

Title (en)

Method for providing magnesium alloys with superplastic properties

Title (de)

Verfahren zur Einstellung von superelastischen Eigenschaften in Magnesiumlegierungen

Title (fr)

Procédé permettant de conférer des propriétés superplastiques à des alliages de magnésium

Publication

EP 1342805 A3 20040317 (DE)

Application

EP 03011735 A 20010123

Priority

- DE 10003970 A 20000125
- DE 10011334 A 20000310
- EP 01909511 A 20010123

Abstract (en)

[origin: WO0155467A2] The invention relates to a method for producing magnesium alloys with a superplastic structure using a deformation process, followed by quick cooling. The magnesium-based alloy is initially pre-heated to a temperature of 340 -380 DEG C and is subsequently deformed. The semi-finished product thus obtained is cooled down at high speed to an ambient temperature immediately after deformation.

IPC 1-7

C22C 23/00; C21D 8/00; C21D 8/02

IPC 8 full level

C21D 8/00 (2006.01); **C21D 8/02** (2006.01); **C22C 23/00** (2006.01); **C22F 1/06** (2006.01)

CPC (source: EP US)

C22C 23/00 (2013.01 - EP US); **C22F 1/06** (2013.01 - EP US); **C21D 2201/02** (2013.01 - EP US)

Citation (search report)

- [X] GB 1187305 A 19700408 - DOW CHEMICAL CO [US]
- [A] US 3709745 A 19730109 - KOEPLINGER R, et al
- [A] US 5620537 A 19970415 - BAMPTON CLIFFORD C [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 09 30 September 1996 (1996-09-30)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0155467 A2 20010802; WO 0155467 A3 20020425; AT E264928 T1 20040515; AU 3723401 A 20010807; CA 2398125 A1 20010802; DE 50102051 D1 20040527; EP 1252352 A2 20021030; EP 1252352 B1 20040421; EP 1342805 A2 20030910; EP 1342805 A3 20040317; US 2003140992 A1 20030731

DOCDB simple family (application)

DE 0100256 W 20010123; AT 01909511 T 20010123; AU 3723401 A 20010123; CA 2398125 A 20010123; DE 50102051 T 20010123; EP 01909511 A 20010123; EP 03011735 A 20010123; US 18189202 A 20021204