

Title (en)
Free-cutting copper alloys

Title (de)
Automatenlegierung auf Kupferbasis

Title (fr)
Alliage de décolletage à base de cuivre.

Publication
EP 1502964 A1 20050202 (EN)

Application
EP 04077560 A 19981116

Priority
• EP 98953070 A 19981116
• JP 28792198 A 19981009

Abstract (en)
Free-cutting alloys with industrially satisfactory machinability comprising 69 to 79 percent, by weight, of copper, 2.0 to 4.0 percent, by weight, of silicon; 0.02 to 0.4, by weight, of lead and the remaining percent, by weight, of zinc. <IMAGE>

IPC 1-7
C22C 9/04; C22F 1/08

IPC 8 full level
C22F 1/00 (2006.01); **C22C 9/04** (2006.01); **C22F 1/08** (2006.01)

CPC (source: EP KR)
C22C 9/04 (2013.01 - EP KR); **C22F 1/08** (2013.01 - EP)

Citation (search report)
• [X] DE 3427740 A1 19860206 - DIEHL GMBH & CO [DE]
• [A] US 5658401 A 19970819 - GAAG NORBERT [DE], et al
• [A] WO 9401591 A1 19940120 - OLIN CORP [US]
• [X] MANNHEIM R ET AL: "Silicon brass: an alternative for lead-free faucets and fittings", CAPLUS, 1997, XP002223301
• [A] PATENT ABSTRACTS OF JAPAN vol. 010, no. 321 (C - 382) 31 October 1986 (1986-10-31)
• [T] "ASM Speciality Handbook: Copper and Copper Alloys", 2001, ASM INTERNATIONAL, OHIO, USA, XP002223300 & CONGRESSO ANUAL - ASSOCIACAO BRASILEIRA DE METALURGIA E MATERIAIS (1998), VOLUME DATE 1997, 52ND(II CONGRESSO INTERNACIONAL DE TECNOLOGIA METALURGICA E DE MATERIAIS), 5012-5032, 1997

Cited by
EP3985136A1; DE102020127317A1

Designated contracting state (EPC)
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EP 1038981 A1 20000927; EP 1038981 A4 20030219; EP 1038981 B1 20050126; AU 1054099 A 20000501; AU 738301 B2 20010913; CA 2303512 A1 20000420; CA 2303512 C 20060711; DE 69828818 D1 20050303; DE 69828818 T2 20060105; DE 69833582 D1 20060427; DE 69833582 T2 20070118; DE 69835912 D1 20061026; DE 69835912 T2 20070308; EP 1502964 A1 20050202; EP 1502964 B1 20060301; EP 1508626 A1 20050223; EP 1508626 B1 20060913; JP 2000119774 A 20000425; JP 3917304 B2 20070523; KR 100375426 B1 20030310; KR 20010033101 A 20010425; TW 577931 B 20040301; WO 0022181 A1 20000420

DOCDB simple family (application)
EP 98953070 A 19981116; AU 1054099 A 19981116; CA 2303512 A 19981116; DE 69828818 T 19981116; DE 69833582 T 19981116; DE 69835912 T 19981116; EP 04077560 A 19981116; EP 04077561 A 19981116; JP 28792198 A 19981009; JP 9805156 W 19981116; KR 20007006464 A 20000609; TW 88103870 A 19990312