

Title (en)  
Outward opening fuel nozzle

Title (de)  
Nach aussen öffnende Kraftstoffeinspritzdüse

Title (fr)  
Buse d'injection de combustible à ouverture vers l'extérieur

Publication  
**EP 1500812 A1 20050126 (EN)**

Application  
**EP 03102305 A 20030725**

Priority  
EP 03102305 A 20030725

Abstract (en)  
An outward opening fuel nozzle comprises a nozzle body (10) and a pintle (12), wherein the pintle (12) comprises a closing member (14) receivable on a seat (18) of the nozzle body (10), the seat (18) defines a first sealing surface (22) co-operating with a second sealing surface (26) on a periphery of the closing member (14), and the pintle (12) is slideable so that the closing member (14) can be lifted from the seat (18) in order to open a fuel passage (30) defined between the first sealing surface (22) and the second sealing surface (26). The first sealing surface (22) and the second sealing surface (26) each comprise at least two conical portions (34, 36, 42, 44) wherein the cone angles (  $\alpha_1$ ,  $\alpha_2$ ) of the conical portions differ. <IMAGE>

IPC 1-7  
**F02M 61/08**

IPC 8 full level  
**F02M 61/08** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP)  
**F02M 61/08** (2013.01); **F02M 61/18** (2013.01)

Citation (search report)  

- [X] GB 2138884 A 19841031 - MASCHF AUGSBURG NUERNBERG AG
- [X] JP S59147861 A 19840824 - TOYOTA MOTOR CO LTD
- [X] GB 2219627 A 19891213 - ORBITAL ENG PTY [AU]
- [X] EP 0008500 A1 19800305 - FORD MOTOR CO [GB], et al
- [X] WO 03038273 A1 20030508 - BOSCH GMBH ROBERT [DE], et al
- [A] EP 0651154 A1 19950503 - ORBITAL ENG PTY [AU]
- [A] WO 0202932 A1 20020110 - ORBITAL ENG PTY [AU], et al

Cited by  
WO2016120081A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1500812 A1 20050126**

DOCDB simple family (application)  
**EP 03102305 A 20030725**