

Title (en)

TWO PHASE TITANIUM ALUMINIDE ALLOY

Title (de)

TITANALUMINIDLEGIERUNG MIT ZWEI PHASEN

Title (fr)

ALLIAGE D'ALUMINURE DE TITANE A DEUX PHASES

Publication

EP 1066415 A1 20010110 (EN)

Application

EP 99935269 A 19990202

Priority

- US 9902212 W 19990202
- US 1748398 A 19980202
- US 17410398 A 19981016

Abstract (en)

[origin: WO9951787A1] A two phase titanium aluminide alloy having a lamellar microstructure with little intercolony structures. The alloy can include fine particles such as boride particles at colony boundaries and/or grain boundary equiaxed structures. The alloy can include alloying additions such as <= 10 at % W, Nb and/or Mo. The alloy can be free of Cr, V, Mn, Cu and/or Ni and can include, in atomic %, 45 to 55 % Ti, 40 to 50 % Al, 1 to 5 % Nb, 0.3 to 2 % W, up to 1 % Mo and 0.1 to 0.3 % B. In weight %, the alloy can include 57 to 60 % Ti, 30 to 32 % Al, 4 to 9 % Nb, up to 2 % Mo, 2 to 8 % W and 0.02 to 0.08 % B.

IPC 1-7

C22C 14/00

IPC 8 full level

B22F 3/23 (2006.01); **C22C 1/04** (2006.01); **C22C 14/00** (2006.01); **C22C 29/00** (2006.01); **C22C 32/00** (2006.01); **C22F 1/18** (2006.01)

CPC (source: EP KR)

B22F 3/23 (2013.01 - EP); **C22C 1/0458** (2013.01 - EP); **C22C 1/047** (2023.01 - EP); **C22C 14/00** (2013.01 - EP KR);
C22C 29/005 (2013.01 - EP); **C22C 32/00** (2013.01 - EP); **C22F 1/183** (2013.01 - EP); **B22F 2998/10** (2013.01 - EP)

Cited by

CN107937753A

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9951787 A1 19991014; WO 9951787 A9 20000622; AT E221137 T1 20020815; AU 5078399 A 19991025; AU 751819 B2 20020829;
BR 9908529 A 20001205; CA 2319505 A1 19991014; CA 2319505 C 20091006; CN 1100153 C 20030129; CN 1292038 A 20010418;
DE 69902245 D1 20020829; DE 69902245 T2 20030327; EP 1066415 A1 20010110; EP 1066415 A4 20010509; EP 1066415 B1 20020724;
ID 26231 A 20001207; JP 2002510750 A 20020409; JP 4664500 B2 20110406; KR 100641905 B1 20061106; KR 20010040579 A 20010515;
NO 20003891 D0 20000728; NO 20003891 L 20001002; NO 333617 B1 20130722

DOCDB simple family (application)

US 9902212 W 19990202; AT 99935269 T 19990202; AU 5078399 A 19990202; BR 9908529 A 19990202; CA 2319505 A 19990202;
CN 99803452 A 19990202; DE 69902245 T 19990202; EP 99935269 A 19990202; ID 20001685 A 19990202; JP 2000542498 A 19990202;
KR 20007008448 A 20000802; NO 20003891 A 20000728