

Title (en)
FUEL INJECTION DEVICE FOR A COMBUSTION ENGINE

Title (de)
KRAFTSTOFFEINSPRITZEINRICHTUNG FÜR EINE BRENNKRAFTMASCHINE

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

Publication
EP 1606511 B1 20070606 (DE)

Application
EP 03815794 A 20031018

Priority
• DE 0303495 W 20031018
• DE 10311522 A 20030317

Abstract (en)
[origin: WO2004083624A1] The fuel injection device comprises a fuel high-pressure pump (10) and a fuel injection valve (12) for a cylinder of a combustion engine. The fuel high-pressure pump (10) has a pump working space (22), and the fuel injection valve (12) has an injection valve element (38) via which at least one injection opening (32) is controlled and which can be moved in a direction of opening (29) against the force of a closing spring (44) by the pressure prevailing inside a pressure space (40) having a connection (48) to the pump working space (22). The closing spring (44) is supported on the injection valve element (28) and on a displaceable accumulator plunger (50) which, via its side facing away from the closing spring (44), delimits an accumulator space (52) having a connection (54) to the pump working space (22) and which can be displaced against the force of the closing spring (44) and into a spring space (46). The spring space (46) has a connection, which is formed by a channel (76), to a low-pressure area (62) extending along the spring space (46). Said spring space (46) is connected to an end area of the channel (76) via a throttling point (78), and the channel (76), at the opposite end thereof, leads into the low-pressure area (62).

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