

Title (en)

Pump for feeding fuel to an internal combustion engine

Title (de)

Pumpe zur Brennstoffzufuhr zu einer Brennkraftmaschine

Title (fr)

Pompe pour alimenter en carburant un moteur à combustion interne

Publication

**EP 1156207 A1 20011121 (EN)**

Application

**EP 00830365 A 20000519**

Priority

EP 00830365 A 20000519

Abstract (en)

A pump for feeding of fuel an injection system for an internal combustion engine comprising a body (1, 1'), a conduit (16,17) with single-acting valves (14, 15) that extends between a suction inlet (12) and a delivery outlet (13); at least one cylinder (2) made in the body (1, 1') wherein a piston (3) reciprocates capable of pumping fuel into the conduit (17) towards the delivery outlet (13). In the body a first (4) chamber crossed by the conduit (16, 17) and a second chamber (5, 5') are made both flooded by the fuel. The piston (3) reciprocates towards/from the first and second chamber (4-5,5'). The inner diameter of the cylinder (2) exceeds the outer diameter of the pumping piston (3) according to a clearance sufficient to allow a minimum leakage of fuel from the first to the second chamber, whereby the leakage of fuel lubricates the coupling between the piston (3) and the cylinder (2). A channel of return (18) of the leaked fuel is provided between the second chamber and the conduit (16). For operating the piston (3) the second chamber (5) contains a cam mechanism (6,7,8,9) connected to a driven shaft (10). <IMAGE>

IPC 1-7

**F02M 37/04**; **F04B 53/04**

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CPC (source: EP)

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Citation (search report)

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