

Title (en)

Fuel injector for internal combustion engines

Title (de)

Brennstoffeinspritzventil für Verbrennungskraftmaschinen

Title (fr)

Injecteur de combustible pour moteur à combustion interne

Publication

EP 1118765 A3 20031119 (DE)

Application

EP 00127135 A 20001212

Priority

CH 922000 A 20000119

Abstract (en)

[origin: US2001013556A1] An injection valve member for the closing and opening of injection orifices of a valve seat element is installed longitudinally adjustably in a central housing bore of a fuel injection valve. The opening and closing movement sequence of the injection valve member is controlled by a control device. A control piston operatively connected to the injection valve member is loaded, on the one hand, by the fuel system pressure prevailing in a high-pressure zone and, on the other hand, by the fuel control pressure in a control space. The high-pressure zone includes the central housing bore which is closed off sealingly by a control body fixed to the housing. The control space is arranged between the control body and a piston end face and is at least temporarily delimited radially by a control sleeve which is moveable transversely to the longitudinal axis of the housing. A narrow sliding guide between a control piston part and the control sleeve, said sliding guide separating the control space from the high-pressure zone, forms an accurate longitudinal guide for the control sleeve. The fuel injection valve is simple in terms of manufacture and assembly.

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

F02M 47/027 (2013.01 - EP US); **F02M 2200/21** (2013.01 - EP US)

Citation (search report)

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- [Y] EP 0450532 A1 19911009 - WEBER SRL [IT]
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US 2001013556 A1 20010816; **US 6499669 B2 20021231**; EP 1118765 A2 20010725; EP 1118765 A3 20031119; JP 2001227435 A 20010824; JP 4606605 B2 20110105

DOCDB simple family (application)

US 76443501 A 20010119; EP 00127135 A 20001212; JP 2001011758 A 20010119