

Title (en)
FUEL INJECTION DEVICE

Title (de)
KRAFTSTOFFEINSPRITZEINRICHTUNG

Title (fr)
DISPOSITIF D'INJECTION DE CARBURANT

Publication
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Application
EP 04712043 A 20040218

Priority

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Abstract (en)
[origin: WO2004074671A1] The invention relates to a fuel injection device for injecting fuel into the combustion chamber of an internal combustion engine. The fuel injection device comprises a fuel pump (1) which is used to pump fuel placed under increasing and decreasing pressure, in addition to an injector (5) having an injector nozzle and an injector needle (12) in order to control the beginning and end of injection. The injector needle (12) is maintained during the injection intervals in a position in which it rests on a valve seat by means of a force acting on the injector needle (12) in the direction of closure. The injector needle (12) can be impinged upon by the pressure of the fuel pumped by the fuel pump (1) in order to produce a force acting in the direction of opening on a ring surface. Injection begins if the force directed in the direction of opening exceeds the force directed in the direction of closure, whereby the force directed in the direction of closure is variably adjusted prior to the beginning of injection according to engine operation parameters.

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