

Title (en)

CU-NI-SI-BASED ALLOY FOR ELECTRONIC MATERIAL

Title (de)

LEGIERUNG AUF CU-NI-SI-BASIS FÜR ELEKTRONISCHES MATERIAL

Title (fr)

ALLIAGE À BASE DE CU-NI-SI POUR UN MATÉRIAU ÉLECTRONIQUE

Publication

EP 2154257 A1 20100217 (EN)

Application

EP 08739256 A 20080328

Priority

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- JP 2007094441 A 20070330

Abstract (en)

An object of the present invention is to provide a Corson alloy having significantly improved characteristics, i.e. high strength and high electrical conductivity, by enhancing the effect of addition of Cr to a Cu-Ni-Si system alloy. There is provided a copper alloy for electronic materials comprising 1.0-4.5% by mass Ni, 0.50-1.2% by mass Si, 0.003-0.3% by mass Cr wherein the weight ratio of Ni to Si satisfies the expression: $3 \leq \text{Ni/Si} \leq 5.5$, and the balance being Cu and incidental impurities, wherein particles of Cr-Si compounds having a size of 0.1 μm to 5 μm are dispersed in the alloy and the dispersed particles having an atomic concentration ratio of Cr to Si of 1 to 5 and a dispersion density of no more than $1 \times 10^6 / \text{mm}^2$.

IPC 8 full level

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