

Title (en)  
FREE-CUTTING COPPER ALLOY

Title (de)  
AUTOMATENLEGIERUNG AUF KUPFERBASIS

Title (fr)  
ALLIAGE DE DECOLLETAGE A BASE DE CUIVRE

Publication  
**EP 1038981 B1 20050126 (EN)**

Application  
**EP 98953070 A 19981116**

Priority  
• JP 9805156 W 19981116  
• JP 28792198 A 19981009

Abstract (en)  
[origin: EP1038981A1] 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.

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

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

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

Cited by  
EP1273671A1; EP1502965A1; EP3128020A4; WO2006039951A1; WO2012104426A2; US11028466B2; CN109563568A; EP3498870A4; CN110249065A; CN110268077A; EP3498872A4; EP3498871A4; EP3498873A4; EP3498869A4; TWI649438B; TWI649436B

Designated contracting state (EPC)  
BE DE FI FR GB IT SE

DOCDB simple family (publication)  
**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