

Title (en)
FUEL INJECTION NOZZLE FOR INTERNAL COMBUSTION ENGINES

Publication
EP 0188745 A3 19870415 (DE)

Application
EP 85115988 A 19851214

Priority
DE 3502109 A 19850123

Abstract (en)
[origin: EP0188745A2] 1. Fuel injection nozzle for internal combustion engines, comprising a nozzle body (10), clamped in place on a nozzle holder by a union nut (12), and a heater body (22) which is arranged downstream from the nozzle body (10), has a passage (24) for the spray jets and is surrounded, with radial clearance, by a sleeve (30) which, with a flange part (72), rests on a supporting shoulder (18), arranged downstream from the nozzle body (10) and firmly connected to the union nut (12), and is provided with wall apertures (57) through which the spray jets draw air from the combustion chamber into the interior of the heater body (22) whose current connection on the combustion chamber side is electrically connected to the sleeve (30) and whose other current connection is electrically connected to a contact disc (46) which, together with the sleeve (30), is secured between the supporting shoulder (18) of the union nut (12) and the facing front end of the nozzle body (10), characterized in that the supporting shoulder (18) is formed directly on the union nut (12), that the inside diameters of the union nut (12), in the area located upstream from its supporting shoulder (18), are larger than the outside diameters of the sleeve (30, 70, 90) and of the contact disc (46, 84, 97), and that these parts, together with the heater body (82, 88), can be inserted from the end located upstream into the union nut (12) and can be pushed forwards up to the supporting shoulder (18).

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

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

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

Citation (search report)
• [AP] EP 0140148 A2 19850508 - BOSCH GMBH ROBERT [DE]
• [A] DE 3307666 A1 19840906 - BOSCH GMBH ROBERT [DE]
• [A] EP 0102507 A2 19840314 - BOSCH GMBH ROBERT [DE]
• [A] WO 8404567 A1 19841122 - BOSCH GMBH ROBERT [DE]

Cited by
US4821696A; GB2158513B; GB2190960A; GB2190960B; WO8706978A1; EP0188744B1; EP0298962B1; EP0269641B1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 0188745 A2 19860730; **EP 0188745 A3 19870415**; **EP 0188745 B1 19890315**; DE 3502109 A1 19860724; DE 3568829 D1 19890420; JP S61169655 A 19860731

DOCDB simple family (application)
EP 85115988 A 19851214; DE 3502109 A 19850123; DE 3568829 T 19851214; JP 818186 A 19860120