Title (en)

FUEL INJECTION VALVE

Title (de)

BRENNSTOFFEINSPRITZVENTIL

Title (fr)

SOUPAPE D'INJECTION DE CARBURANT

Publication

EP 1003965 B1 20030625 (DE)

Application

EP 99911578 A 19990129

Priority

- DE 9900237 W 19990129
- DE 19808068 A 19980226

Abstract (en)

[origin: DE19808068A1] The invention relates to a fuel injection valve (1) with a nozzle body (5), for injecting fuel directly into the combustion chamber (3) of an internal combustion engine. To this end, the inventive fuel injection valve can be introduced into a locating bore (2) of a cylinder head (4) of the internal combustion engine. A metal ring (6) located on the nozzle body (5) deforms on heating, and so after the fuel injection valve (1) has been introduced into the locating bore (2), does not cause a radial compression of the fuel injection valve in said locating bore (2) until heated.

IPC 1-7

F02M 61/14; F02M 53/04; F02M 61/16

IPC 8 full level

F02M 53/04 (2006.01); **F02M 61/14** (2006.01); **F02M 61/16** (2006.01); F02M 63/00 (2006.01)

CPC (source: EP KR US)

F02M 53/04 (2013.01 - EP US); **F02M 61/14** (2013.01 - EP KR US); **F02M 61/166** (2013.01 - EP US); F02M 2200/16 (2013.01 - EP US); F02M 2200/22 (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

DE 19808068 A1 19990902; DE 59906080 D1 20030731; EP 1003965 A1 20000531; EP 1003965 B1 20030625; JP 2001522435 A 20011113; JP 4308923 B2 20090805; KR 20010006536 A 20010126; US 6186123 B1 20010213; WO 9943950 A1 19990902

DOCDB simple family (application)

DE 19808068 A 19980226; DE 59906080 T 19990129; DE 9900237 W 19990129; EP 99911578 A 19990129; JP 54302699 A 19990129; KR 19997009626 A 19991018; US 40382299 A 19991026