

Title (en)

Method for the production of hollow foundry cores.

Title (de)

Verfahren zur Herstellung von hohlen Giessereikernen.

Title (fr)

Procédé pour la production de noyaux creux de fonderie.

Publication

**EP 0126532 A1 19841128 (EN)**

Application

**EP 84302157 A 19840329**

Priority

US 46668083 A 19830330

Abstract (en)

A method for the production of hollow foundry sand cores in which binder coated sand is cured in the patten cavity (17) of a core box (10) using an amine catalyst gas to form a hollow sand core, and uncured binder coated sand is discharged and recovered from the cavity of the hollow sand core. Fresh binder coated sand and recovered binder coated sand are volumetrically metered alternately to a blow head (40) so that at no time is there a mixture of the two sands in the blow head. The metered binder coated sand in the blow head (40) is blown by compressed air through an investment aperture in the top of the core box into the core pattern cavity (17). After gassing, any uncured binder coated sand is discharged and recovered from hollow sand cores while fresh binder coated is being metered to the blow head. Metering of fresh binder coated sand is discontinued after a predetermined period of time equivalent to about 1/10 to about 1/3 of the bench life of the binder coated sand. At this point, metering of recovered binder coated sand to the blow head is commenced and continued until essentially all of the sand is consumed in hollow core formation. The metering of fresh binder coated sand is then recommenced and the procedure repeated.

IPC 1-7

**B22C 1/00**; **B22C 9/00**; **B22C 9/10**; **B22C 9/12**; **B22C 13/08**; **B22C 5/16**

IPC 8 full level

**B22C 9/12** (2006.01); **B22C 13/08** (2006.01)

CPC (source: EP KR)

**B22C 9/10** (2013.01 - KR); **B22C 9/123** (2013.01 - EP); **B22C 13/08** (2013.01 - EP)

Citation (search report)

- [AD] US 4204569 A 19800527 - MICHELSON ANATOL [US]
- [AD] US 4232726 A 19801111 - MICHELSON ANATOL
- [AD] US 4291740 A 19810929 - MICHELSON ANATOL
- [AD] US 3409579 A 19681105 - JANIS ROBINS
- [A] DE 2557193 A1 19770623 - FOMES SA

Cited by

CN107470566A; US10499915B2; US11395656B2

Designated contracting state (EPC)

AT DE FR GB

DOCDB simple family (publication)

**EP 0126532 A1 19841128**; AU 2610584 A 19841011; AU 546308 B2 19850829; BR 8401558 A 19841113; CA 1205613 A 19860610; KR 840007838 A 19841211

DOCDB simple family (application)

**EP 84302157 A 19840329**; AU 2610584 A 19840326; BR 8401558 A 19840330; CA 450083 A 19840321; KR 840001649 A 19840329