

Title (en)

METHOD FOR FORMING AMORPHOUS ALLOY MEMBER

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES AMORPHEN LEGIERUNGSELEMENTS

Title (fr)

PROCÉDÉ DE FORMAGE D'ÉLÉMENT EN ALLIAGE AMORPHE

Publication

EP 3225711 A4 20171025 (EN)

Application

EP 15862248 A 20150714

Priority

- CN 201410719338 A 20141130
- CN 2015083961 W 20150714

Abstract (en)

[origin: EP3225711A1] A method for forming an amorphous alloy member. In the method, within a temperature range from the liquidus temperature to the glass transition temperature in the solidification process of a molten amorphous alloy, low-pressure precision forming is carried out for the amorphous alloy. The method makes use of a smooth, free surface formed after the molten alloy solidifies, good deformation property and low shrinkage coefficient during solidification, to obtain an amorphous alloy member that has high dimensional precision, high surface smoothness and a compact structure without defects such as shrinkage cavities and shrinkage porosity. The method features a short technological process, high production efficiency, and reduced costs.

IPC 8 full level

C22C 45/00 (2006.01); **B22D 17/00** (2006.01); **B22D 17/02** (2006.01); **B22D 27/15** (2006.01); **B22D 41/005** (2006.01); **C22C 45/10** (2006.01)

CPC (source: EP US)

B22D 17/00 (2013.01 - EP US); **B22D 17/02** (2013.01 - EP US); **B22D 27/15** (2013.01 - EP US); **B22D 41/005** (2013.01 - EP US); **C22C 45/00** (2013.01 - EP US); **C22C 45/10** (2013.01 - EP US)

Citation (search report)

- [X] WO 03064076 A1 20030807 - LIQUIDMETAL TECHNOLOGIES [US], et al
- [A] EP 2611558 A2 20130710 - CALIFORNIA INST OF TECHN [US]
- [A] CN 103361501 A 20131023 - UNIV LANZHOU TECH
- See references of WO 2016082561A1

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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3225711 A1 20171004; **EP 3225711 A4 20171025**; CN 105710334 A 20160629; CN 105710334 B 20171121; US 2017259331 A1 20170914; WO 2016082561 A1 20160602

DOCDB simple family (application)

EP 15862248 A 20150714; CN 201410719338 A 20141130; CN 2015083961 W 20150714; US 201715607452 A 20170527