINE BRENNKRAFTMASCHINE

Title (fr)
DISPOSITIF D'INJECTION DE CARBURANT POUR MOTEUR A COMBUSTION INTERNE

Publication
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Application
EP 02742765 A 20020518

Priority
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Abstract (en)
[origin: US2004099250A1] The fuel injection system has one high-pressure fuel pump (10) and one fuel injection valve (12) for one cylinder of the engine. The high-pressure fuel pump has a pump work chamber (22), and the fuel injection valve (12) has an injection valve member (28), by which at least one injection opening (32) is controlled and which is movable in an opening direction (29), counter to the force of a closing spring (44), by the pressure prevailing in a pressure chamber (40) communicating with the pump work chamber (22); the closing spring (44) is braced on one end on the injection valve member (28) and on the other on a displaceable deflection piston (50), which on its side remote from the closing spring (44) defines a prechamber (85) that communicates with the pump work chamber (22). The deflection piston (50) is movable into a storage chamber (55) counter to the force of the closing spring (44). The prechamber (85) communicates with the pump work chamber (22) via a first throttle restriction (84), and the pressure chamber (40) of the fuel injection valve (12) communicates with the pump work chamber (22) via a second throttle restriction (93), circumventing the prechamber (85).

IPC 8 full level
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