

Title (en)  
FUEL INJECTION DEVICE FOR A COMBUSTION ENGINE

Title (de)  
KRAFTSTOFF-EINSPRITZVORRICHTUNG FÜR EINE BRENNKRAFTMASCHINE

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

Publication  
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Application  
**EP 04738751 A 20040622**

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Abstract (en)  
[origin: WO2005014996A1] A fuel injection device (20) for a combustion engine comprises a first valve element (36) with a pressure surface (38) that acts in an opening direction. An impinging device (50) acts in a closing direction. A second valve element (34) comprises a hydraulic control surface (58), which acts in the closing direction and which delimits a hydraulic control space (60). A corresponding impinging device acts in an opening direction. In addition, a high-pressure connection (24) is provided. The invention provides that the fuel injection device (20) has an additional valve device (66) that, in a first final position, connects the pressure space (40) only to the low pressure connection (28) and connects the control space (60) only to the high pressure connection (24). In a second final position, the additional valve device (66) connects the pressure space (40) only to the high pressure connection (24) and separates the control space (60) essentially from the high pressure connection (24). In an intermediate position, the pressure space (40) is connected only to the high pressure connection (24), and the control space (60) is simultaneously connected to the high pressure connection (24) and to the low pressure connection (28).

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