

Title (en)

INVESTMENT CASTING COMPOSITIONS, MOLDS, AND RELATED METHODS

Title (de)

ZUSAMMENSETZUNGEN FÜR PRÄZISIONSFORMGUSS, FORMEN UND ZUGEHÖRIGE VERFAHREN

Title (fr)

COMPOSITIONS DE MOULAGE À LA CIRE PERDUE, MOULES, ET PROCÉDÉS ASSOCIÉS

Publication

**EP 3137244 A1 20170308 (EN)**

Application

**EP 15724405 A 20150429**

Priority

- US 201461987604 P 20140502
- US 2015028193 W 20150429

Abstract (en)

[origin: WO2015168233A1] Provided are slurry compositions and methods for producing investment casting molds. These compositions include a refractory material, a binder, a solvent, and a thixotropic agent comprising a polymer emulsion. Implementation of these slurry compositions enables a reduction in the number of backup layers in an investment casting shell, while retaining similar viscosity characteristics and similar or greater strength characteristics in the finished investment mold.

IPC 8 full level

**B22C 1/22** (2006.01)

CPC (source: CN EP US)

**B22C 1/02** (2013.01 - CN); **B22C 1/08** (2013.01 - EP US); **B22C 1/165** (2013.01 - EP US); **B22C 1/183** (2013.01 - EP US);  
**B22C 1/186** (2013.01 - EP US); **B22C 1/22** (2013.01 - EP US); **B22C 7/02** (2013.01 - EP US); **B22C 9/04** (2013.01 - CN EP US)

Citation (search report)

See references of WO 2015168233A1

Citation (examination)

DANIELS HESSELBARTH ET AL: "Mechanical Properties of Coagulated Wet Particle Networks with Alkali-Swellable Thickeners", JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol. 84, no. 8, 1 August 2001 (2001-08-01), US, pages 1689 - 1695, XP055742308, ISSN: 0002-7820, DOI: 10.1111/j.1151-2916.2001.tb00900.x

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)

**WO 2015168233 A1 20151105**; CA 2947695 A1 20151105; CN 106232261 A 20161214; CN 106232261 B 20200721; EP 3137244 A1 20170308;  
MX 2016014279 A 20170206; US 2017043390 A1 20170216

DOCDB simple family (application)

**US 2015028193 W 20150429**; CA 2947695 A 20150429; CN 201580022255 A 20150429; EP 15724405 A 20150429;  
MX 2016014279 A 20150429; US 201515307771 A 20150429