

Title (en)

SPARK PLUG ELECTRODE MATERIAL AND SPARK PLUG

Title (de)

ZÜNDKERZENELEKTRODENMATERIAL UND ZÜNDKERZE

Title (fr)

ALLIAGE POUR ELECTRODE DE BOUGIE D'ALLUMAGEET BOUGIE D'ALLUMAGE

Publication

EP 2697405 A1 20140219 (DE)

Application

EP 12707053 A 20120215

Priority

- DE 1020111007532 A 20110415
- EP 2012052563 W 20120215

Abstract (en)

[origin: WO2012139791A1] The invention relates to a spark plug electrode material containing nickel, silicon, and copper, wherein the electrode material, if used correctly, forms a nickel oxide layer from nickel oxide crystals on at least a part of the surface thereof, wherein the crystal boundary phase of the nickel oxide crystals includes silicon and/or silicon oxide.

IPC 8 full level

C22C 19/00 (2006.01)

CPC (source: EP KR US)

C22C 19/00 (2013.01 - KR); **C22C 19/03** (2013.01 - EP US); **C22C 19/05** (2013.01 - US); **C22F 1/10** (2013.01 - EP US);
H01T 13/39 (2013.01 - EP US); **H01T 21/02** (2013.01 - EP US)

Citation (search report)

See references of WO 2012139791A1

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 1020111007532 A1 20121018; BR 112013026476 A2 20161220; CN 103492595 A 20140101; CN 103492595 B 20170215;
EP 2697405 A1 20140219; EP 2697405 B1 20190731; JP 2014516385 A 20140710; JP 5732589 B2 20150610; KR 20140018921 A 20140213;
RU 2640699 C1 20180111; US 2014125214 A1 20140508; US 9166380 B2 20151020; WO 2012139791 A1 20121018

DOCDB simple family (application)

DE 1020111007532 A 20110415; BR 112013026476 A 20120215; CN 201280018331 A 20120215; EP 12707053 A 20120215;
EP 2012052563 W 20120215; JP 2014504218 A 20120215; KR 20137027006 A 20120215; RU 2013150688 A 20120215;
US 201214111863 A 20120215