

Title (en)

FUEL-INJECTION DEVICE FOR INTERNAL COMBUSTION ENGINES, PARTICULARLY FOR DIESEL ENGINES

Publication

**EP 0032172 B1 19840808 (DE)**

Application

**EP 80106922 A 19801224**

Priority

DE 3000977 A 19800112

Abstract (en)

[origin: US4398518A] A fuel injection apparatus for internal combustion engines is proposed (FIG. 1), in which the onset and end of injection are determined by a hydraulically actuated control slide. The injection pumps of the apparatus, which are preferably combined with an injection nozzle to make a pump/nozzle unit, having a central magnetic valve assembly comprising two magnetic valves switched hydraulically in parallel, which valve assembly is inserted in a connection between a control pressure line, which can be placed under control pressure (PS) from a source of control fuel, and a low-pressure line which is under supply pressure (PV). In order to initiate the onset of injection, the control slide is placed under control pressure (PS) by the valve assembly via a distributor apparatus and closes an overflow channel leading out of the pump work chamber. In order to control the end of the injection, the control slide, during its return stroke, relieves this overflow channel toward a low-pressure line. The control pressure (PS) in the control pressure line required for actuation of the stroke movement of the control slide is built up by means of the valve assembly as a result of blocking the outflow from this line.

IPC 1-7

**F02M 59/36**

IPC 8 full level

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CPC (source: EP US)

**F02M 59/366** (2013.01 - EP US); **F02B 3/06** (2013.01 - EP US)

Citation (examination)

- FR 2235276 A2 19750124 - BENDIX CORP [US]
- FR 2235275 A1 19750124 - BENDIX CORP [US]
- DE 1917927 A1 19701029 - BOSCH GMBH ROBERT
- DE 920881 C 19541202 - DAIMLER BENZ AG
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- US 2357563 A 19440905 - TRUXELL JR CLYDE W

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AT DE FR GB IT

DOCDB simple family (publication)

**EP 0032172 A1 19810722**; **EP 0032172 B1 19840808**; AT E8922 T1 19840815; DE 3000977 A1 19810723; DE 3068920 D1 19840913; JP H0327756 B2 19910416; JP S56106061 A 19810824; US 4398518 A 19830816

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