

Title (en)

LASER SPARK PLUG AND CLEANING METHOD FOR SAME

Title (de)

LASERZÜNDKERZE UND REINIGUNGSVERFAHREN HIERFÜR

Title (fr)

BOUGIE D'ALLUMAGE LASER ET PROCÉDÉ DE NETTOYAGE DE CETTE DERNIÈRE

Publication

EP 2732149 B1 20170301 (DE)

Application

EP 12724610 A 20120529

Priority

- DE 102011079043 A 20110713
- EP 2012059957 W 20120529

Abstract (en)

[origin: WO2013007439A1] The invention relates to a laser spark plug (100), especially for an internal combustion engine, comprising a combustion chamber window (106) through which laser radiation (L) can be emitted from an interior (I) of the laser spark plug (100) towards an exterior (A), the laser spark plug (100) comprising a component (120a, 120b) which surrounds at least part of the beam path (S) of the laser radiation (L) in the region of the exterior (A). The invention is characterized in that the laser spark plug (100), in the region of the component (120a, 120b), has at least one channel (122) which has at least two orifice sections (122a, 122b) and which allows fluid communication between the orifice sections (122a, 122b), a first orifice section (122a) being located in the region of an outer surface (106a) of the combustion chamber window (106) and a second orifice section (122b) being located in a radially outer region of the laser spark plug (100), especially of component (120a, 120b).

IPC 8 full level

F02P 23/04 (2006.01)

CPC (source: EP US)

F02P 23/04 (2013.01 - EP US); **F02B 5/00** (2013.01 - EP US); **F02P 13/00** (2013.01 - EP US); **Y10T 29/49229** (2015.01 - EP 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

DOCDB simple family (publication)

DE 102011079043 A1 20130117; EP 2732149 A1 20140521; EP 2732149 B1 20170301; JP 2014523995 A 20140918; JP 6021907 B2 20161109; US 2014305394 A1 20141016; US 9982651 B2 20180529; WO 2013007439 A1 20130117

DOCDB simple family (application)

DE 102011079043 A 20110713; EP 12724610 A 20120529; EP 2012059957 W 20120529; JP 2014519466 A 20120529; US 201214232342 A 20120529