

Title (en)

Lost pattern casting process and apparatus for the execution of this process

Title (de)

Giesserei mit verlorenem Modell und Vorrichtung zur Durchführung dieses Verfahren

Title (fr)

Procede de moulage à modèle perdu et installation pour la mise en oeuvre de ce procede

Publication

EP 2357049 A1 20110817 (FR)

Application

EP 10196190 A 20101221

Priority

FR 1050326 A 20100119

Abstract (en)

The lost wax casting process comprises placing models made of a sublimating material in a container, spreading sand over the models, and forming a hole in the models and then pouring a liquid metal into the hole. The models are placed in an enclosure having a specific element to cool surfaces of the model. The model or cluster is placed in the enclosure to an assembly station and then transferred to a tank using an insertion unit. The enclosure is pre-positioned in contact with the container, and when the enclosure receives the cluster, the cluster is separated from the enclosure. The lost wax casting process comprises placing models made of a sublimating material in a container, spreading sand over the models, and forming a hole in the models and then pouring a liquid metal into the hole. The models are placed in an enclosure having a specific element to cool surfaces of the model. The model or cluster is placed in the enclosure to an assembly station and then transferred to a tank using an insertion unit. The enclosure is pre-positioned in contact with the container, and when the enclosure receives the cluster, the cluster is separated from the enclosure by a specific mechanism. The enclosure or model assembly is kept in suspension in the container without contact with each other. An independent claim is included for an installation for molding a waste model.

Abstract (fr)

L'invention concerne un procédé de moulage en modèle perdu dans lequel on place dans un container, un ou plusieurs modèles (1) en une matière sublimable, on noie le ou les modèles dans du sable en laissant subsister un orifice de coulée et on verse du métal liquide dans cet orifice, caractérisé en ce que le ou lesdits modèles (1) sont mis en place au préalable dans une enceinte (2) présentant au moins un élément propre à refroidir une ou plusieurs faces du modèle (1), l'ensemble enceinte/modèle(s) (2, 1) étant positionné dans le container sans contact avec ce dernier. Application à la fabrication de culasse.

IPC 8 full level

B22C 7/02 (2006.01); **B22C 9/04** (2006.01); **B22C 13/08** (2006.01); **B22D 15/00** (2006.01)

CPC (source: EP)

B22C 7/023 (2013.01); **B22C 9/046** (2013.01); **B22C 13/085** (2013.01); **B22D 15/00** (2013.01)

Citation (applicant)

FR 2685229 A1 19930625 - PEUGEOT [FR], et al

Citation (search report)

- [AD] FR 2685229 A1 19930625 - PEUGEOT [FR], et al
- [A] EP 0301928 A1 19890201 - RENAULT [FR]

Cited by

WO2013186124A1; CN104162634A; FR3081734A1; WO2019229309A1; DE102012209805A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

FR 2955274 A1 20110722; FR 2955274 B1 20120106; EP 2357049 A1 20110817; EP 2357049 B1 20141119

DOCDB simple family (application)

FR 1050326 A 20100119; EP 10196190 A 20101221