

Title (en)

Cu-Ni-Si-based copper alloy sheet material and method of manufacturing same

Title (de)

Cu-Ni-Si-basiertes Kupferlegierungsfolienmaterial und Herstellungsverfahren dafür

Title (fr)

Matériau de feuille d'alliage de cuivre à base de Cu-Ni-Si et son procédé de fabrication

Publication

EP 1967596 A1 20080910 (EN)

Application

EP 08002634 A 20080213

Priority

- JP 2007032623 A 20070213
- JP 2007326559 A 20071218

Abstract (en)

This invention provides a copper alloy sheet material containing, in mass%, Ni: 0.7% - 4.2% and Si: 0.2% - 1.0%, optionally containing one or more of Sn: 1.2% or less, Zn: 2.0% or less, Mg: 1.0% or less, Co: 2.0% or less, and Fe: 1.0% or less, and a total of 3% or less of one or more of Cr, B, P, Zr, Ti, Mn and V, the balance being substantially Cu, and having a crystal orientation satisfying Expression (1): $I_{420} / I_{0420} > 1.0$ where I_{420} is the x-ray diffraction intensity from the {420} crystal plane in the sheet plane of the copper alloy sheet material and I_{0420} is the x-ray diffraction intensity from the {420} crystal plane of standard pure copper powder. The copper alloy sheet material has highly improved strength, post-notching bending workability, and stress relaxation resistance property.

IPC 8 full level

C22C 9/06 (2006.01); **C22F 1/08** (2006.01)

CPC (source: EP)

C22C 1/06 (2013.01); **C22C 9/06** (2013.01); **C22F 1/08** (2013.01)

Citation (applicant)

DE 4115998 A1 19921119 - DIEHL GMBH & CO [DE]

Citation (search report)

- [A] DE 4115998 A1 19921119 - DIEHL GMBH & CO [DE]
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DOCDB simple family (publication)

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