

Title (en)

METHOD FOR PREPARING FIBROUS SILVER-BASED ELECTRICAL CONTACT MATERIAL

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES FASERIGEN ELEKTRISCHEN KONTAKTMATERIALS AUF SILBERBASIS

Title (fr)

PROCÉDÉ DE PRÉPARATION D'UNE MATIÈRE DE CONTACT ÉLECTRIQUE FIBREUSE À BASE D'ARGENT

Publication

**EP 2537949 A4 20141001 (EN)**

Application

**EP 11844208 A 20110411**

Priority

- CN 201010571801 A 20101203
- CN 2011000630 W 20110411

Abstract (en)

[origin: EP2537949A1] A method for preparing silver-based electrical contact materials with fiber-like arrangement of reinforcing nanoparticles includes (1) uniformly mixing reinforcement powders and silver matrix powders for ball milling; (2) pouring the obtained composite powders and silver matrix powders into a powder mixing machine for powder mixing; (3) cold isostatic pressing; (4) sintering; (5) hot pressing; and (6) hot extruding to obtain silver-based electrical contact materials with fiber-like arrangement of reinforcing nanoparticles. The method of the present invention can obtain silver-based electrical contact materials with fiber-like arrangement of reinforcing nanoparticles with no specific requirement on processing deformation, and the plasticity and ductility of the reinforcing phase. Furthermore, it has simple processes, low cost and no particular requirements on the equipment. Contact materials prepared by the present method have good resistance to welding and arc erosion, conductivity and a greatly enhanced processing performance.

IPC 8 full level

**C22C 5/06** (2006.01); **C22C 1/04** (2006.01); **H01H 1/02** (2006.01)

CPC (source: EP US)

**C22C 1/1084** (2013.01 - EP); **C22C 1/1094** (2013.01 - EP); **C22C 5/06** (2013.01 - EP US); **C22C 32/0021** (2013.01 - EP); **C22C 47/14** (2013.01 - EP); **H01H 1/023** (2013.01 - EP); **B22F 2998/10** (2013.01 - EP)

Citation (search report)

- [XA] CN 101241804 B 20100421 - UNIV CENTRAL SOUTH
- See references of WO 2012071767A1

Cited by

CN115870498A

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 2537949 A1 20121226**; **EP 2537949 A4 20141001**; **EP 2537949 B1 20181128**; CN 102002651 A 20110406; CN 102002651 B 20130403; WO 2012071767 A1 20120607

DOCDB simple family (application)

**EP 11844208 A 20110411**; CN 201010571801 A 20101203; CN 2011000630 W 20110411