

Title (en)  
COPPER ALLOY, COPPER ALLOY PLATE, AND PROCESS FOR PRODUCING THE SAME

Title (de)  
KUPFERLEGIERUNG, KUPFERLEGIERUNGSPLATTE UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
ALLIAGE DE CUIVRE, PLAQUE EN ALLIAGE DE CUIVRE ET PROCÉDÉ POUR SA FABRICATION

Publication  
**EP 1889934 A4 20090930 (EN)**

Application  
**EP 06766490 A 20060608**

Priority  
• JP 2006311517 W 20060608  
• JP 2005168591 A 20050608  
• JP 2005270694 A 20050916

Abstract (en)  
[origin: EP1889934A1] A copper alloy with an excellent stress relaxation resistance including Ni: 0.1 through 3.0 mass%, Sn: 0.01 through 3.0 mass %,P: 0.01 through 0.3 mass% and remainder copper and inevitable impurities, and the Ni content in extracted residues separated and left on a filter having filter mesh size of 0.1  $\mu\text{m}$  by using an extracted residues method accounting for 40 mass% or less of the Ni content in the copper alloy, wherein the extracted residues method requires that 10 g of the copper alloy is immersed in 300 ml of a methanol solution which contains 10 mass % of ammonium acetate, and using the copper alloy as the anode and platinum as the cathode, constant-current electrolysis is performed at the current density of 10 mA/cm<sup>2</sup>, and the solution in which the copper alloy is thus dissolved is subjected to suction filtration using a membrane filter of polycarbonate whose filter mesh size is 0.1  $\mu\text{m}$ , thereby separating and extracting undissolved residues on said filter, and the Ni content in the extracted residues is identified through analysis by ICP after dissolving said undissolved residues separated and left on said filter into a solution prepared by mixing aqua regia and water at the ratio of 1 : 1.

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

CPC (source: EP KR US)  
**C22C 9/02** (2013.01 - EP KR US); **C22C 9/06** (2013.01 - EP US); **C22F 1/08** (2013.01 - EP US)

Citation (search report)  
• [X] JP H04154942 A 19920527 - DOWA MINING CO, et al  
• [X] JP 2000129377 A 20000509 - SUMITOMO METAL MINING CO  
• [A] US 6136104 A 20001024 - MIYAFUJI MOTOHISA [JP], et al  
• See references of WO 2006132317A1

Cited by  
CN102071335A; EP2451604A4; EP3106546A4; RU2649480C1

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DOCDB simple family (publication)  
**EP 1889934 A1 20080220; EP 1889934 A4 20090930; EP 1889934 B1 20111123**; CN 101693960 A 20100414; CN 101693960 B 20110907; EP 2366807 A1 20110921; EP 2366807 B1 20130821; KR 100968997 B1 20100709; KR 100992281 B1 20101105; KR 20080007403 A 20080118; KR 20100003376 A 20100108; US 2009116996 A1 20090507; US 2011182767 A1 20110728; WO 2006132317 A1 20061214

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**EP 06766490 A 20060608**; CN 200910173285 A 20060608; EP 11002839 A 20060608; JP 2006311517 W 20060608; KR 20077028509 A 20060608; KR 20097027233 A 20060608; US 201113078404 A 20110401; US 91673006 A 20060608