

Title (en)  
COPPER ALLOY SHEET MATERIAL HAVING LOW YOUNG'S MODULUS AND METHOD FOR PRODUCING SAME

Title (de)  
KUPFERLEGIERUNGS-FOLIENMATERIAL MIT GERINGEM YOUNG-MODULUS UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
MATÉRIAU EN FEUILLE D'ALLIAGE DE CUIVRE PRÉSENTANT UN FAIBLE MODULE DE YOUNG ET SON PROCÉDÉ DE FABRICATION

Publication  
**EP 2508634 A4 20160106 (EN)**

Application  
**EP 10834584 A 20101201**

Priority  
• JP 2009274996 A 20091202  
• JP 2010071517 W 20101201

Abstract (en)  
[origin: EP2508634A1] {Problems} To provide a copper alloy material, having a low Young's modulus that is required of electrical or electronic parts, such as connectors. {Means to solve} A copper alloy sheet material for electrical or electronic parts, having an alloy composition containing any one or both of Ni and Co in an amount of 0.5 to 5.0 mass% in total, and Si in an amount of 0.2 to 1.5 mass%, with the balance being Cu and inevitable impurities, wherein the copper alloy sheet material has a 0.2% proof stress in the rolling direction of 500 MPa or more, an electrical conductivity of 30 %IACS or more, a Young's modulus of 110 GPa or less, and a factor of bending deflection of 105 GPa or less.

IPC 8 full level  
**B21B 3/00** (2006.01); **C22C 9/00** (2006.01); **C22C 9/02** (2006.01); **C22C 9/04** (2006.01); **C22C 9/05** (2006.01); **C22C 9/06** (2006.01);  
**C22C 9/10** (2006.01); **C22F 1/00** (2006.01); **C22F 1/08** (2006.01); **H01B 1/02** (2006.01); **H01B 13/00** (2006.01)

CPC (source: EP KR US)  
**B21B 3/00** (2013.01 - KR); **C22C 9/00** (2013.01 - KR); **C22C 9/06** (2013.01 - EP US); **C22C 9/10** (2013.01 - EP US);  
**C22F 1/08** (2013.01 - EP KR US); **H01B 1/02** (2013.01 - KR); **H01B 1/026** (2013.01 - EP US); **B21B 2003/005** (2013.01 - EP US)

Citation (search report)  
• [X] EP 1964937 A1 20080903 - DOWA METALTECH CO LTD [JP]  
• [XP] EP 2154257 A1 20100217 - NIPPON MINING CO [JP]  
• [E] EP 2298945 A1 20110323 - FURUKAWA ELECTRIC CO LTD [JP]  
• See references of WO 2011068134A1

Cited by  
EP2610358A4

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 2508634 A1 20121010; EP 2508634 A4 20160106; EP 2508634 B1 20170823**; CN 102630251 A 20120808; CN 102630251 B 20170315;  
JP 4809935 B2 20111109; JP WO2011068134 A1 20130418; KR 20120104553 A 20120921; US 2012241056 A1 20120927;  
WO 2011068134 A1 20110609

DOCDB simple family (application)  
**EP 10834584 A 20101201**; CN 201080053121 A 20101201; JP 2010071517 W 20101201; JP 2011513179 A 20101201;  
KR 20127013066 A 20101201; US 201213486861 A 20120601