

Title (en)  
Servo valve and injection valve

Title (de)  
Servoventil und Einspritzventil

Title (fr)  
Servovalve et soupape d'injection

Publication  
**EP 1640604 A1 20060329 (DE)**

Application  
**EP 05103812 A 20050509**

Priority  
DE 102004046191 A 20040923

Abstract (en)  
The injection valve has an injector housing (1), a piezo-actuator (4), a leakage cavity (14), a valve plate (16), and an intermediate plate (18). It also has two valve bodies and a sealing shell the first valve body is arranged so that the fluid can flow to the first seat region through a recess in the second valve body. The second valve body is in a recess in the housing, and has a closing body which is sealed to the second seat region in the closed position of the second valve body.

IPC 8 full level  
**F02M 45/08** (2006.01); **F02M 47/02** (2006.01); **F02M 59/46** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)  
**F02M 45/086** (2013.01); **F02M 47/027** (2013.01); **F02M 63/0026** (2013.01); **F02M 63/004** (2013.01); **F02M 63/0042** (2013.01); **F02M 63/0045** (2013.01); **F02M 63/0061** (2013.01); **F02M 2200/46** (2013.01)

Citation (applicant)  
EP 0978649 A2 20000209 - SIEMENS AG [DE]

Citation (search report)  
• [A] EP 1338788 A1 20030827 - DELPHI TECH INC [US]  
• [A] EP 1081372 A2 20010307 - DENSO CORP [JP]  
• [A] EP 0949415 A2 19991013 - BOSCH GMBH ROBERT [DE]

Cited by  
CN103635686A; CN106795851A; EP2813698A1; EP2275666A1; CN109958564A; EP2287460A1; DE102009000170B4; US10233885B2; WO2016059069A1; WO2013000635A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

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