

Title (en)
Fuel injection nozzle.

Title (de)
Brennstoffeinspritzdüse.

Title (fr)
Injecteur de combustible.

Publication
EP 0283154 A1 19880921 (EN)

Application
EP 88301692 A 19880226

Priority

- GB 8706088 A 19870314
- GB 8716657 A 19870715
- GB 8721692 A 19870915

Abstract (en)

A fuel injection nozzle for supplying fuel to an internal combustion engine includes a valve member (17) which co-operates with a seating surface (14) in a nozzle body to prevent fuel flow through an outlet orifice (13) extending from a "sac" volume (16) downstream of the seating surface. The valve body and the valve member downstream of the seating surface define spaced parallel truncated conical surfaces which have a cone angle less than that of the seating surface. The surface defines a flow restriction gap the degree of restriction offered by the gap decreasing at a lower rate as the valve member is lifted from the seating surface, than the degree of restriction between the valve member (17) and the seating surface (14).

IPC 1-7
F02M 61/06; F02M 61/18

IPC 8 full level
F02M 61/06 (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP)
F02M 61/06 (2013.01); **F02M 61/18** (2013.01); **F02M 61/182** (2013.01); **F02M 2200/28** (2013.01)

Citation (search report)

- [Y] GB 2138073 A 19841017 - BOSIO ROBERTO
- [Y] GB 2083134 A 19820317 - NISSAN MOTOR
- [Y] US 4524914 A 19850625 - KAIBARA NOBUHIRO [JP], et al
- [A] DE 837337 C 19520421 - KLOECKNER HUMBOLDT DEUTZ AG
- [A] GB 2034816 A 19800611 - MASCHF AUGSBURG NUERNBERG AG
- [A] FR 2383320 A1 19781006 - BOSCH GMBH ROBERT [DE]
- [A] GB 2143274 A 19850206 - LUCAS IND PLC
- [A] GB 2029508 A 19800319 - BENDIX CORP
- [A] DE 894789 C 19531029 - DAIMLER BENZ AG

Cited by

KR100737712B1; EP1180596A1; EP1717440A1; US5033679A; US7128280B1; EP1967730A1; EP1498602A3; US7000856B2; WO2004074676A1; WO0118387A1; WO2004076850A1; WO2006007620A1; WO2016150591A1; EP0404407B1; WO2007017302A1; WO2014206610A1; US6682003B2; US8919677B2

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
EP 0283154 A1 19880921; JP S63248967 A 19881017

DOCDB simple family (application)
EP 88301692 A 19880226; JP 5811388 A 19880311