

Title (en)

Fuel injection device for an internal-combustion engine.

Title (de)

Kraftstoffeinspritzvorrichtung für eine Brennkraftmaschine.

Title (fr)

Dispositif d'injection de carburant pour un moteur à combustion interne.

Publication

**EP 0030907 A1 19810624 (FR)**

Application

**EP 80420143 A 19801212**

Priority

FR 7931353 A 19791214

Abstract (en)

[origin: US4462369A] A fuel injection apparatus for controlling fuel injectors for internal combustion engines which injectors remain normally shut as a result of a high fuel pressure applied on either side of injector fuel nozzles. The apparatus of the present invention includes a first slide valve member which, by sliding from one extreme position to another, is able to lower the pressure below a fuel nozzle associated with a fuel injector to start a fuel injection cycle in that injector. The apparatus also includes a second slide valve member which, by sliding from one extreme position to another, is able to increase the pressure below the fuel nozzle to end the fuel injection cycle and control the duration of the fuel injection cycle as well as the flow rate of the injected fuel. The first and second slide valve members return to their initial positions after two consecutive fuel injection cycles.

Abstract (fr)

Les injecteurs restent normalement fermés par application de la haute pression d'alimentation de part et d'autre de l'aiguille. Le dispositif comprend un premier tiroir (12) capable, en passant d'une position extrême à l'autre, d'interrompre la pression sur le côté aval de l'aiguille en définissant le début d'injection, ainsi qu'un deuxième tiroir (13) capable, en passant d'une position extrême à l'autre, de rétablir la pression sur le côté aval de l'aiguille, en définissant la fin d'injection, la durée d'injection et le débit injecté. Les tiroirs ne retrouvent leurs positions initiales respectives qu'à l'issue de l'injection suivante.

IPC 1-7

**F02M 47/02**

IPC 8 full level

**F02M 47/02** (2006.01)

CPC (source: EP US)

**F02M 47/025** (2013.01 - EP US); **F02M 47/027** (2013.01 - EP US); **Y10T 137/87893** (2015.04 - EP US)

Citation (search report)

- [X] FR 2331693 A2 19770610 - MASCHF AUGSBURG NUERNBERG AG [DE]
- [X] FR 2316450 A1 19770128 - MASCHF AUGSBURG NUERNBERG AG [DE]
- [X] DE 2759187 A1 19790712 - BOSCH GMBH ROBERT

Cited by

DE19621583C2; EP0089301A1

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**EP 0030907 A1 19810624**; FR 2471483 A1 19810619; FR 2471483 B1 19841207; US 4462369 A 19840731

DOCDB simple family (application)

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