

Title (en)

WHITE-COLORED COPPER ALLOY WITH REDUCED NICKEL CONTENT

Title (de)

WEISSFARBENE KUPFERLEGIERUNG MIT VERMINDERTEM NICKELGEHALT

Title (fr)

ALLIAGE DE CUIVRE DE COULEUR BLANCHE AVEC UNE TENEUR EN NICKEL RÉDUITE

Publication

EP 2384372 A4 20131120 (EN)

Application

EP 09813496 A 20090908

Priority

- US 2009056201 W 20090908
- US 9573308 P 20080910
- US 9571908 P 20080910
- US 10627508 P 20081017

Abstract (en)

[origin: WO2010030597A2] Disclosed is a white-colored copper alloy comprising by weight up to 30% zinc, up to 20% manganese, up to 5% nickel with the balance copper. This alloy may have from 6% to 25% zinc, from 4% to 17% manganese, from 0.1% to 3.5% nickel and the balance copper. The balance copper in the alloy may further contain at least one of: up to 0.5% of at least one of the group which consists of Sn, Si, Co, Ti, Cr, Fe, Mg, Zr, and Ag; and up to 0.1% of at least one of the group which consists of P, B, Ca, Ge, Se, Te. It may also contain up to 0.3% Zr by weight. The alloy may have an electrical conductivity greater than 2.5% IACS at eddy current gauge exciting frequencies between 60 kHz and 480 kHz.

IPC 8 full level

C22C 9/04 (2006.01); **C22C 9/05** (2006.01)

CPC (source: EP KR)

C22C 9/00 (2013.01 - KR); **C22C 9/04** (2013.01 - EP KR); **C22C 9/05** (2013.01 - EP KR)

Citation (search report)

- [E] DE 102009032371 A1 20110113 - BERKENHOFF GMBH [DE]
- [XY] CN 1327899 A 20011226 - UNIV JILIN [CN]
- [XY] DE 3332482 A1 19840419 - MITSUBISHI METAL CORP [JP]
- [Y] EP 0399658 A2 19901128 - GOMEZ LUIS [US]
- [Y] WEAVER ET AL: "Survival of Clostridium difficile on copper and steel: futuristic options for hospital hygiene", JOURNAL OF HOSPITAL INFECTION, ACADEMIC PRESS, LONDON, GB, vol. 68, no. 2, 22 January 2008 (2008-01-22), pages 145 - 151, XP022457563, ISSN: 0195-6701, DOI: 10.1016/j.jhin.2007.11.011
- See references of WO 2010030597A2

Citation (examination)

SPIEKERMANN P: "LEGIERUNGEN - EIN BESONDERES PATENTRECHTLICHES PROBLEM? - LEGIERUNGSPRUEFUNG IM EUROPÄISCHEN PATENTAMT -", MITTEILUNGEN DER DEUTSCHEN PATENTANWAELTE, HEYMANN, KOLN, DE, 1 January 1993 (1993-01-01), pages 178 - 190, XP000961882, ISSN: 0026-6884

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DOCDB simple family (publication)

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