

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 B1 20100616 (EN)**

Application

**EP 08002634 A 20080213**

Priority

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- JP 2007326559 A 20071218

Abstract (en)

[origin: EP1967596A1] 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)

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