Title (en)

FUEL INJECTION DEVICE

Title (de)

BRENNSTOFFEINSPRITZVORRICHTUNG

Title (fr)

DISPOSITIF D'INJECTION DE CARBURANT

Publication

EP 3234346 A1 20171025 (DE)

Application

EP 15784719 A 20151026

Priority

- DE 102014225976 A 20141216
- EP 2015074702 W 20151026

Abstract (en)

[origin: WO2016096204A1] The fuel injection device according to the invention is characterized particularly by providing a low-noise and pivotal structure. The fuel injection device comprises at least one fuel injection valve (1), a receiving bore (20) in a cylinder head (9) for the fuel injection valve (1), and a decoupling element (25) between a valve housing (22) of the fuel injection valve (1) and a wall of the receiving bore (20). The decoupling element (25) is arranged on the fuel injection valve (1) in a captive manner before the fuel injection valve is assembled in the receiving bore (20), wherein a securing ring (29) is attached to the outer circumference of the fuel injection valve (1) below the decoupling element (25), and the securing ring (29) is a closed plastic ring. The fuel injection valve is particularly suitable for injecting fuel directly into a combustion chamber of a mixture-compressing spark-ignited internal combustion engine.

IPC 8 full level

F02M 61/14 (2006.01); **F02M 61/16** (2006.01)

CPC (source: CN EP KR US)

F02M 61/14 (2013.01 - CN EP KR US); **F02M 61/168** (2013.01 - CN EP KR US); F02M 2200/858 (2013.01 - CN EP KR US)

Citation (search report)

See references of WO 2016096204A1

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)

DE 102014225976 A1 20160616; CN 107110098 A 20170829; CN 107110098 B 20200526; EP 3234346 A1 20171025; EP 3234346 B1 20200318; JP 2018500500 A 20180111; JP 6553725 B2 20190731; KR 102476866 B1 20221214; KR 20170097039 A 20170825; US 10197033 B2 20190205; US 2017350358 A1 20171207; WO 2016096204 A1 20160623

DOCDB simple family (application)

DE 102014225976 A 20141216; CN 201580068490 A 20151026; EP 15784719 A 20151026; EP 2015074702 W 20151026; JP 2017532067 A 20151026; KR 20177016418 A 20151026; US 201515535307 A 20151026