

Title (en)  
COPPER ALLOY SHEET

Title (de)  
KUPFERLEGIERUNGSBLECH

Title (fr)  
FEUILLE EN ALLIAGE DE CUIVRE

Publication  
**EP 2221391 B1 20140430 (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  
**B21B 3/00** (2006.01); **C22C 9/04** (2006.01); **C22C 9/06** (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)

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