

Title (en)  
PURE TITANIUM SHEET HAVING EXCELLENT BALANCE BETWEEN PRESS FORMABILITY AND STRENGTH AND EXCELLENT CORROSION RESISTANCE, AND PROCESS FOR MANUFACTURING SAME

Title (de)  
REINES TITANBLECH MIT HERVORRAGENDER BALANCE ZWISCHEN PRESSFORMBARKEIT UND FESTIGKEIT SOWIE HERVORRAGENDER KORROSIONSBESTÄNDIGKEIT UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)  
FEUILLE DE TITANE PUR AYANT UN EXCELLENT ÉQUILIBRE ENTRE UNE APTITUDE AU FAÇONNAGE À LA PRESSE ET UNE RÉSISTANCE ET UNE EXCELLENTE RÉSISTANCE À LA CORROSION ET SON PROCÉDÉ DE FABRICATION

Publication  
**EP 2716778 A4 20141119 (EN)**

Application  
**EP 12793298 A 20120530**

Priority  
• JP 2011120766 A 20110530  
• JP 2012074836 A 20120328  
• JP 2012063914 W 20120530

Abstract (en)  
[origin: EP2716778A1] Disclosed is a pure titanium sheet including 0.02% to 0.10% of Fe and 0.04% to 0.20% of O, with the balance being titanium and inevitable impurities. The Fe and O contents satisfy a condition specified by Expression (1). Regions having Schmidt factors of {11-22}<11-23> twins of 0.45 or more are present in an area percentage of 43% or more, which Schmidt factors of the twins are determined at a depth of one-fourth the gage of the pure titanium sheet with a rolling direction as an axis. The pure titanium sheet has a beta phase volume fraction of 0.3% or less. Expression (1) is expressed as follows:

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 1/18** (2013.01 - KR); **C22F 1/183** (2013.01 - EP); **F28F 21/086** (2013.01 - EP); **F28F 3/046** (2013.01 - EP)

Citation (search report)  
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• [E] EP 2615186 A1 20130717 - NIPPON STEEL & SUMITOMO METAL CORP [JP]  
• [A] US 2011017369 A1 20110127 - SHIRAI YOSHIHISA [JP], et al  
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• [A] BATTAINI M ET AL: "Orientation Effect on Mechanical Properties of Commercially Pure Titanium at Room Temperature", METALLURGICAL AND MATERIALS TRANSACTIONS A, SPRINGER-VERLAG, NEW YORK, vol. 38, no. 2, 28 February 2007 (2007-02-28), pages 276 - 285, XP019695709, ISSN: 1543-1940  
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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 2716778 A1 20140409; EP 2716778 A4 20141119**; CN 103562421 A 20140205; JP 2013011013 A 20130117; JP 5937865 B2 20160622; KR 20140004793 A 20140113; WO 2012165470 A1 20121206

DOCDB simple family (application)  
**EP 12793298 A 20120530**; CN 201280025980 A 20120530; JP 2012063914 W 20120530; JP 2012074836 A 20120328; KR 20137031469 A 20120530