

Title (en)

IMPROVED METHOD FOR MANUFACTURING A SHELL MOLD FOR PRODUCTION BY LOST-WAX CASTING OF BLADED ELEMENTS OF AN AIRCRAFT TURBINE ENGINE

Title (de)

VERBESSERTES VERFAHREN ZUR HERSTELLUNG EINER SCHALENFORM ZUR HERSTELLUNG VON BESCHAUFELTEN ELEMENTEN EINES FLUGZEUGTURBINENMOTORS DURCH WACHAUSSCHMELZEN

Title (fr)

PROCÉDÉ AMÉLIORÉ DE FABRICATION D'UNE CARAPACE, POUR LA RÉALISATION PAR MOULAGE À CIRE PERDUE D'ÉLÉMENTS AUBAGÉS DE TURBOMACHINE D'AÉRONEF

Publication

**EP 3166739 A1 20170517 (FR)**

Application

**EP 15742358 A 20150629**

Priority

- FR 1456522 A 20140707
- FR 2015051769 W 20150629

Abstract (en)

[origin: WO2016005674A1] The invention relates to a method for manufacturing a shell mold for the production by lost-wax casting of bladed elements (1) of an aircraft turbine engine, including the following steps: a) creating an assembly (200) including a wax pattern (100) as well as a device for forming a cup for pouring metal (32b) and having an end surface (40a); b) depositing a hot wax coating layer on at least one portion of the end surface (40a); c) forming the shell mold around the assembly (200). In addition, the method includes, between steps b) and c), the implementation of a step of structuring the coating layer intended for reinforcing the adhesion between said layer (46) and the shell mold, and including the production of recesses (62) and projections (60) on the still-malleable coating layer.

IPC 8 full level

**B22C 9/04** (2006.01); **B22C 9/08** (2006.01)

CPC (source: CN EP RU US)

**B05D 1/18** (2013.01 - US); **B22C 7/02** (2013.01 - EP US); **B22C 9/04** (2013.01 - EP RU US); **B22C 9/043** (2013.01 - CN EP US);  
**B22C 9/082** (2013.01 - CN EP US); **B22C 9/103** (2013.01 - EP US); **B22C 9/24** (2013.01 - EP US); **B22D 25/02** (2013.01 - EP US);  
**F01D 5/12** (2013.01 - US); **F01D 9/02** (2013.01 - US); **F04D 29/324** (2013.01 - US); **F04D 29/542** (2013.01 - US); **B22C 9/088** (2013.01 - EP US);  
**F05D 2220/323** (2013.01 - US); **F05D 2230/21** (2013.01 - US)

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 3023195 A1 20160108; FR 3023195 B1 20160819;** BR 112017000291 A2 20171031; BR 112017000291 B1 20210601;  
CA 2954026 A1 20160114; CA 2954026 C 20220405; CN 106470781 A 20170301; CN 106470781 B 20181204; EP 3166739 A1 20170517;  
EP 3166739 B1 20190814; JP 2017521258 A 20170803; JP 6543327 B2 20190710; RU 2017103750 A 20180809; RU 2017103750 A3 20181127;  
RU 2685614 C2 20190422; US 2017151605 A1 20170601; US 9862023 B2 20180109; WO 2016005674 A1 20160114

DOCDB simple family (application)

**FR 1456522 A 20140707;** BR 112017000291 A 20150629; CA 2954026 A 20150629; CN 201580036504 A 20150629; EP 15742358 A 20150629;  
FR 2015051769 W 20150629; JP 2017500055 A 20150629; RU 2017103750 A 20150629; US 201515324390 A 20150629