

Title (en)  
FUEL INJECTION DEVICE FOR COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES

Publication  
**EP 0114375 B1 19890125 (DE)**

Application  
**EP 83112959 A 19831222**

Priority  
DE 3302294 A 19830125

Abstract (en)  
[origin: ES8500387A1] A fuel injection arrangement for air-compressing, spontaneous-ignition, internal combustion engines. The arrangement includes at least one electromagnetic control valve via which a high-pressure channel of a fuel injection pump can be connected with a low-pressure channel. The control valve includes a valve body which is in the form of a piston valve, is spring-loaded, and is axially movable in a housing chamber which is provided with at least one connection on the high-pressure end, and with a connection on the low-pressure end. The piston valve is in operative connection with an electromagnetic adjusting device which can preferably be controlled by an electrically-operating data processor. The piston valve region on the high-pressure end is delimited by a valve seat and has a fixed diameter which corresponds to the diameter of the valve seat. The piston valve region on the low-pressure end has a diameter which is less than that of the piston valve region on the high-pressure end. The housing chamber taken in its entirety is sealed off in such a way as to be resistant to high pressure. The chambers on the low and high pressure ends can be connected by at least one line. The inventive fuel injection arrangement is characterized by an extremely stable behavior of the control valve and an absolute sealing in the closure position of the piston valve, so that the fuel injection arrangement itself is operational at the highest injection pressures.

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IPC 8 full level  
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CPC (source: EP US)  
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