

Title (en)

IMPROVED PROCESS FOR MANUFACTURING SHEETS MADE OF ALUMINIUM-COPPER-LITHIUM ALLOY FOR AIRCRAFT FUSELAGE
MANUFACTURE AND CORRESPONDING SHEET

Title (de)

VERBESSERTES VERFAHREN ZUR HERSTELLUNG VON BLECHEN AUS EINER ALUMINIUM-KUPFER-LITHIUM-LEGIERUNG FÜR DIE
HERSTELLUNG VON FLUGZEUGRÜMPFEN UND ENTSPRECHENDEM BLECH

Title (fr)

PROCEDE DE FABRICATION AMELIORE DE TÔLES EN ALLIAGE D'ALUMINIUM-CUIVRE-LITHIUM POUR LA FABRICATION DE FUSELAGE
D'AVION ET TÔLE CORRESPONDANTE

Publication

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Application

EP 18833951 A 20181217

Priority

- FR 1762674 A 20171220
- FR 2018053316 W 20181217

Abstract (en)

[origin: CA3085811A1] The subject of the invention is a process for manufacturing a wrought product made of aluminium alloy comprising the following steps : a) casting a plate made of alloy comprising, in percentages by weight, Cu: 2.1 to 2.8; Li: 1.1 to 1.7; Mg: 0.2 to 0.9; Mn: 0.2 to 0.6; Ti: 0.010.2; Ag < 0.1; Zr < 0.08; Fe and Si = 0.1 each; unavoidable impurities = 0.05% each and 0.15% in total; remainder aluminium; b) homogenizing said plate at 480-520°C for 5 to 60 hours; c) hot-rolling and optionally cold-rolling said homogenized plate to give a sheet; d) solution annealing the sheet at 470-520°C for 5 minutes to 4 hours; e) quenching the solution-annealed sheet; f) controlled tensioning of the solution-annealed and quenched sheet with a permanent set of 1 to 6%; g) tempering of the tensioned sheet by heating at a temperature of at least 160°C for a maximum time of 30 hours.

IPC 8 full level

C22C 21/12 (2006.01); **C22C 21/14** (2006.01); **C22C 21/16** (2006.01); **C22F 1/057** (2006.01)

CPC (source: EP US)

C21D 8/0226 (2013.01 - US); **C21D 8/0236** (2013.01 - US); **C21D 8/0273** (2013.01 - US); **C22C 21/12** (2013.01 - EP); **C22C 21/14** (2013.01 - EP); **C22C 21/16** (2013.01 - EP US); **C22F 1/057** (2013.01 - EP US)

Cited by

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DOCDB simple family (publication)

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