

Title (en)
ELECTRICAL CONTACT MATERIAL

Title (de)
ELEKTRISCHES KONTAKTMATERIAL

Title (fr)
MATÉRIAU DE CONTACT ÉLECTRIQUE

Publication
EP 2586883 A4 20140312 (EN)

Application
EP 11797993 A 20110609

Priority

- JP 2010141247 A 20100622
- JP 2011063200 W 20110609

Abstract (en)
[origin: EP2586883A1] Provided is an electrical contact material excellent in welding resistance, wear-out resistance, and temperature performance. The electrical contact material (31) includes more than 30% by mass and 55% by mass or less of tungsten carbide and 2% by mass or more and 5% by mass or less of graphite, the remainder including silver and an unavoidable impurity, the electrical contact material (31): having a relative density of 98.0% or more; an oxygen content of 450 ppm or less; an electrical conductivity of 45% IACS or more; and a transverse rupture strength of 350 MPa or more.

IPC 8 full level
C22C 32/00 (2006.01); **C22C 1/05** (2006.01); **C22C 5/06** (2006.01); **C22C 29/08** (2006.01); **H01H 1/021** (2006.01); **H01H 1/023** (2006.01)

CPC (source: EP)
C22C 5/06 (2013.01); **C22C 29/08** (2013.01); **C22C 32/0052** (2013.01); **H01H 1/0233** (2013.01); **B22F 2998/00** (2013.01)

Citation (search report)

- [E] EP 2587507 A1 20130501 - ALMT CORP [JP]
- [E] EP 2620515 A1 20130731 - ALMT CORP [JP]
- [E] EP 2413337 A1 20120201 - ALMT CORP [JP]
- [A] WO 2009041246 A1 20090402 - ALMT CORP [JP], et al
- [A] CN 1658346 A 20050824 - UNIV SHANGHAI [CN]
- [A] US 4689196 A 19870825 - LEUNG CHI H [US]
- [A] US 4810289 A 19890307 - HOYER NORMAN S [US], et al
- [A] US 4954170 A 19900904 - FEY MAURICE G [US], et al
- [A] FEHIM FINDIK ET AL: "Microstructure, hardness and electrical properties of silver-based refractory contact materials", MATERIALS & DESIGN, vol. 24, no. 7, 1 October 2003 (2003-10-01), pages 489 - 492, XP055099851, ISSN: 0261-3069, DOI: 10.1016/S0261-3069(03)00125-0
- See references of WO 2011162107A1

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)
EP 2586883 A1 20130501; **EP 2586883 A4 20140312**; **EP 2586883 B1 20151104**; CN 102947475 A 20130227; CN 102947475 B 20150902; JP 4898978 B2 20120321; JP WO2011162107 A1 20130819; WO 2011162107 A1 20111229

DOCDB simple family (application)
EP 11797993 A 20110609; CN 201180030832 A 20110609; JP 2011063200 W 20110609; JP 2011542622 A 20110609