

Title (en)
COPPER ALLOY SHEET MATERIAL

Title (de)
KUPFERLEGIERUNGSBLECHMATERIAL

Title (fr)
MATÉRIAU EN FEUILLE EN ALLIAGE DE CUIVRE

Publication
EP 2221391 A4 20120627 (EN)

Application
EP 08847798 A 20081105

Priority
• JP 2008070139 W 20081105
• JP 2007287066 A 20071105

Abstract (en)
[origin: EP2221391A1] A copper alloy sheet material which has a tensile strength of 730-820 MPa and contains at least nickel (Ni) and silicon (Si) , with the remainder being copper (Cu) and inevitable impurities. When the sheet material has a shape capable of 180° tight bending and the width and thickness of this sheet material are expressed by W (unit: mm) and T (unit: mm) respectively, then the product of W and T is 0.16 or less. Preferably, the sheet material is constituted of an alloy containing nickel at 1.8-3.3 mass%, silicon at 0.4 mass%, and chromium (Cr) at 0.01-0.5 mass%, with the remainder being copper and inevitable impurities. The sheet material may further contain one or more of: at least one member selected among tin (Sn), magnesium (Mg), silver (Ag), manganese (Mn), titanium (Ti), iron (Fe), and phosphorus (P) in a total amount of 0.01-1 mass%; zinc (Zn) at 0.01-10 mass%, cobalt (Co) at and 0.01-1.5 mass%.

IPC 8 full level
C22C 9/06 (2006.01); **B21B 3/00** (2006.01); **C22C 9/04** (2006.01); **C22F 1/00** (2006.01); **C22F 1/08** (2006.01)

CPC (source: EP US)
C22C 9/04 (2013.01 - EP US); **C22C 9/06** (2013.01 - EP US); **C22F 1/08** (2013.01 - EP US); **B21B 3/00** (2013.01 - EP US); **B21B 2003/005** (2013.01 - EP US)

Citation (search report)
• [X1] JP 2006265731 A 20061005 - FURUKAWA ELECTRIC CO LTD
• [XP] EP 1873266 A1 20080102 - FURUKAWA ELECTRIC CO LTD [JP]
• [X1] US 2005263218 A1 20051201 - TANAKA NOBUYUKI [JP], et al
• [X1] US 2005236074 A1 20051027 - MIHARA KUNITERU [JP], et al
• [XA] JP 2007231364 A 20070913 - DOWA HOLDINGS CO LTD
• [A] US 2007131315 A1 20070614 - MANDIGO FRANK N [US], et al
• [A] EP 0949343 A1 19991013 - KOBE STEEL LTD [JP]
• See references of WO 2009060873A1

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

DOCDB simple family (publication)
EP 2221391 A1 20100825; EP 2221391 A4 20120627; EP 2221391 B1 20140430; CN 101849027 A 20100929; CN 101849027 B 20130515; JP 4785092 B2 20111005; JP WO2009060873 A1 20110324; KR 101515668 B1 20150427; KR 20100095431 A 20100830; US 2011038753 A1 20110217; WO 2009060873 A1 20090514

DOCDB simple family (application)
EP 08847798 A 20081105; CN 200880114702 A 20081105; JP 2008070139 W 20081105; JP 2009540067 A 20081105; KR 20107012166 A 20081105; US 74130908 A 20081105