

Title (en)

Method of manufacturing products from high-strength alloys of the Al-Zn-Mg-Cu type and with transverse direction toughness.

Title (de)

Verfahren zur Herstellung von extrudierten Werkstücken aus hochfesten Legierungen des Typs Al-Zn-Mg-Cu, mit Zähigkeit in Querrichtung.

Title (fr)

Méthode pour l'obtention de produits filés en alliages type Al-Zn-Mg-Cu à haute résistance et à tenacité sens travers améliorée.

Publication

EP 0081441 A1 19830615 (FR)

Application

EP 82420168 A 19821201

Priority

FR 8122969 A 19811203

Abstract (en)

1. A method of producing hot extruded products of the type Al-Zn-Mg-Cu, which, in the treated state, has improved transverse characteristics, characterised by casting an alloy of the following composition (% by weight) : Si \leq 0.08 Cu 1.0 to 2.0 Mg 2.1 to 3.5 Zn 7.2 to 9.5 Cr 0.07 to 0.17 Mn 0.15 to 0.25 Zr 0.08 to 0.14 Ti \leq 0.10 Others each \leq 0.05 Others total \leq 0.15 Balance = Al and iron homogenizing the cast product in the range of temperatures of from 460 degrees C to the initial melting temperature of the alloy, hot extruding the product at a temperature of the order of 400 degrees C, optionally hot drawing the hot extruded product, putting the product into solution in the range of temperatures of from 460 to 490 degrees C, quenching the product in cold water (μ \leq 40 degrees C), cold working with a level of deformation (S - s/s) \leq 10%, and a tempering operation : type T6 : that is to say, from 6 to 50 hours at from 115 to 150 degrees C, or type T7 : that is to say, from 3 to 24 hours at from 100 to 120 degrees C + 8 to 20 hours at from 150 to 170 degrees C, the longest periods of time generally being associated with the lowest temperatures.

IPC 1-7

C22F 1/04; **C22C 21/10**

IPC 8 full level

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CPC (source: EP)

C22F 1/053 (2013.01)

Citation (search report)

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