

Title (en)

SAND-MOLD MOLDING METHOD AND SAND-MOLD MOLDING APPARATUS

Title (de)

FORMVERFAHREN FÜR SANDFORM UND FORMVORRICHTUNG FÜR SANDFORM

Title (fr)

PROCÉDÉ DE MOULAGE DE MOULE EN SABLE ET APPAREIL DE MOULAGE DE MOULE EN SABLE

Publication

EP 2979776 A4 20161109 (EN)

Application

EP 14776559 A 20140122

Priority

- JP 2013066335 A 20130327
- JP 2014051273 W 20140122

Abstract (en)

[origin: EP2979776A1] When a molded article is obtained by which foamed sand is packed into a metallic mold, heated and solidified, vapor and gas that have been generated through the heating and solidification of the foamed sand are smoothly discharged from the cavity. A cavity C is formed by clamping a metallic mold 2, and foamed sand S is packed into the cavity C. When heating and solidifying the foamed sand S, a mold clamping force is reduced to form a slight gap L in the metallic mold 2 while maintaining the cavity C. Gas and water vapor that are generated when heating and solidifying the foamed sand S can be smoothly discharged from within the cavity C to the outside through the gap L, and thus the baking time of the foamed sand S can be shortened. Even if solidified binder accumulates on slits 16, gas and water vapor can be reliably discharged from within the cavity C to the outside via the gap.

IPC 8 full level

B22C 9/02 (2006.01)

CPC (source: EP US)

B22C 7/065 (2013.01 - EP US); **B22C 9/02** (2013.01 - EP US); **B22C 9/12** (2013.01 - EP US); **B22C 15/08** (2013.01 - EP US); **B22C 19/00** (2013.01 - EP US)

Citation (search report)

- [X] EP 0056112 A1 19820721 - NISSAN MOTOR [JP], et al
- [A] JP 2000190049 A 20000711 - SINTOKOGIO LTD
- [A] JP 2011173157 A 20110908 - LIGNYTE CO LTD
- [A] JP 2002137044 A 20020514 - TOYOTA MOTOR CORP
- See references of WO 2014156246A1

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

DOCDB simple family (publication)

EP 2979776 A1 20160203; **EP 2979776 A4 20161109**; CN 104884188 A 20150902; JP 2014188551 A 20141006; TW 201440921 A 20141101; US 2016045951 A1 20160218; WO 2014156246 A1 20141002

DOCDB simple family (application)

EP 14776559 A 20140122; CN 201480003648 A 20140122; JP 2013066335 A 20130327; JP 2014051273 W 20140122; TW 103104720 A 20140213; US 201414780116 A 20140122