

Title (en)  
ALPHA-BETA TITANIUM ALLOY

Title (de)  
ALPHA/BETA-TITANLEGIERUNG

Title (fr)  
ALLIAGE DE TITANE ALPHA-BÊTA

Publication  
**EP 3276016 A4 20180822 (EN)**

Application  
**EP 16768566 A 20160316**

Priority  
• JP 2015064275 A 20150326  
• JP 2016009417 A 20160121  
• JP 2016058247 W 20160316

Abstract (en)  
[origin: EP3276016A1] To provide an  $\alpha$ - $\beta$  titanium alloy that has high strength and excellent hot workability of the level of the  $\alpha$ - $\beta$  titanium alloy, typified by the Ti-6Al-4V, while exhibiting more excellent machinability than the Ti-6Al-4V. The  $\alpha$ - $\beta$  titanium alloy includes, in percent by mass: at least one element of 0.1 to 2.0% of Cu and 0.1 to 2.0% of Ni; 2.0 to 8.5% of Al; 0.08 to 0.25% of C; and 1.0 to 7.0% in total of at least one element of 0 to 4.5% of Cr and 0 to 2.5% of Fe, with the balance being Ti and inevitable impurities.

IPC 8 full level  
**C22C 14/00** (2006.01); **C22F 1/00** (2006.01); **C22F 1/18** (2006.01)

CPC (source: EP US)  
**C22C 14/00** (2013.01 - EP US); **C22F 1/183** (2013.01 - EP US); **C22F 1/00** (2013.01 - EP US); **C22F 1/18** (2013.01 - EP US)

Citation (search report)  
• [E] EP 3196321 A2 20170726 - PUBLIC STOCK COMPANY VSMPO-AVISMA CORP [RU]  
• [X] JP 2009299110 A 20091224 - KOBE STEEL LTD  
• [X] JP 2014001421 A 20140109 - KOBE STEEL LTD  
• See references of WO 2016152663A1

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

DOCDB simple family (publication)  
**EP 3276016 A1 20180131; EP 3276016 A4 20180822; EP 3276016 B1 20191009**; CN 107406918 A 20171128; JP 2016183407 A 20161020; JP 6719216 B2 20200708; KR 102027100 B1 20191001; KR 20170125981 A 20171115; RU 2017134565 A 20190409; RU 2017134565 A3 20190409; RU 2695852 C2 20190729; US 2018044763 A1 20180215

DOCDB simple family (application)  
**EP 16768566 A 20160316**; CN 201680017462 A 20160316; JP 2016009417 A 20160121; KR 20177029948 A 20160316; RU 2017134565 A 20160316; US 201615560533 A 20160316