

Title (en)
SEAT/SLIDING VALVE COMPRISING A PRESSURE COMPENSATION PIN

Title (de)
SITZ/SCHIEBER-VENTIL MIT DRUCKAUSGLEICHSTIFT

Title (fr)
SOUPAPE A SIEGE/COULISSE COMPORTANT UNE TIGE DE COMPENSATION DE PRESSION

Publication
EP 1379779 A2 20040114 (DE)

Application
EP 02727211 A 20020312

Priority
• DE 0200862 W 20020312
• DE 10111929 A 20010313

Abstract (en)
[origin: WO02073028A2] The invention relates to a 3/2-directional control valve for controlling the injection of motor fuel in a common-rail-injection system in an internal combustion engine. Said valve has a first position wherein an injection nozzle is joined to a fuel return pipe, and a second position wherein the injection nozzle is connected to a high pressure fuel accumulator. The aim of the invention is to improve the function and the quality of the injection. As a result said 3/2-directional control valve comprises a force compensated control piston (44) whereby the control edge of the control piston (44) is pressure compensated by a pocket hole (50).

IPC 1-7
F02M 63/00; **F02M 59/46**

IPC 8 full level
F02M 47/00 (2006.01); **F02M 51/00** (2006.01); **F02M 59/46** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)
F02M 63/0007 (2013.01 - EP US); **F02M 63/0017** (2013.01 - EP US); **F02M 63/0033** (2013.01 - EP US); **F02M 63/0071** (2013.01 - EP US); **F02M 63/0073** (2013.01 - EP US); **Y10T 137/86622** (2015.04 - EP US); **Y10T 137/86678** (2015.04 - EP US); **Y10T 137/86686** (2015.04 - EP US)

Citation (search report)
See references of WO 02073028A2

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

DOCDB simple family (publication)
WO 02073028 A2 20020919; **WO 02073028 A3 20031023**; DE 10111929 A1 20021002; EP 1379779 A2 20040114; JP 2004518875 A 20040624; US 2003172978 A1 20030918; US 6837451 B2 20050104

DOCDB simple family (application)
DE 0200862 W 20020312; DE 10111929 A 20010313; EP 02727211 A 20020312; JP 2002572261 A 20020312; US 27614903 A 20030509