

Title (en)

COPPER ALLOY MATERIAL FOR ELECTRICAL/ELECTRONIC COMPONENT

Title (de)

KUPFERLEGIERUNGSMATERIAL FÜR ELEKTRISCHE UND ELEKTRONISCHE BAUTEILE

Title (fr)

MATIÈRE D'ALLIAGE DE CUIVRE POUR UN COMPOSANT ÉLECTRIQUE/ÉLECTRONIQUE

Publication

**EP 2333128 A4 20120704 (EN)**

Application

**EP 09804913 A 20090730**

Priority

- JP 2009063615 W 20090730
- JP 2008202467 A 20080805

Abstract (en)

[origin: EP2333128A1] A copper alloy material for electrical/electronic components containing Co and Si as additional elements, wherein a compound A composed of Co and Si and having an average particle diameter of not less than 5 nm but less than 50 nm is dispersed, and at least one compound selected from the group consisting of a compound B containing one or neither of Co and Si and having an average particle diameter of not less than 50 nm but not more than 500 nm, a compound C containing both of Co and Si and an additional element and having an average particle diameter of not less than 50 nm but not more than 500 nm, and a compound D composed of Co and Si and having an average particle diameter of not less than 50 nm but not more than 500 nm, is also dispersed. The copper alloy material for electrical/electronic components is also characterized in that the matrix copper alloy has a crystal grain size of 3-35 [μm], and that the copper alloy material has a conductivity of not less than 50% IACS.

IPC 8 full level

**C22C 9/06** (2006.01); **C22F 1/08** (2006.01); **H01B 1/02** (2006.01)

CPC (source: EP US)

**C22C 9/06** (2013.01 - EP US); **C22F 1/08** (2013.01 - EP US); **H01B 1/026** (2013.01 - EP US)

Citation (search report)

- [XDI] US 2008056930 A1 20080306 - ITO TAKEFUMI [JP], et al
- [XDA] JP 2008088512 A 20080417 - NIKKO KINZOKU KK
- [AD] JP 2006161148 A 20060622 - FURUKAWA ELECTRIC CO LTD
- [AD] JP H0920943 A 19970121 - FURUKAWA ELECTRIC CO LTD
- See references of WO 2010016429A1

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 MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**EP 2333128 A1 20110615; EP 2333128 A4 20120704;** CN 102112640 A 20110629; CN 102112640 B 20130327; JP 4913902 B2 20120411; JP WO2010016429 A1 20120119; KR 101570556 B1 20151119; KR 20110039371 A 20110415; US 2011200479 A1 20110818; WO 2010016429 A1 20100211

DOCDB simple family (application)

**EP 09804913 A 20090730;** CN 200980130452 A 20090730; JP 2009063615 W 20090730; JP 2010507744 A 20090730; KR 20117004937 A 20090730; US 201113021371 A 20110204