

Title (en)

COPPER ALLOY MATERIAL, AND METHOD FOR PRODUCTION THEREOF

Title (de)

KUPFERLEGIERUNGSMATERIAL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

MATÉRIAUX D'ALLIAGE DU CUIVRE ET SON PROCÉDÉ DE FABRICATION

Publication

**EP 2157199 A1 20100224 (EN)**

Application

**EP 08739314 A 20080328**

Priority

- JP 2008056196 W 20080328
- JP 2007086026 A 20070328
- JP 2008085013 A 20080327

Abstract (en)

A copper alloy material according to the present invention is characterized in that the copper alloy material includes: an element X between 0.1% and 4% by mass, in which the element X represents one transition element or not less than two elements selected from Ni, Fe, Co and Cr; an element Y between 0.01% and 3% by mass, in which the element Y represents one element or not less than two elements selected from Ti, Si, Zr and Hf; and a remaining portion to be comprised of copper and an unavoidable impurity, wherein the copper alloy material has an electrical conductivity of not less than 50% IACS, an yield strength of not less than 600 MPa, and a stress relaxation rate of not higher than 20% as to be measured after the same is maintained for 1000 hours at a state under applying a stress of 80% of the yield strength.

IPC 8 full level

**C22C 9/00** (2006.01); **B21B 1/22** (2006.01); **B21B 3/00** (2006.01); **C22C 9/06** (2006.01); **C22F 1/00** (2006.01); **C22F 1/08** (2006.01)

CPC (source: EP US)

**C22C 9/00** (2013.01 - EP US); **C22C 9/06** (2013.01 - EP US); **C22F 1/08** (2013.01 - EP US)

Cited by

EP2692877A4; EP2386665A4; US9666325B2; US9394589B2

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)

**EP 2157199 A1 20100224; EP 2157199 A4 20120627;** CN 101680056 A 20100324; CN 101680056 B 20130109; JP 2008266787 A 20081106; US 2010170595 A1 20100708; WO 2008123455 A1 20081016

DOCDB simple family (application)

**EP 08739314 A 20080328;** CN 200880018184 A 20080328; JP 2008056196 W 20080328; JP 2008085013 A 20080327; US 59340208 A 20080328