

Title (en)
FUEL INJECTION DEVICE

Title (de)
KRAFTSTOFFEINSPRITZEINRICHTUNG

Title (fr)
SYSTEME D'INJECTION DE CARBURANT

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Application
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Abstract (en)
[origin: WO02092997A1] A fuel injection device for internal combustion engines is disclosed, comprising a fuel injector supplied by a high pressure fuel source and a pressure amplification device. Said pressure amplification device comprises a moving pressure amplification piston, which separates a chamber which may be connected to the high pressure fuel source from a high pressure chamber connected to the fuel injector. The fuel pressure in the high pressure chamber may be varied by either filling a return chamber on the pressure amplification device with fuel or emptying the return chamber of fuel. The fuel injector comprises a moving closing piston, for opening and closing injection openings, which extends into a sealing pressure chamber (12; 112) so as to pressurise the sealing piston with fuel pressure, generating a force acting in the closing direction on the closing piston. The closing pressure chamber (12; 112) and the chamber (26; 126) are formed by a common working chamber, whereby all the partial regions (12, 47, 26; 112, 130, 126) of the working chamber are permanently connected to each other (47; 130) for the exchange of fuel.

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