Title (en)

FUEL INJECTION PUMP

Publication

EP 0439769 B1 19930908 (DE)

Application

EP 90124332 A 19901215

Priority

DE 4002612 A 19900130

Abstract (en)

[origin: EP0439769A1] A fuel injection pump for internal combustion engines has a pump piston (12) defining a pump working chamber (15), which piston can be driven by way of a cam mechanism (14) in a reciprocating and at the same time rotational movement, during its intake stroke filling the pump working chamber (15) with fuel by way of an inlet (42), which it controls as a function of the angle of rotation. An injection timing device (30), as a function of the speed, rotates the position of the lifting curve of the pump piston (12) relative to its rotational postion to "advance" in the case of high speed and "retard" in that of falling speed. In order to enlarge the injection timing range without varying the cam geometry and/or to increase the cam length without varying the injection timing range, a non-return valve (43) with closing direction towards the inlet (42) is arranged between the inlet (42) and the pump working chamber (15) and the control of the inlet (42) by the pump piston (12) is so designed that, when its lifting curve is in the advance postion, the pump piston (12) does not close the inlet (42) until it is inside the rising edge. <IMAGE>

IPC 1-7

F02M 41/12

IPC 8 full level

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CPC (source: EP)

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