

Title (en)
Copper-based sliding material

Title (de)
Gleitmaterial auf Kupferbasis

Title (fr)
Matériau coulissant à base de cuivre

Publication
EP 2135964 A2 20091223 (EN)

Application
EP 09008100 A 20090619

Priority
JP 2008161635 A 20080620

Abstract (en)
A copper-based sliding material consisting of: 5.0 to 25.0 mass % of Zn; 4.2 to 10.0 mass % of Bi; 2.0 to 7.0 mass % of Mn; 1.0 to 3.0 mass % of Si; 0.1 to 2.0 mass % of Sn; and the balance being Cu and unavoidable impurities is provided. The copper-based sliding material includes a single \pm -phase matrix (1, 2), a Mn-Si compound (3) and a Bi-particle phase (4). The Mn-Si compound (3) and the Bi-particle phase (4) are dispersed in the single \pm -phase matrix (1, 2). The mass ratio of Sn to Bi is 0.024 to 0.200, preferably 0.050 to 0.140.

IPC 8 full level
C22C 9/04 (2006.01)

CPC (source: EP)
C22C 9/04 (2013.01)

Citation (applicant)
• JP H03215642 A 19910920 - DAIDO METAL CO LTD
• JP H09316570 A 19971209 - CHUETSU METAL WORKS
• JP 2004137512 A 20040513 - DAIDO METAL CO LTD

Cited by
RU2732139C2; GB2489609A; GB2489609B; US11427890B2; US8790574B2; US11359263B2; US10570484B2; WO2017198698A1

Designated contracting state (EPC)
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 SE SI SK TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
EP 2135964 A2 20091223; EP 2135964 A3 20130123; EP 2135964 B1 20140312; JP 2010001532 A 20100107; JP 5111253 B2 20130109

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EP 09008100 A 20090619; JP 2008161635 A 20080620