

Title (en)
ELECTRICAL CONTACT MATERIAL

Title (de)
ELEKTRISCHES KONTAKTMATERIAL

Title (fr)
MATÉRIAUX 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)
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DOCDB simple family (publication)
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JP 4898978 B2 20120321; JP WO2011162107 A1 20130819; WO 2011162107 A1 20111229

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EP 11797993 A 20110609; CN 201180030832 A 20110609; JP 2011063200 W 20110609; JP 2011542622 A 20110609