

Title (en)
FUEL INJECTION DEVICE

Title (de)
KRAFTSTOFFEINSPRITZEINRICHTUNG

Title (fr)
DISPOSITIF D'INJECTION DE CARBURANT

Publication
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Application
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Abstract (en)
[origin: WO2004074675A1] The invention relates to a fuel injection device comprising a fuel pump embodied as a double piston pump which is used to pump fuel into the combustion chamber of an internal combustion engine to an injector respectively associated therewith and which is optimized with regard to the injection process thereof. The double piston pump comprises two pistons (70, 73) which pump in parallel along a common line and which are provided with control edges. A control rod (71,74) is associated with each piston (70,73) and is used to control the beginning and end of the pumping. The beginning of the pumping can be adjusted on the first piston (70) and the end of the pumping can be adjusted on the second piston (73). A control pressure is provided prior to the beginning of injection according to engine operation parameters in order to adjust the force acting upon the injector needle (12) in the direction of closure, said pressure enabling pressure to be impinged upon the valve needle (12) in the direction of closure. In order to compensate an alteration in the beginning of injection caused thereby, the control rod (71) of the first piston (70) regulating the beginning of pumping is adjusted accordingly.

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