

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

Publication  
**EP 0166995 A3 19870616 (DE)**

Application  
**EP 85106902 A 19850604**

Priority  
DE 3424883 A 19840706

Abstract (en)  
[origin: US4635605A] A fuel injection pump of the distributor type is proposed, in which the injection quantity is controlled by controlling the first outlet cross section D of a first relief line and the stroke-offset outlet C of a second relief line for the pump work chamber of the fuel injection pump by means of a control edge that is variable in accordance with load and/or rpm. To attain nonsupply of fuel within the intended supply stroke of the pump piston during idling and at low partial load, communication between the first and second relief lines is provided. The communication exists only for the duration of a predetermined stroke portion (he) and is additionally controlled in accordance with load and/or rpm by controlling the following outlet of the second relief line, so that from a predetermined upper load range to full-load operation, the entire fuel quantity pumped by the pump piston over the effective supply stroke does in fact become injected.

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

IPC 8 full level  
**F02D 1/02** (2006.01); **F02D 1/04** (2006.01); **F02M 41/12** (2006.01); **F02M 45/06** (2006.01)

CPC (source: EP US)  
**F02M 41/126** (2013.01 - EP US); **F02M 45/06** (2013.01 - EP US)

Citation (search report)  
• [A] FR 2520812 A1 19830805 - BOSCH GMBH ROBERT [DE]  
• [A] DE 3013087 A1 19811015 - BOSCH GMBH ROBERT [DE]  
• [A] DE 2644698 A1 19780406 - BOSCH GMBH ROBERT  
• [A] FR 2287591 A1 19760507 - BOSCH GMBH ROBERT [DE]

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EP0273225A3; DE102013111098B3; US5597291A; WO8805128A1; WO9749910A1; WO2015051784A2; US11174859B2

Designated contracting state (EPC)  
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