

Title (en)

Methods for processing titanium aluminide intermetallic compositions

Title (de)

Verfahren zur Verarbeitung von intermetallischen Titanaluminidzusammensetzungen

Title (fr)

Procédés de traitement de compositions intermétalliques d'aluminure de titane

Publication

EP 2641984 A3 20140312 (EN)

Application

EP 13159885 A 20130319

Priority

- US 201261614751 P 20120323
- US 201213459420 A 20120430

Abstract (en)

[origin: EP2641984A2] Methods of processing compositions containing titanium and aluminum, especially titanium aluminide intermetallic compositions (TiAl intermetallics) based on the TiAl (gamma) intermetallic compound. The methods entail processing steps that include a hot isostatic pressing (HIP) cycle and a heat treatment cycle that can be performed in a single vessel. TiAl intermetallic compositions processed in this manner preferably exhibit a duplex microstructure containing equiaxed and lamellar morphologies.

IPC 8 full level

C22C 14/00 (2006.01); **C22F 1/18** (2006.01)

CPC (source: EP US)

C22C 1/02 (2013.01 - EP US); **C22C 14/00** (2013.01 - EP US); **C22F 1/18** (2013.01 - EP US); **C22F 1/183** (2013.01 - EP US)

Citation (search report)

- [A] US 6231699 B1 20010515 - KELLY THOMAS J [US], et al
- [A] US 5350466 A 19940927 - LARSEN JR DONALD E [US], et al

Cited by

WO2021152274A1; FR3106851A1

Designated contracting state (EPC)

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DOCDB simple family (application)

EP 13159885 A 20130319; BR 102013006917 A 20130325; CA 2809444 A 20130314; CN 201310093900 A 20130322; EP 15184357 A 20130319; JP 2013055847 A 20130319; US 201213459420 A 20120430