

Title (en)

ALUMINIUM ALLOY, METHOD OF PRODUCTION OF AN ALUMINIUM-FLATPRODUCT, THE ALUMINIUM-FLATPRODUCT AND ITS USE

Title (de)

ALUMINIUMLEGIERUNG, VERFAHREN ZUR HERSTELLUNG EINES ALUMINIUMFLACHPRODUKTS, ALUMINIUMFLACHPRODUKT UND VERWENDUNG DESSELBEN

Title (fr)

ALLIAGE D'ALUMINIUM, MÉTHODE DE FABRICATION D'UN PRODUIT PLAT D'ALUMINIUM, LE PRODUIT PLAT D'ALUMINIUM ET UTILISATION

Publication

EP 3740598 C0 20230628 (DE)

Application

EP 19701587 A 20190115

Priority

- EP 18151840 A 20180116
- EP 2019050899 W 20190115

Abstract (en)

[origin: CA3088915A1] The invention relates to an aluminium alloy for superplastic aluminium flat products (46; 56, 56'), wherein the aluminium alloy has the following composition: Si = 0.4 wt. %, Fe = 0.4 wt. %, Cu = 0.1 wt. %, 0.5 wt. % = Mn = 1.0 wt. %, 4.7 wt. % = Mg = 5.5 wt. %, 0.05 wt. % = Cr = 0.25 wt. %, Zn = 0.25 wt. %, Ti = 0.20 wt. %, Na = 2 ppm, individual unavoidable impurities = 0,05 Gew.-%, and total unavoidable impurities = 0,15 Gew.-%, the remainder being aluminium. The invention also relates to a method for producing an aluminium flat product (46; 56, 56'), particularly a superplastic aluminium flat product, in which an aluminium melt (22) is produced from the above-mentioned aluminium alloy, the aluminium melt (22) is cast to form an ingot (24), the ingot (24) is hot-rolled to form a hot strip (40), the hot strip (40) is cold-rolled to form a cold strip (46), and the cold strip (46) is straightened. The invention further relates to an aluminium flat product (46; 56, 56') produced by the method, and to a use thereof.

IPC 8 full level

C22C 21/06 (2006.01); **C22C 21/08** (2006.01); **C22F 1/047** (2006.01)

CPC (source: EP US)

B21B 1/24 (2013.01 - US); **B21D 3/02** (2013.01 - US); **C22C 1/026** (2013.01 - US); **C22C 21/06** (2013.01 - EP); **C22C 21/08** (2013.01 - EP US); **C22F 1/047** (2013.01 - EP US)

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

Participating member state (EPC – UP)

AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)

EP 3511433 A1 20190717; CA 3088915 A1 20190725; CA 3088915 C 20210803; EP 3740598 A1 20201125; EP 3740598 B1 20230628; EP 3740598 C0 20230628; US 2020325560 A1 20201015; WO 2019141666 A1 20190725

DOCDB simple family (application)

EP 18151840 A 20180116; CA 3088915 A 20190115; EP 19701587 A 20190115; EP 2019050899 W 20190115; US 202016911628 A 20200625