

Title (en)
Titanium aluminide alloys

Title (de)
Titanaluminidlegierungen

Title (fr)
Alliages d'aluminure de titane

Publication
EP 2075349 B1 20160309 (DE)

Application
EP 08020431 A 20081125

Priority
DE 102007060587 A 20071213

Abstract (en)
[origin: EP2075349A2] Alloy based on titanium aluminides has the composition: Ti - (38-42 at.%) Al - (5-10 at.%) Nb. The composition has composite lamellae structures with B19-phase and beta -phase in each lamella. The ratio, especially the volume ratio, of the B19-phase and the beta -phase in each lamella is 0.05-20, especially 0.1-10. Independent claims are also included for the following: (1) Method for the production of the alloy; and (2) Component made from the alloy.

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

CPC (source: EP KR US)
C22C 1/02 (2013.01 - US); **C22C 1/04** (2013.01 - US); **C22C 1/0458** (2013.01 - US); **C22C 1/047** (2023.01 - EP US);
C22C 14/00 (2013.01 - EP KR US); **C22C 21/00** (2013.01 - KR); **C22C 30/00** (2013.01 - US); **C22F 1/183** (2013.01 - EP US)

Citation (examination)
TAKEYAMA MASAO ET AL: "Phase equilibria among .alpha., .alpha.2, .beta. and .gamma. phases in ternary Ti-Al-X systems at elevated temperatures", TITANIUM '95: SCIENCE AND TECHNOLOGY, PROCEEDINGS OF THE WORLD CONFERENCE ON TITANIUM, 8TH, BIRMINGHAM, UK, OCT. 22-26, 1995, INSTITUTE OF MATERIALS, LONDON, UK, vol. 1, 1 January 1995 (1995-01-01), pages 294 - 301, XP009178047

Cited by
EP2251445A4; EP3508594A4; US11078563B2; CN105970026A; EP3974551A4

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
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EP 08020431 A 20081125; BR PI0806979 A 20081211; CA 2645843 A 20081204; CN 200810172769 A 20081212; DE 102007060587 A 20071213; EP 09010152 A 20081125; EP 11187502 A 20081125; IL 19575608 A 20081207; JP 2008318555 A 20081215; KR 20080126803 A 20081212; RU 2008149177 A 20081212; US 201313931051 A 20130628; US 33190908 A 20081210; US 51245109 A 20090730