

Title (en)
FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)
KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE

Publication
EP 0811119 A1 19971210 (DE)

Application
EP 96922757 A 19960709

Priority
• DE 9601234 W 19960709
• DE 19548540 A 19951223

Abstract (en)
[origin: DE19548540A1] A fuel injection valve for internal combustion engines with a valve body (1) at the combustion chamber side of which there is an annular pressure chamber (25) connected to a supply channel (5) and bounded by an elastic valve member (11) which bears under its own tension via a valve sealing surface (27) on a fixed valve seat (29), from which it can be lifted by pressure in the pressure chamber (25). The aperture cross-section thereby controlled is downstream of at least one injection aperture (31) into the combustion chamber of the internal combustion engine. Here, the centre of the elastic valve member (11), which takes the form of a diaphragm, is secured against the valve body (1) and its radially outwardly directed edge region forms the elastic sealing surface (27) which can be elastically raised from the valve seat (29).

IPC 1-7
F02M 61/04

IPC 8 full level
B05B 1/30 (2006.01); **F02M 61/04** (2006.01)

CPC (source: EP KR)
B05B 1/3006 (2013.01 - EP); **F02M 61/04** (2013.01 - KR); **F02M 61/047** (2013.01 - EP)

Citation (search report)
See references of WO 9723724A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 19548540 A1 19970626; CN 1075871 C 20011205; CN 1173911 A 19980218; DE 59608146 D1 20011213; EP 0811119 A1 19971210; EP 0811119 B1 20011107; JP H11501382 A 19990202; KR 19980702022 A 19980715; RU 2161723 C2 20010110; WO 9723724 A1 19970703

DOCDB simple family (application)
DE 19548540 A 19951223; CN 96191912 A 19960709; DE 59608146 T 19960709; DE 9601234 W 19960709; EP 96922757 A 19960709; JP 52318897 A 19960709; KR 19970705417 A 19970807; RU 97116142 A 19960709