

Title (en)  
Titanium aluminide alloys

Title (de)  
Titanaluminidlegierungen

Title (fr)  
Alliages d'aluminure de titane

Publication  
**EP 2075349 A3 20090909 (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 (search report)

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- [X] APPEL, FRITZ ET AL: "Nano -scale design of TiAl alloys based on beta-phase decomposition", MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS , 980, 383-388 CODEN: MRSPDH; ISSN: 0272-9172, 2007, XP009115409
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- [A] APPEL F. ET AL.: "Recent Progress in the Development of Gamma Titanium Aluminide Alloys", ADVANCED ENGINEERING MATERIALS, vol. 2, no. 11, 2000, pages 699 - 720, XP002523946

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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

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 2075349 A2 20090701; EP 2075349 A3 20090909; EP 2075349 B1 20160309**; BR PI0806979 A2 20100420; CA 2645843 A1 20090613; CN 101457314 A 20090617; CN 101457314 B 20130724; DE 102007060587 A1 20090618; DE 102007060587 B4 20130131; EP 2145967 A2 20100120; EP 2145967 A3 20100421; EP 2145967 B1 20130724; EP 2423341 A1 20120229; EP 2423341 B1 20130710; IL 195756 A0 20091118; JP 2009144247 A 20090702; JP 5512964 B2 20140604; KR 20090063173 A 20090617; RU 2008149177 A 20100620; RU 2466201 C2 20121110; US 2009151822 A1 20090618; US 2010000635 A1 20100107; US 2014010701 A1 20140109

DOCDB simple family (application)  
**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