

Title (en)

ABRASION-RESISTANT TITANIUM ALLOY MEMBER HAVING EXCELLENT FATIGUE STRENGTH

Title (de)

Abriebfestes Bauteil aus einer Titanlegierung mit hervorragender Ermüdungsfestigkeit

Title (fr)

COMPOSANT D'ALLIAGE DE TITANE RÉSISTANT À L'ABRASION AYANT UNE EXCELLENTE RÉSISTANCE À LA FATIGUE

Publication

EP 2674506 B1 20170412 (EN)

Application

EP 12745006 A 20120201

Priority

- JP 2011027253 A 20110210
- JP 2012052265 W 20120201

Abstract (en)

[origin: EP2674506A1] The purpose of the present invention is to provide a titanium alloy member having superior wear resistance and fatigue strength to those of conventional titanium alloys at low cost. Provided is a wear-resistant titanium alloy member having excellent fatigue strength, comprising: a matrix material which comprises, in mass%, 4.5% or more and less than 5.5% of Al, 1.3% or more and less than 2.3% of Fe, 0.25% or more and less than 0.50% of Si, 0.08% or more and less than 0.25% of O, and a remainder made up by titanium and unavoidable impurities; and a cured layer which is formed as a surface layer of the matrix material and is composed of a solid solution of oxygen.

IPC 8 full level

C22C 14/00 (2006.01); **C22F 1/00** (2006.01); **C22F 1/18** (2006.01)

CPC (source: EP KR)

C22C 14/00 (2013.01 - EP KR); **C22F 1/02** (2013.01 - EP); **C22F 1/18** (2013.01 - KR); **C22F 1/183** (2013.01 - EP)

Cited by

EP2851446A4; EP3202952A4; US9689062B2; US11504765B2; US10760152B2

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 2674506 A1 20131218; EP 2674506 A4 20160601; EP 2674506 B1 20170412; CN 103348029 A 20131009; CN 103348029 B 20160330; JP 5093428 B2 20121212; JP WO2012108319 A1 20140703; KR 101492356 B1 20150210; KR 20130099226 A 20130905; WO 2012108319 A1 20120816

DOCDB simple family (application)

EP 12745006 A 20120201; CN 201280008351 A 20120201; JP 2012052265 W 20120201; JP 2012530020 A 20120201; KR 20137020054 A 20120201