

Title (en)

Hot compaction and extrusion of L12 aluminum alloys

Title (de)

Heißverdichtung und -extrusion von L12-Aluminiumlegierungen

Title (fr)

Compactage à chaud et extrusion d'alliages d'aluminium L12

Publication

EP 2325342 A2 20110525 (EN)

Application

EP 10251433 A 20100811

Priority

US 54394509 A 20090819

Abstract (en)

A method and apparatus produces high strength aluminum alloys from a powder containing L1 2 intermetallic dispersoids. The powder is degassed, sealed under vacuum in a container, consolidated by vacuum hot pressing, and extruded into useful shapes.

IPC 8 full level

C22C 1/04 (2006.01); **B22F 1/00** (2006.01); **B22F 3/12** (2006.01); **B22F 3/14** (2006.01); **B22F 3/20** (2006.01); **C22C 21/00** (2006.01); **C22F 1/04** (2006.01)

CPC (source: EP US)

B22F 3/20 (2013.01 - EP US); **C22C 1/0416** (2013.01 - EP US); **C22C 21/00** (2013.01 - EP US); **C22C 21/02** (2013.01 - EP US); **C22C 21/06** (2013.01 - EP US); **C22C 21/10** (2013.01 - EP US); **C22C 21/12** (2013.01 - EP US); **C22F 1/04** (2013.01 - EP US); **B22F 2003/175** (2013.01 - EP US); **B22F 2003/208** (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP US); **B22F 2999/00** (2013.01 - EP US)

C-Set (source: EP US)

1. **B22F 2998/10 + B22F 9/082 + B22F 3/1216 + B22F 3/20 + B22F 3/17**
2. **B22F 2999/00 + B22F 3/1216 + B22F 2201/20 + B22F 2203/11**

Citation (applicant)

- US 6248453 B1 20010619 - WATSON THOMAS J [US]
- US 2006269437 A1 20061130 - PANDEY AWADH B [US]
- R. GERMAIN: "Powder Metallurgy Science", 1994, pages: 101

Cited by

CN102400135A; CN106239164A; CN108538426A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

BA ME RS

DOCDB simple family (publication)

US 2011044844 A1 20110224; EP 2325342 A2 20110525; EP 2325342 A3 20110921; EP 2325342 B1 20130123

DOCDB simple family (application)

US 54394509 A 20090819; EP 10251433 A 20100811