

Title (en)

TIMEPIECE OR JEWELLERY ITEM MADE FROM LIGHTWEIGHT PRECIOUS ALLOY COMPRISING TITANIUM

Title (de)

UHR ODER SCHMUCKSTÜCK AUS EINER LEICHTEN WERTVOLLEN EDELMETALLLEGIERUNG MIT TITAN

Title (fr)

PIÈCE D'HORLOGERIE OU DE BIJOUTERIE EN ALLIAGE PRÉCIEUX LÉGER COMPORTANT DU TITANE

Publication

**EP 3241078 A1 20171108 (FR)**

Application

**EP 15810677 A 20151217**

Priority

- EP 14200381 A 20141229
- EP 2015080211 W 20151217

Abstract (en)

[origin: WO2016107752A1] An external component (1) for a timepiece or jewellery item, made from lightweight precious alloy comprising titanium and palladium, in the atomic composition  $Ti_aPdbMcTd$ , in which a, b, c and d are atomic fractions of the total, such that  $a+b+c+d=1$ , - a being between 0.44 and 0.55, - b being between 0.30 and 0.45, - c being between 0.04 and 0.24, - d being between 0.001 and 0.03, - in which said alloy comprises, at most, two metals M, chosen from Nb, V, Fe, Co, Au and Pt, - in which each trace of metal T has an atomic proportion of less than 3.0% of the total of said alloy, chosen from Nb, V, Mo, Ta, W, Fe, Co, Ni, Ru, Rh, Ir, Au, Pt, Cr, Mn, Cu, Zn, Ag, Al, B, Si, Ge, Sn, Sb and In, - said alloy comprising at least 0.05% boron, and comprising at least 50% by weight of palladium.

IPC 8 full level

**G04B 37/22** (2006.01); **A44C 27/00** (2006.01); **C22C 5/02** (2006.01); **C22C 5/04** (2006.01); **C22C 14/00** (2006.01); **C22C 30/00** (2006.01);  
**G04B 45/00** (2006.01)

CPC (source: CN EP US)

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**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);  
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Citation (search report)

See references of WO 2016107752A1

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**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;  
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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