

Title (en)
IMPROVED SPARK PLUG

Title (de)
VERBESSERTE ZÜNDKERZE

Title (fr)
BOUGIE D'ALLUMAGE AMÉLIORÉE

Publication
EP 3180824 A4 20180321 (EN)

Application
EP 15831542 A 20150813

Priority
• CA 2859488 A 20140815
• CA 2015050769 W 20150813

Abstract (en)
[origin: WO2016023127A1] The plug comprises a nut, a coupling extending from the nut and adapted to receive an ignition wire and an insulator extending from the nut and away from the coupling. A positive electrode extends through the insulator. An externally-threaded tubular portion extends from the nut in surrounding relation to the insulator and terminating, short of the insulator end, in a cap that is disposed in spaced relation to the insulator. The cap defines a void having: a central portion into which the positive electrode extends; an annular channel surrounding the central portion; and a plurality of lobes, each positioned with respect to the central portion as the planet gears are positioned with respect to the sun gear in a planetary gear. The cap has a central surface that is axially spaced from the insulator and a convex surface that surrounds and extends to the central surface.

IPC 8 full level
H01T 13/46 (2006.01); **H01T 13/32** (2006.01)

CPC (source: EP)
H01T 13/32 (2013.01); **H01T 13/467** (2013.01)

Citation (search report)
• [X] WO 2013010246 A1 20130124 - NANO SPARK INC [CA], et al
• [XP] US 2014354137 A1 20141204 - FARRELL MARK [CA], et al
• [A] US 2009241321 A1 20091001 - FARRELL MARK [CA], et al
• See references of WO 2016023127A1

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 2016023127 A1 20160218; CA 2859488 A1 20160215; CN 106797108 A 20170531; EP 3180824 A1 20170621; EP 3180824 A4 20180321; JP 2017529656 A 20171005; KR 20170041895 A 20170417

DOCDB simple family (application)
CA 2015050769 W 20150813; CA 2859488 A 20140815; CN 201580050767 A 20150813; EP 15831542 A 20150813; JP 2017508032 A 20150813; KR 20177006870 A 20150813