

Title (en)
Method of manufacturing spark plug

Title (de)
Verfahren zur Herstellung einer Zündkerze

Title (fr)
Procédé de fabrication d'une bougie d'allumage

Publication
EP 2869413 A1 20150506 (EN)

Application
EP 14189873 A 20141022

Priority
JP 2013228834 A 20131101

Abstract (en)
To improve the accuracy of a judgment as to whether or not a discharge penetrating an insulator has occurred. A spark plug which includes a center electrode extending in an axial direction, an insulator having an axial hole which extends in the axial direction and in which the center electrode is disposed, a metallic shell disposed around the insulator, and a ground electrode electrically connected to the metallic shell and forming a gap in cooperation with the center electrode is manufactured by the following method. An assembly is formed by combining the metallic shell, the insulator, and the center electrode. A voltage is applied between the metallic shell and the center electrode of the assembly. In a period during which the voltage is applied, a judgment as to whether or not a discharge penetrating the insulator has occurred is made by using an output value output from an optical sensor directed toward a forward end portion of the assembly.

IPC 8 full level
H01T 13/60 (2011.01); **H01T 21/02** (2006.01)

CPC (source: EP)
H01T 13/60 (2013.01); **H01T 21/02** (2013.01)

Citation (applicant)
JP 2012185963 A 20120927 - NGK SPARK PLUG CO

Citation (search report)
• [Y] DE 4208533 A1 19920924 - NIPPON DENSO CO [JP]
• [Y] JP 2010217068 A 20100930 - NIPPON SOKEN, et al
• [Y] FR 2968143 A1 20120601 - SNECMA [FR]
• [Y] DD 150118 A1 19810812 - SCHIBILSKI SIEGFRIED
• [Y] US 4702553 A 19871027 - BUCHMUELLER REINO [DE], et al
• [AD] JP 2012185963 A 20120927 - NGK SPARK PLUG CO

Cited by
CN111389985A; EP3121914A1; US10008834B2

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

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BA ME

DOCDB simple family (publication)
EP 2869413 A1 20150506; EP 2869413 B1 20191204; JP 2015088436 A 20150507; JP 5921516 B2 20160524

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