

Title (en)

VALVE FOR CONTROLLING A CONNECTION IN A HIGH-PRESSURE LIQUID SYSTEM, PARTICULARLY A FUEL INJECTION DEVICE FOR AN INTERNAL COMBUSTION ENGINE

Title (de)

VENTIL ZUR STEUERUNG EINER VERBINDUNG IN EINEM HOCHDRUCKFLÜSSIGKEITSSYSTEM, INSbesondere EINER KRAFTSTOFFEINSPRITZERICHUNG FÜR EINE BRENNKRAFTMASCHINE

Title (fr)

SOUPAPE POUR COMMANDER UNE LIAISON DANS UN SYSTEME DE LIQUIDE HAUTE PRESSION, NOTAMMENT UN DISPOSITIF D'INJECTION DE CARBURANT POUR UN MOTEUR A COMBUSTION INTERNE

Publication

EP 1671028 A1 20060621 (DE)

Application

EP 04762589 A 20040804

Priority

- DE 2004001744 W 20040804
- DE 10344897 A 20030926

Abstract (en)

[origin: DE10344897A1] The valve has a valve element movable in longitudinal direction that protrudes into a valve pressure chamber in which high pressure occurs at least occasionally and that contains a sealing surface interacting with a valve seat to control an opening with connection to a low-pressure region. The valve element has a journal protruding into the connection via which fuel can exit the valve pressure chamber with the sealing surface raised from the seat so that approximately no or only low forces on valve element are generated by fuel exiting the valve pressure chamber.

IPC 1-7

F02M 59/46; F02M 47/02

IPC 8 full level

F02M 47/02 (2006.01); **F02M 57/02** (2006.01); **F02M 59/46** (2006.01); **F02M 61/20** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)

F02M 47/027 (2013.01 - EP US); **F02M 57/023** (2013.01 - EP US); **F02M 61/205** (2013.01 - EP US); **F02M 63/0033** (2013.01 - EP US);
F02M 63/0035 (2013.01 - EP US); **F02M 63/0045** (2013.01 - EP US); **F02M 63/007** (2013.01 - EP US); **F02M 63/0073** (2013.01 - EP US);
F02M 63/0078 (2013.01 - EP US); **F02M 2200/04** (2013.01 - EP US)

Citation (search report)

See references of WO 2005040598A1

Designated contracting state (EPC)

DE ES FR GB

DOCDB simple family (publication)

DE 10344897 A1 20050421; BR PI0406815 A 20051227; BR PI0406815 B1 20121211; CN 100564864 C 20091202; CN 1856642 A 20061101;
EP 1671028 A1 20060621; EP 1671028 B1 20120704; JP 2006510847 A 20060330; JP 4253659 B2 20090415; US 2007063159 A1 20070322;
US 7513441 B2 20090407; WO 2005040598 A1 20050506

DOCDB simple family (application)

DE 10344897 A 20030926; BR PI0406815 A 20040804; CN 200480027901 A 20040804; DE 2004001744 W 20040804;
EP 04762589 A 20040804; JP 2005518212 A 20040804; US 57256704 A 20040804