

Title (en)

AlZnMg-alloy superplastic preform material.

Title (de)

Vormaterial aus einer superplastischen AlZnMg-Legierung.

Title (fr)

Matériau semi-fini en alliage AlZnMg superplastique.

Publication

EP 0462055 A1 19911218 (DE)

Application

EP 91810410 A 19910530

Priority

CH 195890 A 19900611

Abstract (en)

An alloy with 6 to 10% of zinc, 2 to 4% of magnesium, 0 to 3% of copper, 0 to 0.3% of iron, 0 to 0.3% of zirconium, 0 to 0.3% of chromium, 0 to 0.3% of manganese, 0 to 0.2% of silicon and 0 to 0.2% of titanium, the remainder being aluminium of commercial purity, is homogenised after continuous casting and holding, and deformed to give a superplastic base material of large cross-section. This base material can be superplastically deformed without prior solution annealing.

Abstract (de)

Eine Legierung mit 6 bis 10% Zink, 2 bis 4% Magnesium, 0 bis 3% Kupfer, 0 bis 0,3% Eisen, 0 bis 0,3% Zirkon, 0 bis 0, 3% Chrom, 0 bis 0,3% Mangan, 0 bis 0,2% Silizium und 0 bis 0,2% Titan, Rest Aluminium handel süblicher Reinheit, wird nach dem Stranggiessen und Halten homogenisiert und zu einem superplastischen Vormaterial grossen Querschnitts verformt. Dieses Vormaterial kann ohne vorhergehende Lösungsglühung superplastisch verformt werden.

IPC 1-7

C22C 21/10; C22F 1/053

IPC 8 full level

C22F 1/053 (2006.01)

CPC (source: EP)

C22F 1/053 (2013.01)

Citation (search report)

- [A] FR 2113037 A5 19720623 - FUCHS OTTO
- [A] US 4618382 A 19861021 - MIYAGI YOSHIMITSU [JP], et al
- [A] EP 0368005 A1 19900516 - ALUMINUM CO OF AMERICA [US]
- [A] PATENT ABSTRACTS OF JAPAN, Band 9, Nr. 228 (C-303)[1951], 13. September 1985; & JP-A-60 86 248 (KOBE SEIKOSHO K.K.) 15-05-1985
- [A] PATENT ABSTRACTS OF JAPAN, Band 10, Nr. 128 (C-345)[2185], 13. Mai 1986; & JP-A-60 251 260 (KOBE SEIKOSHO K.K.) 11-12-1985
- [A] "Homogenization and Annealing of Aluminium and Copper Alloys", PROCEEDINGS OF THE SYMPOSIUM ON HOMOGENIZATION AND ANNEALING OF ALUMINIUM AND COPPER ALLOYS", Cincinnati, 12. - 13. Oktober 1987, editors H. Merchant et al., Seiten 1-52, Metallurgical Society, Warrendale, US; H.D. MERCHANT et al.: "Homogenization of aluminium alloys"

Cited by

CN110241338A; CN103732772A; US2007204937A1; CN107937776A; CN115584407A; US9353431B2; US10208370B2; US10472707B2; US6811625B2; US9512510B2; US10301710B2; EP0863220B2

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