

Title (en)

Use of an electric contact material to blow an electric arc

Title (de)

Verwendung eines elektrischen Kontaktmaterials zur Herstellung eines Lichtbogens durch Blasen

Title (fr)

Utilisation d'un matériau de contact électrique pour souffler un arc électrique

Publication

EP 2124236 A1 20091125 (FR)

Application

EP 08156731 A 20080522

Priority

EP 08156731 A 20080522

Abstract (en)

The material has an array of conductor metal and non-magnetized magnetic entities, where the entities are magnetized with an average orientation defined by a direction of a magnetic field applied on the material for blowing an electrical arc between electrical contact studs. Each electrical contact stud has an upper layer that comprises material such as silver or copper, or stable refractory compound. The magnetic entities are rare earth based hard magnetic compounds such as nanostructured alloy of neodymium/praseodymium, iron and boron. An independent claim is also included for a method for fabricating an electrical contact stud.

Abstract (fr)

La présente invention concerne l'utilisation d'un matériau comportant une matrice en métal conducteur et des entités magnétiques représentant entre 8 et 80% en poids du matériau et comprenant des phases magnétiques dures, lesdites entités magnétiques étant non aimantées et susceptibles d'être rendues aimantées avec une orientation moyenne, définie par la direction d'un champ magnétique appliqué sur ledit matériau, pour souffler un arc électrique entre deux plots de contacts électriques dont l'un au moins comprend ledit matériau.

IPC 8 full level

H01H 9/44 (2006.01)

CPC (source: EP US)

H01H 9/446 (2013.01 - EP US); **H01H 1/0094** (2013.01 - EP US); **H01H 1/02372** (2013.01 - EP US); **Y10T 29/49124** (2015.01 - EP US)

Citation (applicant)

- US 3626124 A 19711207 - DENES PETER A
- EP 1482525 A2 20041201 - OMRON TATEISI ELECTRONICS CO [JP]

Citation (search report)

- [DXAY] US 3626124 A 19711207 - DENES PETER A
- [Y] DE 857252 C 19521127 - SIEMENS AG

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 08156731 A 20080522; AT 09749760 T 20090514; BR PI0913030 A 20090514; CA 2723770 A 20090514; CN 200980118366 A 20090514; EP 09749760 A 20090514; EP 2009055879 W 20090514; ES 09749760 T 20090514; HK 11105874 A 20110610; IL 20930310 A 20101114; JP 2011509934 A 20090514; MX 2010012523 A 20090514; PL 09749760 T 20090514; PT 09749760 T 20090514; SI 200930226 T 20090514; US 99230809 A 20090514