

Title (en)

Composite core for casting processes, and processes of making and using same

Title (de)

Verbundkern für Gießverfahren, sowie Verfahren zur Herstellung und Verwendung davon

Title (fr)

Noyau composite pour procédés de moulage et procédés de fabrication et d'utilisation associés

Publication

EP 2650062 A3 20171011 (EN)

Application

EP 13162368 A 20130404

Priority

US 201213442130 A 20120409

Abstract (en)

[origin: EP2650062A2] A composite ceramic core (12) that, in combination with a shell mold (22), is suitable for use in a casting process to produce metal alloy components. The core (12) and casting process make use of a highly leachable interior layer (14) in combination with an exterior layer (16) that is less reactive than the interior layer (14) in the presence of common alloying elements. The interior layer (14) contains at least one hollow channel that allows a point of entry for a leaching solution, as well as exit for gaseous byproducts generated during the casting process.

IPC 8 full level

B22C 9/10 (2006.01); **B22C 9/04** (2006.01); **B22C 9/24** (2006.01)

CPC (source: EP US)

B22C 9/04 (2013.01 - EP US); **B22C 9/10** (2013.01 - EP US); **B22C 9/24** (2013.01 - EP US); **B22D 25/02** (2013.01 - US)

Citation (search report)

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- [Y] EP 0001434 A1 19790418 - GEN ELECTRIC [US]
- [Y] JP S55114457 A 19800903 - HITACHI LTD
- [A] WO 2012003439 A1 20120105 - MIKRO SYSTEMS INC [US], et al
- [A] US 5394933 A 19950307 - TAKAYANAGI TAKESHI [JP]
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- [AD] US 3824113 A 19740716 - LOXLEY T, et al

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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)

EP 2650062 A2 20131016; EP 2650062 A3 20171011; JP 2013215805 A 20131024; RU 2013115842 A 20141020; US 2016175923 A1 20160623

DOCDB simple family (application)

EP 13162368 A 20130404; JP 2013078154 A 20130404; RU 2013115842 A 20130409; US 201213442130 A 20120409