

Title (en)

ALMGMN ALLOY PRODUCT WITH IMPROVED CORROSION RESISTANCE

Title (de)

ALMGMN-LEGIERUNGSPRODUKT MIT VERBESSERTER KORROSIONSBESTÄNDIGKEIT

Title (fr)

PRODUIT EN ALLIAGE ALMGMN A TENUE À LA CORROSION AMÉLIORÉE

Publication

**EP 3850119 A1 20210721 (FR)**

Application

**EP 19790635 A 20190909**

Priority

- FR 1858257 A 20180913
- FR 2019052061 W 20190909

Abstract (en)

[origin: WO2020053507A1] The invention relates to a method for manufacturing an aluminium alloy sheet, wherein an aluminium alloy is prepared with the following composition, in wt%: Mg: 4.0 - 5.2, Mn: 0.40 - 1.0, Zn: 0.15 - 0.40, at least one element selected from Ti, Cr, Cu and Zr, the content of the element, if selected, being 0.01 - 0.15 for Ti, 0.05 - 0.25 for Cr, 0.02 - 0.25 for Cu, 0.05 - 0.25 for Zr, Fe: < 0.40, Si: < 0.40, other elements or impurities < 0.05 each and < 0.15 in total, the remainder being aluminium. A rolling plate is cast by vertical semi-continuous casting, and said optionally homogenised plate is hot-rolled in two successive stages to obtain a sheet. The sheets obtained by the method according to the invention are advantageous, in particular for shipbuilding, since they demonstrate, after being exposed for 7 days to a temperature of 100°C, a weight loss of less than 15 mg/cm<sup>2</sup> during a corrosion test according to the ASTM G67 standard.

IPC 8 full level

**C22C 21/06** (2006.01); **B21B 3/00** (2006.01); **C22F 1/04** (2006.01); **C22F 1/047** (2006.01)

CPC (source: EP US)

**C22C 21/06** (2013.01 - EP); **C22C 21/08** (2013.01 - US); **C22F 1/04** (2013.01 - EP); **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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2020053507 A1 20200319**; AU 2019338972 A1 20210318; EP 3850119 A1 20210721; EP 3850119 B1 20240306; FR 3085968 A1 20200320; FR 3085968 B1 20220812; SG 11202102459P A 20210429; US 12024765 B2 20240702; US 2022049335 A1 20220217

DOCDB simple family (application)

**FR 2019052061 W 20190909**; AU 2019338972 A 20190909; EP 19790635 A 20190909; FR 1858257 A 20180913; SG 11202102459P A 20190909; US 201917275669 A 20190909