

Title (en)  
Timepiece or piece of jewellery made of a light titanium-based precious alloy

Title (de)  
Uhr oder Schmuckgegenstand aus einer leichten hochwertigen Legierung auf Titanbasis

Title (fr)  
Pièce d'horlogerie ou de bijouterie en alliage précieux léger à base de titane

Publication  
**EP 3040790 A1 20160706 (FR)**

Application  
**EP 14200381 A 20141229**

Priority  
EP 14200381 A 20141229

Abstract (en)  
[origin: WO2016107755A1] A lightweight precious alloy made from titanium and gold, comprising at least 750% by weight of gold, characterised in that said alloy has a composition of formula:  $Tia\ Aub\ Mc\ Td$  in which a, b, c, d are atomic proportions and such that:  $a+b+c+d=1$ ,  $0.45 \leq a \leq 0.55$ ;  $0.41 \leq b \leq 0.495$ ;  $0.025 \leq c \leq 0.13$ ;  $0.001 \leq d \leq 0.025$ , in which M represents one or several elements chosen from a first group comprising (Nb, V, Pd, Pt, Fe), in which T represents a maximum of two elements chosen from a second group comprising Nb, V, Pd, Pt, Fe, Mo, Ta, W, Co, Ni, Ru, Rh, Ir, Cr, Mn, Cu, Zn, Ag, Al, B, Si, Ge, Sn, Sb and In, excluding said metals M comprise said alloy. A component for a timepiece, jewellery item or item of personal adornment made from such a lightweight precious alloy made from titanium and gold.

Abstract (fr)  
Composant d'habillage (1) pour pièce d'horlogerie ou de bijouterie, réalisé en alliage précieux léger à base de titane, où cet alliage obéit à la composition atomique  $Ti\ a-x\ (Zr,Hf)\ x\ M\ y\ Pd\ 1-a-y$ , avec  $0.3 < a < 0.6$ ,  $0 < x < 0.15$ ,  $0.01 < y < 0.4$ , et M étant un ou plusieurs parmi un premier groupe composé de : Nb, V, Mo, Ta, W, Fe, Co, Ni, Ru, Rh, Ir, Au, Pt, Cr, Mn, Cu, Zn, Ag, Al, Si, Ge, Sn, Sb, In. Pièce d'horlogerie (10) ou de bijouterie comportant au moins un tel composant d'habillage (1).

IPC 8 full level  
**A44C 27/00** (2006.01); **C22C 5/04** (2006.01); **C22C 30/00** (2006.01); **G04B 37/22** (2006.01); **G04B 45/00** (2006.01)

CPC (source: CN EP US)  
**A44C 5/00** (2013.01 - CN EP US); **A44C 27/003** (2013.01 - CN EP US); **C22C 5/02** (2013.01 - CN EP US); **C22C 5/04** (2013.01 - CN EP US); **C22C 14/00** (2013.01 - EP US); **C22C 30/00** (2013.01 - CN EP US); **C22C 30/02** (2013.01 - CN EP US); **G04B 37/22** (2013.01 - CN EP US); **G04B 45/0076** (2013.01 - CN EP US)

Citation (search report)

- [X1] EP 0267318 A2 19880518 - HAFNER C GMBH & CO [DE]
- [X] EP 0239747 A1 19871007 - SUMITOMO ELECTRIC INDUSTRIES [JP]
- [XA] CH 704233 A1 20120629 - RICHEMONT INT SA [CH]

Cited by  
EP3572549A1

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 3040790 A1 20160706**; CN 106460094 A 20170222; CN 106460094 B 20190514; CN 107208187 A 20170926; CN 107208187 B 20190219; EP 3240915 A1 20171108; EP 3240915 B1 20200708; EP 3241078 A1 20171108; EP 3241078 B1 20210526; HK 1243743 B 20200320; JP 2017518442 A 20170706; JP 2018503480 A 20180208; JP 6389561 B2 20180912; JP 6514354 B2 20190515; US 10136708 B2 20181127; US 10206465 B2 20190219; US 2017226613 A1 20170810; US 2017367446 A1 20171228; WO 2016107752 A1 20160707; WO 2016107752 A4 20160915; WO 2016107755 A1 20160707

DOCDB simple family (application)  
**EP 14200381 A 20141229**; CN 201580028804 A 20151217; CN 201580071445 A 20151217; EP 15810677 A 20151217; EP 15817229 A 20151217; EP 2015080211 W 20151217; EP 2015080270 W 20151217; HK 18103140 A 20180305; JP 2017507083 A 20151217; JP 2017546041 A 20151217; US 201515308185 A 20151217; US 201515533471 A 20151217