

Title (en)

Method and apparatus for removing a fugitive pattern from a mold

Title (de)

Verfahren und Vorrichtung zum Entfernen eines verlorenen Modells aus einer Form

Title (fr)

Procédé et appareil pour supprimer un motif fugitif d'un moule

Publication

EP 1964625 A3 20090520 (EN)

Application

EP 08151921 A 20080226

Priority

US 71282607 A 20070301

Abstract (en)

[origin: US2007215315A1] A fugitive pattern, such as wax or other meltable pattern material, residing inside of a refractory mold, which can be unsupported or supported in a particulates bed, is removed by discharging steam or other condensable vapor that may include a surfactant inside the mold to contact and melt the pattern while an exterior of the mold is subjected to a non-condensing gas atmosphere such as air outside of the mold. Regardless of whether the condensable vapor includes surfactant or not, the mold can be tilted relative to gravity and rotated while it is tilted to improve the pattern removal. Condensable vapor is condensed inside the mold where the vapor has contacted the pattern while the exterior of the mold remains free of condensate. The condensed vapor and melted pattern material are drained out of the mold with the surfactant, if present, improving drainage.

IPC 8 full level

B22C 9/04 (2006.01)

CPC (source: EP KR US)

B22C 9/00 (2013.01 - KR); **B22C 9/04** (2013.01 - KR); **B22C 9/043** (2013.01 - EP US); **B22C 9/12** (2013.01 - KR)

Citation (search report)

- [XA] WO 2006014789 A2 20060209 - METAL CASTING TECH [US], et al
- [XA] JP S63264242 A 19881101 - DAIDO STEEL CO LTD

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

US 2007215315 A1 20070920; BR PI0801201 A 20081014; CA 2622106 A1 20080901; CN 101362186 A 20090211; EP 1964625 A2 20080903; EP 1964625 A3 20090520; JP 2008213044 A 20080918; KR 20080080455 A 20080904; MX 2008002992 A 20090225

DOCDB simple family (application)

US 71282607 A 20070301; BR PI0801201 A 20080229; CA 2622106 A 20080225; CN 200810080690 A 20080303; EP 08151921 A 20080226; JP 2008050076 A 20080229; KR 20080019019 A 20080229; MX 2008002992 A 20080229