

Title (en)  
COPPER ALLOY AND METHOD FOR PRODUCING COPPER ALLOY

Title (de)  
KUPFERLEGIERUNG UND HERSTELLUNGSVERFAHREN FÜR DIE KUPFERLEGIERUNG

Title (fr)  
ALLIAGE DE CUIVRE ET PROCÉDÉ DE FABRICATION DE CELUI-CI

Publication  
**EP 2653574 A4 20140910 (EN)**

Application  
**EP 11848127 A 20111213**

Priority  
• JP 2010276607 A 20101213  
• JP 2011078786 W 20111213

Abstract (en)  
[origin: EP2653574A1] To provide a copper alloy of the FCC structure containing Ni: 3.0 to 29. mass%, Al: 0.5 to 7.0 mass%, and Si: 0.1 to 1.5 mass%, with the remainder consisting of Cu and incidental impurities, wherein the copper alloy is of the high strength, but is excellent in workability, and has high electrical conductivity, and can control property thereof, by precipitating a 3<sup>rd</sup> phase of the L1 2 structure including Si at an average particle diameter of 100 nm or less in a parent phase of the copper alloy.

IPC 8 full level  
**C22C 9/06** (2006.01); **C22C 9/01** (2006.01); **C22F 1/08** (2006.01); **H01B 1/02** (2006.01)

CPC (source: EP KR US)  
**C22C 9/00** (2013.01 - KR); **C22C 9/01** (2013.01 - EP KR US); **C22C 9/02** (2013.01 - US); **C22C 9/04** (2013.01 - US); **C22C 9/05** (2013.01 - US); **C22C 9/06** (2013.01 - EP KR US); **C22F 1/08** (2013.01 - EP KR US); **H01B 1/026** (2013.01 - EP US)

Citation (search report)  
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• [XI] DE 4226692 A1 19930304 - MITSUBISHI MATERIALS CORP [JP]  
• [XI] JP H07268512 A 19951017 - MITSUBISHI MATERIALS CORP  
• [XI] JP H0499140 A 19920331 - HITACHI LTD  
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• [XY] ZHU ZHI-YUAN ET AL: "Solid solution and aging of Cu-Ni-Al-Si alloy", JINSHU RECHULI - HEAT TREATMENT OF METALS, ZHONGGUO JIXIE GONGCHENG XUEHUI, RECHULI XUEHUI, BEIJING, CN, vol. 32, no. 4, 31 December 2007 (2007-12-31), pages 83 - 85, XP009179303, ISSN: 0254-6051  
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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 2653574 A1 20131023**; **EP 2653574 A4 20140910**; **EP 2653574 B1 20170531**; CN 103328665 A 20130925; CN 103328665 B 20160413; JP 5743165 B2 20150701; JP WO2012081573 A1 20140522; KR 101576715 B1 20151210; KR 20130089661 A 20130812; US 2013333812 A1 20131219; WO 2012081573 A1 20120621

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**EP 11848127 A 20111213**; CN 201180059926 A 20111213; JP 2011078786 W 20111213; JP 2012548789 A 20111213; KR 20137015270 A 20111213; US 201113993642 A 20111213