

Title (en)
METHOD AND APPARATUS FOR MAKING DIRECTIONAL SOLIDIFICATION CASTINGS

Title (de)
VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON GUSSTÜCKEN DURCH GERICHTETEERSTARRUNG

Title (fr)
PROCEDE ET DISPOSITIF POUR LA FABRICATION DE FONTE EN SOLIDIFICATION DIRIGEE

Publication
EP 0904430 A1 19990331 (EN)

Application
EP 97931043 A 19970604

Priority

- RU 96111520 A 19960605
- RU 97104513 A 19970319
- US 9709716 W 19970604

Abstract (en)
[origin: WO9746742A1] A method and apparatus for producing large, directionally solidified cast articles having a cast height greater than 200 mm, and preferably greater than 300 mm is described. The casting mold reliability, as well as the casting equipment, is improved by proportioned pouring of a molten superalloy into a casting mold where the mold is protected by suspender elements. The cast articles made by the inventive method are of particular interest to aircraft and power generation equipment, and include, but are not limited to, components such as blades, airfoils, buckets, nozzles, and the like.

IPC 1-7
C30B 11/00; **B22D 27/04**; **C30B 29/52**

IPC 8 full level
B22D 33/00 (2006.01); **B22D 27/04** (2006.01); **C30B 11/00** (2006.01); **C30B 29/52** (2006.01)

CPC (source: EP KR US)
B22D 27/04 (2013.01 - KR); **B22D 27/045** (2013.01 - EP US); **C30B 11/00** (2013.01 - EP KR US); **C30B 29/52** (2013.01 - EP KR US)

Citation (search report)
See references of WO 9746742A1

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

DOCDB simple family (publication)
WO 9746742 A1 19971211; CN 1226291 A 19990818; EP 0904430 A1 19990331; JP 2001505175 A 20010417; KR 20000016339 A 20000325; US 2001001415 A1 20010524

DOCDB simple family (application)
US 9709716 W 19970604; CN 97196810 A 19970604; EP 97931043 A 19970604; JP 50084298 A 19970604; KR 19980709912 A 19981204; US 19462598 A 19981130