

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: WO0246602A1] The invention relates to a fuel injection system, comprising a fuel injection valve (15) and a control valve (50). Said control valve (50) has a control valve member (54) which is longitudinally displaceable in a control valve bore (52). A control valve sealing surface (55) is configured on the control valve member and interacts with a control valve seat, hereby controlling the connection between a first pressure chamber (57) and a second pressure chamber (58), said first pressure chamber (57) being connected to a high pressure accumulator chamber (10). A bore (30) is configured in a valve body (25), a piston-shaped valve needle (32) controlling the opening of at least one injection opening (38) in said bore with its combustion-side end, by performing a longitudinal movement under the influence of the pressure from a pressure chamber (31). Said pressure chamber (58) is connected to the second pressure chamber (58) by a delivery channel (28). The first pressure chamber (5) is connected by a throttle (72) to a damping chamber (70) which is otherwise closed, enabling the pressure oscillations that are produced when the control valve (50) closes to be dampened quickly.

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