

Title (en)
INVESTMENT CASTING UTILIZING FLEXIBLE WAX PATTERN TOOL FOR SUPPORTING A CERAMIC CORE ALONG ITS LENGTH DURING WAX INJECTION

Title (de)
PRÄZISIONSGUSS MIT EINEM FLEXIBLEN WACHSMUSTERWERKZEUG ZUR UNTERSTÜTZUNG EINES KERAMISCHEN KERNS IN LÄNGSERSTRECKUNG WÄHREND EINER WACHSINJEKTION

Title (fr)
MOULAGE À LA CIRE PERDUE UTILISANT UN OUTIL DE MOTIF DE CIRE SOUPLE SERVANT À SUPPORTER UN NOYAU EN CÉRAMIQUE LE LONG DE SA LONGUEUR PENDANT L'INJECTION DE CIRE

Publication
EP 2991787 A1 20160309 (EN)

Application
EP 14728738 A 20140430

Priority
• US 201313886449 A 20130503
• US 2014035994 W 20140430

Abstract (en)
[origin: US2013333855A1] An investment casting process wherein the wax pattern tool (42) is flexible to provide compliant support for an enclosed ceramic core (10) and to facilitate removal of the tool from the cast wax pattern (52) even when the cast shape would otherwise require multiple pull planes. Positioning pins (106) may extend from the flexible tool to make compliant contact against the core during the wax injection step. The pins may cooperate with a pedestal (128) formed on the core to support the core along multiple axes during wax injection, thereby allowing a higher wax injection pressure without damage to the core.

IPC 8 full level
B22C 7/02 (2006.01); **B22C 9/02** (2006.01); **B22C 9/04** (2006.01); **B22C 9/10** (2006.01); **B22C 9/24** (2006.01)

CPC (source: EP KR RU US)
B22C 7/02 (2013.01 - EP KR RU US); **B22C 9/02** (2013.01 - EP KR US); **B22C 9/04** (2013.01 - EP KR US); **B22C 9/103** (2013.01 - EP KR US); **B22C 9/24** (2013.01 - EP KR US); **B22C 21/14** (2013.01 - EP KR US)

Cited by
CN114406190A

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)
US 2013333855 A1 20131219; CN 105592956 A 20160518; CN 105592956 B 20190614; EP 2991787 A1 20160309; EP 2991787 B1 20190529; JP 2016516591 A 20160609; KR 20160099470 A 20160822; MX 2015014797 A 20170202; RU 2015147194 A 20170608; RU 2684004 C2 20190403; WO 2014179381 A1 20141106

DOCDB simple family (application)
US 201313886449 A 20130503; CN 201480024902 A 20140430; EP 14728738 A 20140430; JP 2016511815 A 20140430; KR 20157034425 A 20140430; MX 2015014797 A 20140430; RU 2015147194 A 20140430; US 2014035994 W 20140430