Title (en)

Low-lead brass alloy

Title (de)

Bleiarme Messinglegierung

Title (fr)

Alliage de laiton à faible teneur en plomb

Publication

EP 2963134 B1 20180523 (EN)

Application

EP 14176783 A 20140711

Priority

CN 201410282838 A 20140623

Abstract (en)

[origin: EP2963134A1] The invention relates to a low-lead brass alloy, comprising: by the total weight of the brass alloy, 62.5-63 wt% copper, 0.16-0.24 wt% lead, 0-0.02 wt% antimony, 0-0.01 wt% magnesium, 0-0.2 wt% tin, 0.0005-0.0009 wt% boron, 0.55-0.7 wt% aluminum, 0.05-0.15 wt % iron, 0-0.15 wt% nickel, 0.09-0.12 wt% arsenic, 0-0.005 wt% zirconium, 0-0.01 wt% impurities, and a balance of zinc.

IPC 8 full level

C22C 9/04 (2006.01)

CPC (source: EP KR US)

C22C 9/01 (2013.01 - KR); **C22C 9/04** (2013.01 - EP US)

Citation (opposition)

Opponent : Otto Fuchs - Kommanditgesellschaft

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- US 2011064602 A1 20110317 - LO WEN LIN [TW], et al
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- DE 60010729 T2 20050512 - TOUR & ANDERSSON AB LJUNG [SE]
- LAAKSO ET AL.: "Investigation of the effect of different cutting parameters on chip formation of low-lead brass with experiments and simulations", PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART B, JOURNAL OF ENGINEERING MANUFACTURE, vol. 227, no. 11, November 2013 (2013-11-01), pages 1620 - 1634, XP055568326
- "Kupfer-Zink-Legierungen (Messing und Sondermessing)", DEUTSCHES KUPFERINSTITUT, March 2007 (2007-03-01), Düsseldorf, pages 1 - 30, XP055568361

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Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2963134 A1 20160106; **EP 2963134 B1 20180523**; AU 2014204430 B1 20151210; CN 104032176 A 20140910; CN 104032176 B 20150311; DK 2963134 T3 20180827; ES 2680343 T3 20180906; JP 2016008354 A 20160118; JP 6069752 B2 20170201; KR 20150146347 A 20151231; PL 2963134 T3 20181031; PT 2963134 T 20181008; TW 201600618 A 20160101; TW I577811 B 20170411; US 2015368758 A1 20151224

DOCDB simple family (application)

EP 14176783 A 20140711; AU 2014204430 A 20140715; CN 201410282838 A 20140623; DK 14176783 T 20140711; ES 14176783 T 20140711; JP 2014155443 A 20140730; KR 20140101091 A 20140806; PL 14176783 T 20140711; PT 14176783 T 20140711; TW 103127544 A 20140812; US 201414324251 A 20140707