

Title (en)
Fuel injection nozzle.

Title (de)
Kraftstoffeinspritzdüse.

Title (fr)
Tuyère d'injection de combustible.

Publication
EP 0653561 A1 19950517 (EN)

Application
EP 94307792 A 19941024

Priority
GB 9323236 A 19931111

Abstract (en)
A two stage lift fuel injection nozzle includes a nozzle holder (10) in which is defined a chamber (16) housing a pair of springs (15, 24) disposed in axial relationship. The springs provide a two stage biasing force for a valve member (13) slidable in a nozzle body (11) which is secured to one end of the holder. The spring (24) which is adjacent the nozzle body engages a reaction member (26) in the form of an annular component (30) defining legs (31) which can be expanded outwardly into gripping engagement with the wall of the chamber by means of a plug (32) which is in screw thread engagement with the component. <IMAGE>

IPC 1-7
F02M 45/08; **F02M 61/20**

IPC 8 full level
F02M 45/08 (2006.01); **F02M 61/20** (2006.01)

CPC (source: EP)
F02M 45/083 (2013.01); **F02M 61/205** (2013.01)

Citation (search report)
• [A] GB 2251891 A 19920722 - BOSCH GMBH ROBERT [DE]
• [A] WO 9005844 A1 19900531 - BOSCH GMBH ROBERT [DE]
• [A] EP 0441094 A1 19910814 - STANADYNE AUTOMOTIVE CORP [US]
• [A] GB 924951 A 19630501 - CAV LTD

Cited by
EP1116879A3; EP0984159A3; AT511801A4; AT511801B1; EP1116879A2; US9765910B2

Designated contracting state (EPC)
DE ES FR GB IT

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