

Title (en)
FUEL INJECTION SYSTEM OF AN INTERNAL COMBUSTION ENGINE

Title (de)
KRAFTSTOFFEINSPRITZSYSTEM EINER BRENNKRAFTMASCHINE

Title (fr)
SYSTÈME D'INJECTION DE CARBURANT D'UN MOTEUR À COMBUSTION INTERNE

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Abstract (en)
[origin: WO2012059267A1] The invention relates to fuel injection system of an internal combustion engine, comprising a tank (2), which is connected via a booster pump (1) to a pump interior (3) of a high-pressure pump (5), the pump interior (3) being connected via a dosing unit (10) to a pump working space (9), and furthermore the pump interior (3) being hydraulically connected to a return flow line (7) via an overflow valve (16), which comprises a valve housing (17), a valve plunger (18), and a valve spring (19) which is arranged in a spring space (15), characterized in that the spring space (15) is connected via a throttle circuit to the hydraulic space connected to the dosing unit (10). According to the invention, a fuel injection system is provided, in which the filling pressure of a pump working space (9) can be adjusted depending on the delivery quantity. This is achieved in that the spring space (15) is connected via a throttle circuit to the hydraulic space connected to the dosing unit (10).

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