

Title (en)
Copper alloy sheet

Title (de)
Kupferlegierungsblech

Title (fr)
Feuille d'alliage de cuivre

Publication
EP 2695956 A3 20140618 (EN)

Application
EP 13005147 A 20080724

Priority

- JP 2007205630 A 20070807
- JP 2007232641 A 20070907
- JP 2007252036 A 20070927
- JP 2007252037 A 20070927
- EP 08791572 A 20080724
- JP 2008063320 W 20080724

Abstract (en)
[origin: EP2184371A1] The present invention relates to a Cu-Ni-Sn-P-based copper alloy sheet having a specific composition, where (1) the copper alloy sheet is set to have an electrical conductivity of 32% IACS or more, a stress relaxation ratio in the direction parallel to the rolling direction of 15% or less, a 0.2%-proof stress of 500 MPa or more and an elongation of 10% or more; (2) the X-ray diffraction intensity ratio $I(200)/I(220)$ in the sheet surface is set to be a given value or less and at the same time, anisotropy in the stress relaxation resistance characteristic is reduced by fining the grain size; (3) the texture of the copper alloy sheet is set to a texture such that the distribution density of B orientation and the sum of distribution densities of B orientation, S orientation and Cu orientation each is set to fall in a specific range and bendability is thereby enhanced; or (4) the dislocation density measured using the value obtained by dividing the half-value breadth of the X-ray diffraction intensity peak from {200} plane in the copper alloy sheet surface by the peak height is set to a given value or more and press punchability is thereby enhanced. The Cu-Ni-Sn-P-based copper alloy sheet of the present invention is excellent in the properties required for a terminal or connector and further (1) has excellent strength-ductility balance, (2) satisfies the stress relaxation resistance characteristic in the direction orthogonal to the rolling direction, (3) has excellent bendability, or (4) has excellent press punchability.

IPC 8 full level
C22C 9/06 (2006.01); **C22C 9/00** (2006.01); **C22C 9/02** (2006.01); **C22F 1/08** (2006.01); **H01R 13/03** (2006.01); **H01R 13/11** (2006.01); **H01R 43/16** (2006.01)

CPC (source: EP US)
C22C 9/00 (2013.01 - EP US); **C22C 9/02** (2013.01 - EP US); **C22C 9/06** (2013.01 - EP US); **C22F 1/08** (2013.01 - EP US); **H01R 13/03** (2013.01 - EP US); **H01R 13/11** (2013.01 - EP US); **H01R 43/16** (2013.01 - EP US)

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CN104046813A

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 2184371 A1 20100512; EP 2184371 A4 20130501; EP 2184371 B1 20161130; CN 101743333 A 20100616; EP 2695956 A2 20140212; EP 2695956 A3 20140618; EP 2695956 B1 20181219; EP 2695957 A2 20140212; EP 2695957 A3 20140702; EP 2695957 B1 20181128; EP 2695958 A2 20140212; EP 2695958 A3 20140702; EP 2695958 B1 20181226; KR 101227315 B1 20130128; KR 20100031138 A 20100319; US 2011223056 A1 20110915; WO 2009019990 A1 20090212

DOCDB simple family (application)
EP 08791572 A 20080724; CN 200880024723 A 20080724; EP 13005147 A 20080724; EP 13005148 A 20080724; EP 13005149 A 20080724; JP 2008063320 W 20080724; KR 20107002597 A 20080724; US 67209208 A 20080724