

Title (en)
Method of manufacturing shaped articles of a 2024 type aluminium alloy

Title (de)
Verfahren zur Herstellung von Formteilen aus Aluminiumlegierung vom Typ 2024

Title (fr)
Procédé de fabrication de pièces de forme en alliage d' aluminium type 2024

Publication
EP 1045043 B1 20050518 (FR)

Application
EP 00420071 A 20000410

Priority
FR 9904685 A 19990412

Abstract (en)
[origin: EP1045043A1] Highly deformed AlCuMg alloy sheet part production, by subjecting hot rolled sheets to forming before and/or after solution annealing and quenching, is new. Highly deformed AlCuMg alloy parts are produced by: (a) casting a slab containing (by wt.) 3.8-4.5% Cu, 1.2-1.5% Mg, 0.3-0.5% Mn, less than 0.25% Si, less than 0.20% Fe, less 0.20% Zn, less than 0.10% Cr, less than 0.10% Zr and less than 0.10% Ti; (b) optionally homogenizing at 460-510 (preferably 470-500) degrees C for 2-12 (preferably 3-6) hr.; (c) hot rolling with a start temperature of 430-470 (preferably 440-460) degrees C; (d) optionally cold rolling the strip; (e) optionally annealing at 350-450 degrees C; (f) cutting into sheets; and (g) forming by e.g. stretch forming, deep drawing, spinning and/or bending before and/or after solution annealing at 480-50 degrees C for 5 min. to 1 hr. and quenching.

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C22C 21/16; **C22F 1/057**

IPC 8 full level
B21B 3/00 (2006.01); **C22C 21/12** (2006.01); **C22C 21/16** (2006.01); **C22F 1/00** (2006.01); **C22F 1/057** (2006.01)

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Cited by
WO2013054013A1; WO2014167191A1; US7494552B2; US7323068B2; CN109825748A; FR2836929A1; CN106513638A; CN102489971A; EP1382698A1; FR2842212A1; FR2981365A1; CN103874775A; FR2852609A1; GB2414242A; GB2414242B; ES2292331A1; DE102004010700B4; FR3004464A1; WO03074747A1; WO2008003503A3; US7294213B2; US7993474B2; US10472707B2; CN100355527C; FR2843754A1; GB2406577A; GB2406577B; FR2843755A1; GB2406576A; GB2406576B; CN110218921A; US10968501B2; US11667994B2; US7610669B2; US10400313B2; WO2004083478A1; US7604704B2; US7815758B2; WO2004018722A1; WO2004018723A1; EP1059363B2

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