

Title (en)
AL-ZN-MG-CU ALLOY PRODUCTS

Title (de)
PPRODUKTE AUS AL-ZN-MG-CU-LEGIERUNG

Title (fr)
PRODUITS EN ALLIAGES AL-ZN-MG-CU

Publication
EP 1492895 B1 20091216 (FR)

Application
EP 03740568 A 20030404

Priority
• FR 0301062 W 20030404
• FR 0204257 A 20020405

Abstract (en)
[origin: WO03085145A2] The invention relates to a laminated, extruded, or forged Al-Zn-Mg-Cu alloy product which is characterized by the fact that said alloy product contains (in percent by mass): a) Zn 8.3 - 14.0, Cu 0.3 4.0, Mg 0.5 4.5, Zr 0.03 0.15, Fe + Si < 0.25; b) at least one element selected among the group comprising Sc, Hf, La, Ti, Ce, Nd, Eu, Gd, Tb, Dy, Ho, Er, Y, Yb, the content of each selected element ranging between 0.02 and 0.7 percent; c) the rest consisting of aluminum and inevitable impurities, and fulfills the following conditions: d) Mg / Cu < 2.4, and e) (7.7 0.4 Zn) > (Cu + Mg) > (6.4 0.4 Zn). The inventive products can be used as structural elements (e.g. wing section box, upper wing surface) in aeronautics construction.

IPC 8 full level
C22C 21/10 (2006.01); **C22F 1/053** (2006.01)

CPC (source: EP US)
C22C 21/10 (2013.01 - EP US); **C22F 1/053** (2013.01 - EP US)

Cited by
CN111057920A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 03085145 A2 20031016; WO 03085145 A3 20040401; AT E452216 T1 20100115; AU 2003260001 A1 20031020; DE 03740568 T1 20050714; DE 60330547 D1 20100128; EP 1492895 A2 20050105; EP 1492895 B1 20091216; ES 2338314 T3 20100506; FR 2838136 A1 20031010; FR 2838136 B1 20050128; JP 2005528521 A 20050922; JP 4535731 B2 20100901; US 2003219353 A1 20031127; US 7550110 B2 20090623

DOCDB simple family (application)
FR 0301062 W 20030404; AT 03740568 T 20030404; AU 2003260001 A 20030404; DE 03740568 T 20030404; DE 60330547 T 20030404; EP 03740568 A 20030404; ES 03740568 T 20030404; FR 0204257 A 20020405; JP 2003582320 A 20030404; US 40660903 A 20030404