

Title (en)
DE-LEADING TREATMENT METHOD FOR LEAD-CONTAINING COPPER ALLOY AND DE-LEADING CORED WIRE USED IN SAID METHOD

Title (de)
ENTBLEIUNGSBEHANDLUNGSVERFAHREN FÜR BLEIHALTIGE KUPFERLEGIERUNG UND IN DIESEM VERFAHREN VERWENDETER
ENTBLEIUNGSFÜLLDRAHT

Title (fr)
PROCÉDÉ DE TRAITEMENT D'ÉLIMINATION DU PLOMB POUR ALLIAGE DE CUIVRE CONTENANT DU PLOMB ET FIL FOURRÉ
D'ÉLIMINATION DU PLOMB UTILISÉ DANS LEDIT PROCÉDÉ

Publication
EP 3375896 A4 20190522 (EN)

Application
EP 15908341 A 20151113

Priority
JP 2015082039 W 20151113

Abstract (en)
[origin: US2018195149A1] A copper alloy such as brass and bronze centered on rod products in which machinability is mainly required contains a certain amount of lead. The scrap of these products has been recycled at a high rate. A lead-removing step is indispensable for recycling the scrap of these products for low-lead products, and development of lead-removal techniques is urgently necessary. It is known that a material containing metal element calcium exhibits an effect in removing lead in a copper alloy, and since there are differences in the specific gravity and the melting point between a de-leading agent and a copper alloy, a de-leading method at a practical mass production level is required. In order to solve this problem, for the purpose of de-leading treatment of a copper alloy molten metal, there is provided a cored wire for lead removal characterized in that a metal band which does not affect the components of a copper alloy molten metal is used as a sheath material; a single de-leading agent and/or a de-leading coagent such as an aggregation/flootation agent for a Pb—Ca compound required for a step is used as contents; and physical properties that endure mechanical and continuous feed by a cored wire feeding device are provided.

IPC 8 full level
C22B 15/14 (2006.01); **C22B 9/10** (2006.01)

CPC (source: EP KR US)
C22B 9/10 (2013.01 - EP US); **C22B 9/103** (2013.01 - KR US); **C22B 15/006** (2013.01 - EP KR US)

Citation (search report)

- [IY] JP H0250924 A 19900220 - HITACHI CABLE
- [IY] CA 1095259 A 19810210 - OLIN CORP
- [Y] ATSUSHI NAKANO ET AL: "Removal of Lead from Copper Alloy Scraps by Compound-Separation Method", MATERIALS TRANSACTIONS, vol. 46, no. 12, 1 January 2005 (2005-01-01), JP, pages 2719 - 2724, XP055574044, ISSN: 1345-9678, DOI: 10.2320/matertrans.46.2719
- [A] KANBE Y ET AL: "GAS METAL ARC WELDING FOR SURFACING ALUMINIUM ALLOYS WITH AL-CU CORED WIRE. \1ST REPORT: SURFACING ALUMINIUM ALLOY", WELDING INTERNATIONAL, TAYLOR & FRANCIS, ABINGDON, GB, vol. 7, no. 6, 1 January 1993 (1993-01-01), pages 449 - 455, XP000385783, ISSN: 0950-7116
- See references of WO 2017081824A1

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)
US 2018195149 A1 20180712; CN 107849638 A 20180327; EP 3375896 A1 20180919; EP 3375896 A4 20190522; JP 5940746 B1 20160629; JP WO2017081824 A1 20171109; KR 20180034643 A 20180404; WO 2017081824 A1 20170518

DOCDB simple family (application)
US 201515740816 A 20151113; CN 201580081517 A 20151113; EP 15908341 A 20151113; JP 2015082039 W 20151113; JP 2015557248 A 20151113; KR 20187006012 A 20151113