

Title (en)

ALUMINIUM-COPPER-LITHIUM ALLOY WITH IMPROVED MECHANICAL RESISTANCE AND TOUGHNESS

Title (de)

ALUMINIUM-KUPFER-LITHIUM-LEGIERUNG MIT VERBESSERTEN MECHANISCHE BESTÄNDIGKEIT UND ZÄHIGKEIT

Title (fr)

ALLIAGE ALUMINIUM CUIVRE LITHIUM A RESISTANCE MECANIQUE ET TENACITE AMELIOREES

Publication

**EP 2449142 A1 20120509 (FR)**

Application

**EP 10734173 A 20100622**

Priority

- FR 2010000455 W 20100622
- FR 0903096 A 20090625
- US 22024909 P 20090625

Abstract (en)

[origin: WO2010149873A1] The invention relates to a wrought product such as an extruded, rolled and/or forged product, made of an alloy based on aluminium comprising, in % by weight, Cu: 3.0 - 3.9; Li: 0.8 - 1.3; Mg: 0.6 - 1.0; Zr: 0.05 - 0.18; Ag: 0.0 - 0.5; Mn: 0.0 - 0.5; Fe + Si = 0.20; Zn = 0.15; at least one element from Ti: 0.01-0.15; Sc: 0.05 - 0.3; Cr: 0.05 - 0.3; Hf: 0.05 - 0.5; other elements = 0.05 each and = 0.15 in total, the remainder being aluminium. The invention also relates to the process for manufacturing this product. The products according to the invention are particularly useful for producing thick products made of aluminium intended to produce structural components for the aeronautical industry.

IPC 8 full level

**C22C 21/00** (2006.01); **C22C 21/16** (2006.01); **C22F 1/04** (2006.01); **C22F 1/057** (2006.01)

CPC (source: EP US)

**C22C 21/00** (2013.01 - EP US); **C22C 21/16** (2013.01 - EP US); **C22F 1/04** (2013.01 - EP US); **C22F 1/057** (2013.01 - EP US)

Citation (search report)

See references of WO 2010149873A1

Cited by

FR3080861A1; WO2019211546A1

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 SE SI SK SM TR

DOCDB simple family (publication)

**FR 2947282 A1 20101231**; **FR 2947282 B1 20110805**; BR PI1011757 A2 20180306; BR PI1011757 B1 20190409; CA 2765382 A1 20101229; CA 2765382 C 20180807; CN 102459671 A 20120516; CN 102459671 B 20140319; DE 10734173 T1 20121206; DE 10734173 T8 20130425; EP 2449142 A1 20120509; EP 2449142 B1 20170503; US 11111562 B2 20210907; US 2011030856 A1 20110210; US 2011209801 A2 20110901; WO 2010149873 A1 20101229

DOCDB simple family (application)

**FR 0903096 A 20090625**; BR PI1011757 A 20100622; CA 2765382 A 20100622; CN 201080028657 A 20100622; DE 10734173 T 20100622; EP 10734173 A 20100622; FR 2010000455 W 20100622; US 82049510 A 20100622