

Title (en)
FUEL INJECTION NOZZLE FOR INTERNAL COMBUSTION ENGINES

Publication
EP 0269641 B1 19891011 (DE)

Application
EP 87900650 A 19870115

Priority
DE 3617353 A 19860523

Abstract (en)
[origin: WO8707335A1] A fuel injection nozzle for internal combustion engines has a heater plug (22) mounted downstream of the nozzle opening and integrated in the union nut (12) that tightens the nozzle body (10) against the nozzle holder. The union nut has downstream of the nozzle body (10) a supporting shoulder (18) against which rests a sleeve (30) that surrounds and carries the heater plug (22). The heater plug (22) is composed of a sheathed heating conductor formed as a dimensionally stable spiral (50) and operating as an earth conductor between the contact element (66) and the sleeve (30). The arrangement is thus simpler and easier to assemble. In a preferred embodiment, the connecting end (58a) of the sheathed heating conductor (22a) is conceived as a so-called cold end, thus thermally relieving the adjacent parts, especially the seal of the sheathed heating conductor (22a).

IPC 1-7
F02M 53/06; **F02M 57/00**; **F23Q 7/00**

IPC 8 full level
F02M 53/06 (2006.01); **F02M 57/00** (2006.01); **F23Q 7/00** (2006.01)

CPC (source: EP US)
F02M 53/06 (2013.01 - EP US); **F02M 57/00** (2013.01 - EP US); **F23Q 7/001** (2013.01 - EP US)

Citation (examination)
EP 0188745 A2 19860730 - BOSCH GMBH ROBERT [DE]

Cited by
US10950874B2; EP0855899B2

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 8707335 A1 19871203; DE 3617353 A1 19871126; DE 3760754 D1 19891116; EP 0269641 A1 19880608; EP 0269641 B1 19891011; JP S63503398 A 19881208; US 4834043 A 19890530

DOCDB simple family (application)
DE 8700015 W 19870115; DE 3617353 A 19860523; DE 3760754 T 19870115; EP 87900650 A 19870115; JP 50058687 A 19870115; US 15686388 A 19880107