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

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- 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

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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

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