

Title (en)

FUEL INJECTION DEVICE FOR AN INTERNAL COMBUSTION ENGINE

Title (de)

KRAFTSTOFFEINSPRITZEINRICHTUNG FÜR EINE BRENNKRAFTMASCHINE

Title (fr)

SYSTEME D'INJECTION DE CARBURANT POUR MOTEUR A COMBUSTION INTERNE

Publication

EP 1546544 A1 20050629 (DE)

Application

EP 03724838 A 20030318

Priority

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- DE 10244551 A 20020925

Abstract (en)

[origin: WO2004029447A1] The fuel injection device comprises a delivery pump (12) via which fuel is delivered to the induction side of a high-pressure pump (14). The high-pressure pump (14) delivers fuel to a reservoir (16) according to operating parameters of the internal combustion engine. The fuel injection device also comprises a fuel metering device (44) for adjusting the amount of fuel delivered by the high-pressure pump (14) to the reservoir (16). Said fuel metering device (44) comprises an actuator (45) and a control valve (46) that is actuated thereby. The control valve (46) has a valve element (54), which is guided inside a cylinder bore (52) of a valve housing (50), which can be displaced by the actuator (45) counter to a restoring force (60), and which, while interacting with an opening (62) of an inlet from the delivery pump (12), said opening leading to the lateral surface of the cylinder bore (52), or while interacting with an outlet to the high-pressure pump (14), controls a flow area at the junction between the delivery pump (12) and the high-pressure pump (14).

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