

Title (en)

METHOD AND DEVICE FOR PRODUCING PRECISION INVESTMENT-CAST NE METAL ALLOY MEMBERS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR MASSGENAUEN FEINGUSSHERSTELLUNG VON BAUTEILEN AUS NE-METALLLEGIERUNGEN

Title (fr)

PROCEDE ET DISPOSITIF DE PRODUCTION DE PIECES MOULEES DE HAUTE PRECISION DIMENSIONNELLE A PARTIR D'ALLIAGES METALLIQUES DE NE

Publication

**EP 1480770 B1 20051123 (DE)**

Application

**EP 03722201 A 20030303**

Priority

- DE 0300661 W 20030303
- DE 10210001 A 20020307

Abstract (en)

[origin: WO03074210A2] The invention relates to a method for producing precision investment-cast NE metal alloy members, especially for use in power unit technology. The inventive method is characterized by using a rotation casting method, whereby the outer shell of the casting molds (22) to be produced are fed via an inert pouring spout (14) which is fluidically optimized vis-à-vis the used alloys. These casting molds are likewise fluidically optimized at the sprue positions (19) and are arranged on a rotatably mounted casting device (11) in a manner as to be spatially adjustable. The casting molds can be inductively (30) heated during the casting process for the purpose of temperature adjustment. The components of the device are mounted in such a manner as to allow for a completely homogeneous filling of the casting molds by virtue of the Coriolis forces of the centrifugal forces to which the melt is subjected so that the cast metal is free from inclusions.

IPC 1-7

**B22D 13/04**

IPC 8 full level

**F01D 5/28** (2006.01); **B22C 9/04** (2006.01); **B22D 13/04** (2006.01); **B22D 13/06** (2006.01); **B22D 13/10** (2006.01); **C22C 14/00** (2006.01); **F02C 7/00** (2006.01)

CPC (source: EP US)

**B22D 13/04** (2013.01 - EP US); **B22D 13/066** (2013.01 - EP US); **B22D 13/101** (2013.01 - EP US); **B22D 13/107** (2013.01 - EP US); **C22C 14/00** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**WO 03074210 A2 20030912**; **WO 03074210 A3 20040429**; DE 10210001 A1 20031002; DE 50301746 D1 20051229; EP 1480770 A2 20041201; EP 1480770 B1 20051123; JP 2005527375 A 20050915; US 2005279481 A1 20051222

DOCDB simple family (application)

**DE 0300661 W 20030303**; DE 10210001 A 20020307; DE 50301746 T 20030303; EP 03722201 A 20030303; JP 2003572710 A 20030303; US 50698205 A 20050711