

Title (en)
FUEL INJECTION PUMP FOR INTERNAL-COMBUSTION ENGINES

Publication
EP 0273225 B1 19910821 (DE)

Application
EP 87117819 A 19871202

Priority
DE 3644147 A 19861223

Abstract (en)
[origin: US4763631A] A fuel injection pump of the distributor type in which to attain low injection rates in the idling range, longitudinal slits or longitudinal conduits are provided in the jacket face of the pump piston in accordance with the number of supply strokes of the pump piston. The slits or conduits are in continuous communication with an annular groove and the adjoining annular slide which is the quantity adjusting device of the fuel injection pump. The slits on conduits come in turn into communication with a control opening during the supply stroke of the pump piston via which opening the pump work chamber can be relieved whenever in the course of the pump piston stroke movement a second outlet opening of a relief conduit extending in the pump piston and communicating with the pump work chamber, comes into communication with the annular groove. From this point on, in order to attain quiet idling of the engine, the supply rate of the pump piston is reduced by the outflow rate, determined by a throttle of the pumped fuel into the suction chamber. By rotating the annular slide relative to the pump piston, the control opening can be moved out of the operating range of the longitudinal conduits and the quiet-idle device is shut off.

IPC 1-7
F02M 41/12; **F02M 45/12**

IPC 8 full level
F02M 41/12 (2006.01); **F02M 45/12** (2006.01)

CPC (source: EP KR US)
F02M 41/00 (2013.01 - KR); **F02M 41/126** (2013.01 - EP US); **F02M 45/12** (2013.01 - EP US)

Cited by
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DE FR GB IT

DOCDB simple family (publication)
EP 0273225 A2 19880706; **EP 0273225 A3 19900425**; **EP 0273225 B1 19910821**; DE 3644147 A1 19880707; DE 3772363 D1 19910926; JP S63167064 A 19880711; KR 880007910 A 19880829; US 4763631 A 19880816

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