

Title (en)  
FUEL INJECTOR

Title (de)  
KRAFTSTOFFINJEKTOR

Title (fr)  
INJECTEUR DE CARBURANT

Publication  
**EP 3097302 B1 20190703 (DE)**

Application  
**EP 14819008 A 20141222**

Priority  
• DE 102014200884 A 20140120  
• EP 2014079051 W 20141222

Abstract (en)  
[origin: WO2015106937A1] The invention relates to a fuel injector for injecting fuel into a combustion chamber of an internal combustion engine, comprising a clamping nut fitted with a retainer element and a magnetic element; a needle element unit consisting of an armature needle and an injector needle; and a magnetic actuator accommodated in the clamping nut for direct actuation of the needle element unit, which is reciprocatingly movably accommodated in an inner bore of the clamping nut and which by means of its reciprocating movement can expose or cover at least one injection opening; wherein the magnetic actuator has an annular magnetic coil disposed between the retainer element and the magnetic element, and a solenoid plunger operating as a final control element, and the solenoid plunger comprises an armature plate and the armature needle and co-operates with the magnetic coil, and wherein the armature plate and the armature needle are made of different materials and are integrally bonded together to form a single piece.

IPC 8 full level  
**F02M 51/06** (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP)  
**F02M 51/061** (2013.01); **F02M 51/0664** (2013.01); **F02M 51/0682** (2013.01); **F02M 61/168** (2013.01); **F02M 2200/8053** (2013.01); **F02M 2200/8061** (2013.01); **F02M 2200/8084** (2013.01)

Citation (examination)  
WO 2015106934 A1 20150723 - BOSCH GMBH ROBERT [DE]

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)  
**WO 2015106937 A1 20150723**; CN 105917109 A 20160831; CN 105917109 B 20190402; DE 102014200884 A1 20150723; EP 3097302 A1 20161130; EP 3097302 B1 20190703

DOCDB simple family (application)  
**EP 2014079051 W 20141222**; CN 201480073689 A 20141222; DE 102014200884 A 20140120; EP 14819008 A 20141222