

Title (en)
PRODUCTION METHOD FOR MOLTEN-ALUMINUM-PLATED COPPER WIRE

Title (de)
HERSTELLUNGSVERFAHREN FÜR KUPFERDRAHT MIT PLATTIERUNG AUS ALUMINIUMSCHMELZE

Title (fr)
PROCÉDÉ DE PRODUCTION DE FIL DE CUIVRE PLAQUÉ D'ALUMINIUM LIQUIDE

Publication
EP 3428304 A4 20191127 (EN)

Application
EP 17763255 A 20170307

Priority
• JP 2016047743 A 20160311
• JP 2017009036 W 20170307

Abstract (en)
[origin: EP3428304A1] A production method for molten-aluminum-plated steel wire, the production method being characterized in that a steel wire (2) immersion part (6) at which the steel wire (2) is to be immersed in a molten aluminum plating bath (1) is immersed in the molten aluminum plating bath (1) after the steel wire (2) has been passed into a steel wire introduction device (7) while an immersion region (9a) thereof has been immersed in the molten aluminum plating bath (1). The steel wire introduction device (7) comprises a tube-shaped body (9), which has a total length of 10 to 1000 mm and has a through hole (8) that is for passing the steel wire (2) through the inside thereof, and includes the immersion region (9a), which is for immersion in the molten aluminum plating bath (1) to a length of 2 mm to 400 mm from an end part of one end of the tube-shaped body (9) along the long direction of the tube-shaped body (9). The ratio of the area of the opening of the through hole (8) and the area of a horizontal cross-section of the steel wire (2) (the area of the opening of the through-hole (8) of the tube-shaped body (9)/the area of the horizontal cross-section of the steel wire (2)) is 3 to 4000.

IPC 8 full level
C23C 2/38 (2006.01); **C23C 2/00** (2006.01); **C23C 2/12** (2006.01)

CPC (source: EP KR US)
C23C 2/00348 (2022.08 - EP KR US); **C23C 2/12** (2013.01 - EP KR US); **C23C 2/38** (2013.01 - EP KR US)

Citation (search report)
• [I] WO 2011155477 A1 20111215 - FURUKAWA ELECTRIC CO LTD [JP], et al
• [I] KR 100924317 B1 20091102 - WORLDBC CO LTD [KR]
• See references of WO 2017154915A1

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 3428304 A1 20190116; EP 3428304 A4 20191127; CN 108713070 A 20181026; JP 2017166068 A 20170921; KR 20180118765 A 20181031; TW 201809362 A 20180316; TW I708871 B 20201101; US 2019071760 A1 20190307; WO 2017154915 A1 20170914

DOCDB simple family (application)
EP 17763255 A 20170307; CN 201780015822 A 20170307; JP 2017009036 W 20170307; JP 2017042438 A 20170307; KR 20187028642 A 20170307; TW 106107915 A 20170310; US 201716083587 A 20170307