

Title (en)

Aluminium-copper-magnesium alloy with high creep resistance

Title (de)

Aluminium-Kupfer-Magnesium-Legierung mit hoher Kriechbeständigkeit

Title (fr)

Alliage aluminium-cuivre-magnésium à résistance élevée au fluage

Publication

EP 0756017 B1 20010829 (FR)

Application

EP 96420235 A 19960710

Priority

FR 9509443 A 19950728

Abstract (en)

[origin: EP0756017A1] An alloy comprises 2.0-3.0, pref. 2.5-2.75, wt.% Cu, 1.5-2.1, pref. 1.55-1.8, wt.% Mg, 0.3-0.7 wt.% Mn, >0.3 wt.% Fe, >0.3 wt.% Ni, >1.0 wt.% Ag, >0.15 wt.% Zr, >0.15 wt.% Ti, and Si such that $0.3 < Si + 0.4 Ag < 0.6$, the residue being Al with other elements amounting to less than 0.05% each and less than 0.15% in total. The alloy may be drawn, forged or rolled, then hardened and tempered, after which it exhibits a creep of less than 0.3% in 1000 hours under a load of 250 MPa at 150 degrees C.

IPC 1-7

C22C 21/16

IPC 8 full level

C22F 1/057 (2006.01); **C22C 21/08** (2006.01); **C22C 21/12** (2006.01); **C22C 21/16** (2006.01); **C22F 1/00** (2006.01)

CPC (source: EP US)

C22C 21/08 (2013.01 - EP US); **C22C 21/16** (2013.01 - EP US)

Cited by

EP0989195A1; CN113322400A; WO2012140337A1; US9869008B2; FR3111143A1; WO2021245345A1

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DOCDB simple family (publication)

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