

Title (en)
WHITE AU-BASE BULK SOLIDIFYING AMORPHOUS ALLOY

Title (de)
MASSIVGLASBILDENDE WEISSGOLDLEGIERUNG

Title (fr)
ALLIAGE D'OR BLANC GÉNÉRATEUR DE VERRE MASSIF

Publication
EP 3478864 A1 20190508 (DE)

Application
EP 17739868 A 20170629

Priority
• DE 102016008074 A 20160630
• EP 2017000777 W 20170629

Abstract (en)
[origin: WO2018001564A1] A white gold alloy of the composition $(Au_{1-a-b}Ag_{a-c}Pt_{c-b})_{100-x-y}(Cu_{1-d-e}Ld_{d-e})_x(Si_{1-f}Gef)_y$ has been produced in which L represents In, Ga or Sn or Ld represents L1 d1L2 d2 or L1 d1L2 d2L3 d3, wherein L1, L2 and L3 are selected from the elements In, Ga, or Sn; M represents one or more elements of the elements Ni, Co, and Fe; x and y are at%, wherein $x = 10 - 30$ at% and $y = 10 - 16.3$ at%; $(100-x-y)$, x, and y can contain unavoidable trace impurities; a, b, c, d, e, and f are a fraction of 1; $a = 0.02 - 0.20$, $b = 0 - 0.1$, $c = 0 - 1$, $d = 0.02 - 0.40$, $d1 = 0$ to 0.4; $d2 = 0$ to 0.4; and $d3 = 0$ to 0.4, where $d1 + d2 + d3 = d$, $e = 0 - 0.12$ (total fraction of the elements Ni, Co, and Fe) and $f = 0 - 0.40$. The white gold alloy is suitable for a broad range of solid glass forming processes and for jewelry applications.

IPC 8 full level
C22C 5/02 (2006.01); **C22C 45/00** (2006.01)

CPC (source: EP)
C22C 5/02 (2013.01); **C22C 45/00** (2013.01)

Citation (search report)
See references of WO 2018001564A1

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)
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