

Title (en)

ELECTROMAGNETICALLY OPERABLE VALVE, ESPECIALLY FUEL INJECTION VALVE

Title (de)

ELEKTROMAGNETISCH BETÄIGBARES VENTIL, INSSESONDERE BRENNSTOFFEINSPRITZVENTIL

Title (fr)

ELECTROVANNE, EN PARTICULIER POUR SOUPAPE D'INJECTION DE CARBURANT

Publication

**EP 0796393 A1 19970924 (DE)**

Application

**EP 96920711 A 19960627**

Priority

- DE 9601136 W 19960627
- DE 19537382 A 19951007

Abstract (en)

[origin: DE19537382A1] The invention relates to an electromagnetically operable valve having an electromagnetic circuit consisting partly of a magnet coil (1), a magnet housing (3) and a core (5) acting as an inner pole. A valve body (13) acting as an armature and valve closer is spherical and moves axially inside the magnet housing (3). Between the core (5) and the valve body (13) there is a seat (33) having a concave seat surface (43) facing the valve body (13). The valve body (13) is peripherally at least partly surrounded by a guide (25) having a guide aperture which is also at least partly concave. In the form of a fuel injection valve, the valve is particularly suitable for use in fuel injection systems in mixture-compression spark-ignition internal combustion engines.

IPC 1-7

**F02M 51/06**

IPC 8 full level

**F02M 51/06** (2006.01); **F02M 51/08** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP KR US)

**F02M 51/0632** (2013.01 - EP KR US); **F02M 51/08** (2019.01 - EP KR US); **F02M 61/1853** (2013.01 - EP KR US);  
**Y10S 239/90** (2013.01 - EP KR US)

Citation (search report)

See references of WO 9713977A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**DE 19537382 A1 19970410**; BR 9606667 A 19970930; CN 1067463 C 20010620; CN 1166196 A 19971126; DE 59607084 D1 20010719;  
EP 0796393 A1 19970924; EP 0796393 B1 20010613; JP 3737119 B2 20060118; JP H10510609 A 19981013; KR 100420746 B1 20040520;  
KR 980700516 A 19980330; RU 2160378 C2 20001210; US 5820032 A 19981013; WO 9713977 A1 19970417

DOCDB simple family (application)

**DE 19537382 A 19951007**; BR 9606667 A 19960627; CN 96191164 A 19960627; DE 59607084 T 19960627; DE 9601136 W 19960627;  
EP 96920711 A 19960627; JP 51460197 A 19960627; KR 19970703755 A 19970605; RU 97111874 A 19960627; US 81745797 A 19970415