

Title (en)  
Fuel injection valve

Title (de)  
Brennstoffeinspritzventil

Title (fr)  
Soupape d'injection de carburant

Publication  
**EP 1406006 B1 20050629 (DE)**

Application  
**EP 03022035 A 20031001**

Priority  
• DE 10246315 A 20021004  
• DE 10342034 A 20030911

Abstract (en)  
[origin: EP1406006A1] The device has a piezoelectric or magnetostrictive actuator (2) that actuates a valve closure body (22) on a valve needle (15) via a hydraulic coupler (10). The closure body interacts with a valve seat surface (23) to form a seal seat. The coupler has sender and receiver pistons (9,12) in a guide sleeve (13) and separated by a coupler gap (11). The sender piston (9) and/or receiver piston (12) have a choke bore (19) forming a filling valve (18) for the coupler gap together with a valve body (20) and a valve seat (21).

IPC 1-7  
**F02M 51/06; F02M 61/08**

IPC 8 full level  
**F02M 51/06** (2006.01); **F02M 61/08** (2006.01); **F02M 61/16** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)  
**F02M 51/0603** (2013.01); **F02M 61/08** (2013.01); **F02M 61/167** (2013.01)

Cited by  
US7182212B2

Designated contracting state (EPC)  
DE FR IT

DOCDB simple family (publication)  
**EP 1406006 A1 20040407; EP 1406006 B1 20050629**

DOCDB simple family (application)  
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