

Title (en)

AMORPHOUSLY SOLIDIFYING NOBLE METAL-BASED NOBLE METAL ALLOY

Title (de)

AMORPH ERSTARRENDE EDELMETALL-LEGIERUNG AUF EDELMETALLBASIS

Title (fr)

ALLIAGE DE MÉTAUX PRÉCIEUX À SOLIDIFICATION AMORPHE, À BASE DE MÉTAUX PRÉCIEUX

Publication

**EP 3177747 A1 20170614 (DE)**

Application

**EP 15808100 A 20151113**

Priority

- DE 102014016723 A 20141113
- DE 202014008963 U 20141113
- EP 2015002279 W 20151113

Abstract (en)

[origin: WO2016074796A1] The invention relates to an amorphously solidifying noble metal alloy, characterised by the following composition: AaBbCc, wherein: - A represents at least one noble metal from a group consisting of platinum and palladium; - B represents at least one element from a group consisting of Al, Au, Ag and Cu; - C represents at least one element from a group consisting of Ga and Ge; the mass fraction a lies in a region of 45-60 mass percent, preferably in the region of 45-59 mass percent, most preferably in the region of 48 to 54 mass percent, the mass fraction b lies in the region of 39-55 mass percent, preferably in the region of 39-49 mass percent, most preferably in the region of 40 to 47 mass percent, and the mass fraction c lies in the region of 0-13 mass percent, preferably in the region of 1-13 mass percent, most preferably in the region of 2 to 10 mass percent and especially preferably in the region of 2 to 5 mass percent; in a case where platinum and palladium are both present, the amorphous noble metal alloy preferably does not have aluminum as the sole alloy component from group B; and wherein the above mass fractions a, b and c, aside from typical admixtures, impurities and alloy tolerances, add up to 100 mass percent.

IPC 8 full level

**C22C 5/04** (2006.01); **C22C 45/00** (2006.01)

CPC (source: EP US)

**A44C 27/003** (2013.01 - US); **C22C 5/04** (2013.01 - EP US); **C22C 45/00** (2013.01 - EP US); **C22C 45/003** (2013.01 - EP US);  
**C22F 1/002** (2013.01 - EP US); **C22F 1/14** (2013.01 - EP US); **G04B 37/22** (2013.01 - US); **C22C 2200/02** (2013.01 - US)

Citation (search report)

See references of WO 2016074796A1

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)

**WO 2016074796 A1 20160519**; EP 3177747 A1 20170614; EP 3177747 B1 20180110; US 2017241004 A1 20170824

DOCDB simple family (application)

**EP 2015002279 W 20151113**; EP 15808100 A 20151113; US 201715591745 A 20170510