

Title (en)  
Fuel injector

Title (de)  
KRAFTSTOFFEINSPRITZDÜSE

Title (fr)  
INJECTEUR À CARBURANT

Publication  
**EP 2918818 A1 20150916 (EN)**

Application  
**EP 15156616 A 20150225**

Priority  
GB 201404131 A 20140310

Abstract (en)  
A variable orifice nozzle assembly (12) of a fuel injector (10) having an upper set of spray holes (18) and a lower set of spray holes (20), and being provided with an outer valve member (36) controlling the upper holes (18) and, an inner valve member (40) coaxially slidably arranged inside the outer valve member (36) for controlling the lower holes (18). The outer (36) and the inner valve members (40) are able to be independently translated between a closed position (PC) prohibiting fuel spray and an open position (PO) enabling fuel spray and, the nozzle assembly (12) is provided with an expansion means (50,52,54, 56, 58) enlarging the outer valve member (36) when being in closed position (PC).

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

CPC (source: EP)  
**F02M 61/1873** (2013.01); **F02M 2200/26** (2013.01); **F02M 2200/46** (2013.01)

Citation (search report)  
• [X1] DE 102004055267 A1 20060518 - BOSCH GMBH ROBERT [DE]  
• [X1] WO 03040543 A1 20030515 - BOSCH GMBH ROBERT [DE], et al  
• [X1] DE 102004060151 A1 20060629 - SIEMENS AG [DE]  
• [X1] JP 2009275646 A 20091126 - DENSO CORP  
• [A] DE 102007000080 A1 20070830 - DENSO CORP [JP]  
• [A] EP 1693562 A1 20060823 - DELPHI TECH INC [US]

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)  
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