

Title (en)
FUEL INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

Publication
EP 1042610 A1 20001011 (DE)

Application
EP 99924732 A 19990331

Priority
• DE 9900970 W 19990331
• DE 19835693 A 19980807

Abstract (en)
[origin: DE19835693A1] The invention relates to a fuel injection valve which characterises in that it comprises, for opening and closing purposes, a valve closing body (7) which can move axially along a valve longitudinal axis (2) and a valve seat body (16). A valve seat surface (29) is associated to the valve seat body (16) and said valve closing body (7) co-operates with said valve seat surface (29). The valve closing body (7) is connected to the valve seat body (16) through an elastic member (9) in the form of a diaphragm-spring. Said elastic member (9) is placed in such a way that when the valve closes it acts as a return spring for retracting the valve closing body (7) against the valve seat surface (29). The inventive fuel injection valve is particularly adapted to be used in injection arrangements of internal combustion engines with mixture compression and applied ignition.

IPC 1-7
F02M 61/20; **F02M 61/18**; **F02M 51/06**; **F02M 61/16**

IPC 8 full level
F02M 51/06 (2006.01); **F02M 51/08** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01); **F02M 61/20** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)
F02M 51/0671 (2013.01 - EP US); **F02M 61/20** (2013.01 - EP US); **F02M 2200/50** (2013.01 - EP US); **Y10S 239/90** (2013.01 - EP US); **Y10T 137/86622** (2015.04 - EP US)

Citation (search report)
See references of WO 0008333A1

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
DE 19835693 A1 20000210; DE 59910198 D1 20040916; EP 1042610 A1 20001011; EP 1042610 B1 20040811; ES 2226389 T3 20050316; JP 2002522695 A 20020723; US 6279841 B1 20010828; WO 0008333 A1 20000217

DOCDB simple family (application)
DE 19835693 A 19980807; DE 59910198 T 19990331; DE 9900970 W 19990331; EP 99924732 A 19990331; ES 99924732 T 19990331; JP 2000563939 A 19990331; US 50997700 A 20000405