

Title (en)  
Servo valve for an injector and injector

Title (de)  
Servoventil für ein Einspritzventil und Einspritzventil

Title (fr)  
Servovalve pour un injecteur et injecteur

Publication  
**EP 0976924 A3 20010613 (DE)**

Application  
**EP 99112980 A 19990705**

Priority  
DE 19834667 A 19980731

Abstract (en)  
[origin: EP0976924A2] The servo valve is used for the fuel injection valve of an internal combustion engine. There is a control space (4) above a piston (6) which is connected to the fuel injector needle. The contact space is connected with a second space (20) via a first throttle channel (3). A high-pressure bore (1) is connected to the second space via a wide access bore. Fuel may leave the control space via a bore (9) leading to a second throttle bore. There is a valve body (26) moved by a pushrod (16) attached to a piezoelectric actuator (18). The valve body is hemispherical and its flat surface may seal against a flat surface (24) at the end of the metal block containing the second space. The hemispherical surface is surrounded by a valve chamber (22) and when the valve body is in its upper position it engages a valve seat (28) to block off return flow to the fuel supply.

IPC 1-7  
**F02M 47/02**

IPC 8 full level  
**F02M 47/02** (2006.01); **F02M 59/46** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)  
**F02M 47/027** (2013.01); **F02M 63/0026** (2013.01); **F02M 63/0036** (2013.01); **F02M 63/0045** (2013.01)

Citation (search report)  
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• [A] EP 0426205 A2 19910508 - GANSER MARCO ALFREDO [CH]  
• [A] EP 0740067 A2 19961030 - ISUZU MOTORS LTD [JP]

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Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**EP 0976924 A2 20000202; EP 0976924 A3 20010613; EP 0976924 B1 20030917; DE 59906995 D1 20031023**

DOCDB simple family (application)  
**EP 99112980 A 19990705; DE 59906995 T 19990705**