

Title (en)

THIN SHEETS MADE OF ALUMINIUM-COPPER-LITHIUM ALLOY FOR AIRCRAFT FUSELAGE MANUFACTURE

Title (de)

DÜNNSCHICHTEN AUS ALUMINIUM-KUPFER-LITHIUM-LEGIERUNG FÜR DIE HERSTELLUNG EINES FLUGZEUGRUMPFES

Title (fr)

TOLES MINCES EN ALLIAGE D'ALUMINIUM-CUIVRE-LITHIUM POUR LA FABRICATION DE FUSELAGES D'AVION

Publication

EP 3802897 A1 20210414 (FR)

Application

EP 19740635 A 20190529

Priority

- FR 1855005 A 20180608
- FR 2019051269 W 20190529

Abstract (en)

[origin: WO2019234326A1] The invention concerns a method for manufacturing a thin sheet made of aluminium-based alloy comprising, in per cent by weight, 2.3 to 2.7% Cu, 1.3 to 1.6% Li, 0.2 to 0.5% Mg, 0.1 to 0.5% Mn, 0.01 to 0.15% Ti, a quantity of Zn less than 0.3, a quantity of Fe and of Si less than or equal to 0.1% each, and unavoidable impurities at a content less than or equal to 0.05% by weight each and 0.15% by weight in total, wherein, in particular, the hot-rolling input temperature is between 400°C and 445°C and the hot-rolling output temperature is less than 300°C. The sheets according to the invention have advantageous mechanical properties and are used, in particular, for the manufacture of aircraft fuselage panels.

IPC 8 full level

C22C 21/12 (2006.01); **C22C 21/16** (2006.01); **C22F 1/057** (2006.01)

CPC (source: EP US)

C22C 21/12 (2013.01 - EP); **C22C 21/16** (2013.01 - EP US); **C22F 1/057** (2013.01 - EP US)

Citation (search report)

See references of WO 2019234326A1

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 2019234326 A1 20191212; BR 112020023577 A2 20210209; BR 112020023577 B1 20231205; CA 3099351 A1 20191212;
CN 112236537 A 20210115; EP 3802897 A1 20210414; EP 3802897 B1 20221116; FR 3082210 A1 20191213; FR 3082210 B1 20200605;
US 2021363623 A1 20211125

DOCDB simple family (application)

FR 2019051269 W 20190529; BR 112020023577 A 20190529; CA 3099351 A 20190529; CN 201980036638 A 20190529;
EP 19740635 A 20190529; FR 1855005 A 20180608; US 201916972236 A 20190529