

Title (en)  
NOZZLE ASSEMBLY AND FUEL INJECTOR

Title (de)  
DÜSENANORDNUNG UND KRAFTSTOFFINJEKTOR

Title (fr)  
ENSEMBLE DE BUSE ET INJECTEUR DE CARBURANT

Publication  
**EP 3208456 B1 20200415 (EN)**

Application  
**EP 17155490 A 20170209**

Priority  
GB 201602694 A 20160216

Abstract (en)  
[origin: EP3208456A1] ABSTRACT OF THE DISCLOSURE A nozzle assembly (26) of a fuel injector (10) comprises a nozzle body (28) defining an inner bore extending along a main axis (X), said bore forming at a first extremity a tapered fixed valve seat (42) adapted to receive in sealing contact a complementary tapered needle seating face (52) of a needle valve slidably arranged in the bore, and adapted to translate along the main axis (X) between a closed position where the needle seating face (52) is in sealing contact with the fixed valve seat (42) and, a fully open position where the needle seating face is lifted away from the fixed valve seat. The nozzle assembly (26) is further provided with a spring assembly radially compressed between the needle and the bore so that in use, when beginning a lift of the needle (36) from the closed position toward the open position, the tapered needle seating face (52) slides and remains in contact against the fixed valve seat (52) instead of coaxially separating immediately.

IPC 8 full level  
**F02M 51/06** (2006.01); **F02M 61/12** (2006.01); **F02M 65/00** (2006.01)

CPC (source: EP)  
**F02M 51/0653** (2013.01); **F02M 61/12** (2013.01); **F02M 65/005** (2013.01); **F02M 2200/26** (2013.01); **F02M 2200/50** (2013.01); **F02M 2200/9015** (2013.01)

Citation (examination)  
DE 102015222162 A1 20170511 - BOSCH GMBH ROBERT [DE] & WO 2017080757 A1 20170518 - BOSCH GMBH ROBERT [DE]

Cited by  
US11067028B2; WO2020025262A1

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

DOCDB simple family (publication)  
**EP 3208456 A1 20170823; EP 3208456 B1 20200415**; GB 201602694 D0 20160330

DOCDB simple family (application)  
**EP 17155490 A 20170209**; GB 201602694 A 20160216