

Title (en)
LASER IGNITION DEVICE FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
LASERZÜNDEINRICHTUNG FÜR EINE BRENNKRAFTMASCHINE

Title (fr)
DISPOSITIF D'ALLUMAGE PAR LASER POUR MOTEUR À COMBUSTION INTERNE

Publication
EP 2519737 A1 20121107 (DE)

Application
EP 10787430 A 20101203

Priority
• DE 102009055334 A 20091228
• DE 102010039877 A 20100827
• EP 2010068854 W 20101203

Abstract (en)
[origin: WO2011080025A1] The invention relates to a laser ignition device (27) for an internal combustion engine (10), in particular of a motor vehicle, having a laser device (26) for generating laser pulses (24) and having a pumping light source (30) for optically pumping the laser device (26). According to the invention, a photodiode arrangement (270) is arranged in the region of an optical connection (280) between the pumping light source (30) and the laser device (26) such that both pumping radiation generated by the pumping light source (30) and also laser radiation generated by the laser device (26) can each be at least partially irradiated onto a photodiode (271) of the photodiode arrangement (270).

IPC 8 full level
F02P 23/04 (2006.01); **B23K 26/42** (2006.01); **G01J 1/44** (2006.01); **H01S 3/00** (2006.01); **H01T 13/40** (2006.01); **H01T 13/58** (2011.01); **H04B 10/00** (2006.01)

CPC (source: EP US)
F02D 35/022 (2013.01 - EP US); **F02P 17/00** (2013.01 - EP US); **F02P 23/04** (2013.01 - EP US); **G01J 1/4257** (2013.01 - EP US); **G01J 1/44** (2013.01 - EP US); **F02P 17/12** (2013.01 - EP US); **F02P 2017/123** (2013.01 - EP US); **H01S 3/0912** (2013.01 - EP US); **H01S 3/094053** (2013.01 - EP US); **H01S 3/0941** (2013.01 - EP US); **H01S 3/1312** (2013.01 - EP US)

Citation (search report)
See references of WO 2011080025A1

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 2011080025 A1 20110707; DE 102010039877 A1 20110630; EP 2519737 A1 20121107; JP 2013515911 A 20130509; JP 5599471 B2 20141001; US 2013014717 A1 20130117

DOCDB simple family (application)
EP 2010068854 W 20101203; DE 102010039877 A 20100827; EP 10787430 A 20101203; JP 2012546406 A 20101203; US 201013519278 A 20101203