

Title (en)  
Fuel injection apparatus

Title (de)  
Kraftstoffeinspritzvorrichtung

Title (fr)  
Dispositif d'injection de combustible

Publication  
**EP 0908617 B1 20060426 (DE)**

Application  
**EP 98111577 A 19980624**

Priority  
DE 19744723 A 19971010

Abstract (en)  
[origin: EP0908617A1] A fuel injection system for an internal combustion engine has a three-way valve (40) between the high pressure fuel feed (8) and the injection valve. The control valve opens and closes the injection valve by switching between two stable settings. The control valve has a valve element (42) with conical valve seals (46,47) at each end, and with the upper end of the valve element connected by a shaft to a piston (45) and to a servo drive (59) e.g. a solenoid. The relative sizes of the piston, the connecting shaft and the fuel feeds are such that when the valve is lifted, to close the high pressure fuel feed, and to vent the control side of the injection valve to the fuel sump (6), the pressure of the high pressure fuel feed (53) holds the valve in this position until the servo drive pushes the valve back into the open position, where it is also held by the pressure of the fuel.

IPC 8 full level  
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CPC (source: EP US)  
**F02M 47/027** (2013.01 - EP US); **F02M 63/0026** (2013.01 - EP US); **F02M 63/0045** (2013.01 - EP US)

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