

Title (en)  
Injector tip seal

Title (de)  
Dichtung für Einspritzdüse

Title (fr)  
Joint d'étanchéité de pointe d'un injecteur

Publication  
**EP 2636880 A1 20130911 (EN)**

Application  
**EP 12158314 A 20120306**

Priority  
EP 12158314 A 20120306

Abstract (en)

Fuel injector (10) for direct injection in an internal combustion engine, the fuel injector (10) being designed to be inserted into a mounting bore (14) of a cylinder head (12) which opens into a combustion chamber (16), said fuel injector (10) having an injector body (18) which ends with a tip portion (20) provided with a nozzle (22), characterized by said tip portion (20) being provided with at least one tip seal (38) comprising a ring shaped body formed of metallic wire mesh, said tip seal (38) being able to close the annular gap between the tip portion (20) and the mounting bore wall (40) in view to dissipate thermal energy from the tip portion (20) to the cylinder head (12), and said tip seal (38) being elastically flexible in order to allow radial compression of the tip seal (38) during mounting and dismounting operations of the fuel injector (10) in the mounting bore (14).

IPC 8 full level  
**F02M 61/14** (2006.01); **F01P 1/10** (2006.01); **F01P 3/16** (2006.01); **F02F 1/24** (2006.01); **F02M 53/04** (2006.01); **F02M 69/04** (2006.01);  
**F16J 15/02** (2006.01)

CPC (source: EP)  
**F02M 53/043** (2013.01); **F02M 61/14** (2013.01); **F02M 69/046** (2013.01); **F02M 2200/858** (2013.01)

Citation (search report)

- [Y] FR 2906575 A1 20080404 - RENAULT SAS [FR]
- [Y] DE 102008001489 A1 20081106 - BOSCH GMBH ROBERT [DE]
- [A] JP H0941959 A 19970210 - MITSUBISHI MOTORS CORP
- [A] WO 2007058103 A1 20070524 - TOYOTA MOTOR CO LTD [JP], et al
- [A] DE 102010033710 A1 20120209 - DEUTZ AG [DE]

Cited by  
EP2840251A1; WO2023237311A1; WO2019052719A1; WO2017102245A1; WO2016082986A3

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2636880 A1 20130911**

DOCDB simple family (application)  
**EP 12158314 A 20120306**