

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 1399668 A1 20040324 (DE)

Application
EP 02758052 A 20020612

Priority
• DE 0202116 W 20020612
• DE 10128763 A 20010613
• DE 10224241 A 20020529

Abstract (en)
[origin: WO02101229A1] The invention relates to a fuel injection valve for internal combustion engines, comprising an injection nozzle which is fixed to a nozzle holder or an injector. Said injection nozzle is provided with a body (1, 17, 24) and a needle (3). Said nozzle needle (3) can be axially displaced in a bore hole (2) in the nozzle body (1, 17, 24). Said nozzle body (1, 17, 24) has at least one identifying mark or at least one key surface for aligning the nozzle body (1, 17, 24) with the nozzle holder or injector. The invention also relates to a method for aligning the nozzle body (1, 17, 24) with the nozzle holder or injector, during the assembly of an inventive fuel injection valve.

IPC 1-7
F02M 61/16

IPC 8 full level
F02M 61/16 (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP)
F02M 61/168 (2013.01); **F02M 61/18** (2013.01); **F02M 2200/852** (2013.01)

Citation (search report)
See references of WO 02101229A1

Cited by
RU193251U1; DE102020208277A1; DE102008034128A1; DE102020209636A1; WO2022022965A1

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 02101229 A1 20021219; BR 0205538 A 20030722; DE 50208654 D1 20061221; EP 1399668 A1 20040324; EP 1399668 B1 20061108; JP 2004521244 A 20040715

DOCDB simple family (application)
DE 0202116 W 20020612; BR 0205538 A 20020612; DE 50208654 T 20020612; EP 02758052 A 20020612; JP 2003503959 A 20020612