

Title (en)
Foundry core with improved gutting properties I

Title (de)
Gießereikerne mit verbesserten Entkernungseigenschaften I

Title (fr)
Noyaux de fonderie dotés de propriétés de dénoyautage I améliorées

Publication
EP 2204246 A3 20120104 (DE)

Application
EP 09175206 A 20091106

Priority
DE 102008056856 A 20081112

Abstract (en)
[origin: EP2204246A2] The foundry core comprises sand, organic binder and resorcinol-formaldehyde-aerogel granulate, where the sand is quartz sand, sand based on aluminum oxide and/or sane based on mullite. The aerogel granulate and/or the sand has a grain size distribution of 0.1-0.9 mm. The aerogel granulate has a grain size of 0.5 mm. The portion of the aerogel granulate in the core is 12 vol.% or 0.5-0.75 wt.%. The core is removed by a thermal treatment at ≥ 300 [deg] C. An independent claim is included for a method for the production of foundry core.

IPC 8 full level
B22C 1/02 (2006.01); **B22C 9/10** (2006.01)

CPC (source: EP)
B22C 1/183 (2013.01); **B22C 1/2246** (2013.01)

Citation (search report)

- [XA] EP 1820582 A1 20070822 - DEUTSCH ZENTR LUFT & RAUMFAHRT [DE]
- [A] EP 1077097 A1 20010221 - DLR EV [DE], et al
- [A] EP 1036610 A1 20000920 - DEUTSCH ZENTR LUFT & RAUMFAHRT [DE]
- [A] DE 102006056093 A1 20080521 - DEUTSCH ZENTR LUFT & RAUMFAHRT [DE], et al
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- [A] EP 1236525 A2 20020904 - ALCAN TECH & MAN AG [CH]
- [A] EP 1852197 A1 20071107 - DEUTSCH ZENTR LUFT & RAUMFAHRT [DE]
- [A] LORENZ RATKE ET AL: "Mechanical properties of aerogel composites for casting purposes", JOURNAL OF MATERIALS SCIENCE, KLUWER ACADEMIC PUBLISHERS, BO LNKD- DOI:10.1007/S10853-005-3152-8, vol. 41, no. 4, 1 February 2006 (2006-02-01), pages 1019 - 1024, XP019211565, ISSN: 1573-4803

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WO2024120666A1; CN108367337A; DE102022132848A1

Designated contracting state (EPC)
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 SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
DE 102008056856 A1 20100520; EP 2204246 A2 20100707; EP 2204246 A3 20120104; EP 2204246 B1 20181003

DOCDB simple family (application)
DE 102008056856 A 20081112; EP 09175206 A 20091106