

Title (en)  
SINGLE CRYSTAL VANE SEGMENT AND METHOD OF MANUFACTURE

Title (de)  
EINKRISTALL-LEITSCHAUFEL UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)  
SEGMENT D'AUBE A STRUCTURE MONOCRISTALLINE ET FABRICATION

Publication  
**EP 1131176 B1 20060906 (EN)**

Application  
**EP 99969597 A 19991104**

Priority  
• US 9925976 W 19991104  
• US 10714198 P 19981105  
• US 25166099 A 19990217

Abstract (en)  
[origin: WO0025959A1] The present invention contemplates a multi-airfoil vane segment (50) produced as a single crystal casting from a rhenium containing directionally solidified alloy. The single crystal casting containing grain boundary strengtheners.

IPC 8 full level  
**B22D 25/00** (2006.01); **F01D 5/28** (2006.01); **B22D 21/00** (2006.01); **B22D 27/04** (2006.01); **C22C 1/02** (2006.01); **C22C 19/05** (2006.01); **C30B 11/00** (2006.01); **C30B 29/52** (2006.01)

CPC (source: EP)  
**B22D 27/045** (2013.01)

Cited by  
EP2615243A1; US9500088B2

Designated contracting state (EPC)  
CH DE FR GB IT LI

DOCDB simple family (publication)  
**WO 0025959 A1 20000511**; CA 2349412 A1 20000511; CA 2349412 C 20090901; DE 69933132 D1 20061019; DE 69933132 T2 20070809; DE 69933132 T3 20120906; EP 1131176 A1 20010912; EP 1131176 A4 20030611; EP 1131176 B1 20060906; EP 1131176 B2 20120314; JP 2004538358 A 20041224

DOCDB simple family (application)  
**US 9925976 W 19991104**; CA 2349412 A 19991104; DE 69933132 T 19991104; EP 99969597 A 19991104; JP 2000579385 A 19991104