Title (en)

VIBRATORY KNOCK-OUT DEVICE FOR CASTING CORES

Publication

EP 0144031 B1 19880203 (DE)

Application

EP 84113922 A 19841117

Priority

DE 3341894 A 19831119

Abstract (en)

[origin: US4637558A] PCT No. PCT/DE84/00247 Sec. 371 Date Jun. 27, 1985 Sec. 102(e) Date Jun. 27, 1985 PCT Filed Nov. 17, 1984 PCT Pub. No. WO85/02137 PCT Pub. Date May 23, 1985. The decoring apparatus (1) consists of a portal-shaped support frame (2), at each of the vertical posts (4) and supports (5) on which a bracket (7) is provided. From each of these, via a swinging arm (9), a carrying unit (11) is suspended which is able to swing freely like a pendulum. Said carrying unit has two longitudinal arms (14,15) on which two vibrators (23) and two buffer bars (20) or an impact plate (19), as the case may be, are provided, whereby between the latter there is a casting receiving opening (16), and on the rear side of which several support bars (17) are provided. A casting (a) is loosely set into the receiving opening (16), and the carrying unit (11) is put into motion by vibrators (23). Since said vibrations induce the loose casting (a) to vibrate as well, the latter is quickly and freely moved back and forth between the impact plate (19) and the buffer bars (20) within a defined clearance (c), whereby the casting knocks against them in turn. By this, and due to vibrations induced into the casting (a), the sand cores contained therein disintegrate to sand and flows out at the bottom.

IPC 1-7

B22D 29/02

IPC 8 full level

B22D 29/02 (2006.01); B22D 29/00 (2006.01)

CPC (source: EP US)

B22D 29/005 (2013.01 - EP US); Y10S 241/10 (2013.01 - EP US)

Citation (examination)

DE-Anm. Sch.4896 (31c, 32) vom 31.10.51

Cited by

AT411971B; FR2672525A1; EP0493999A1; FR2670696A1; EP0652063A1; FR2711931A1; US5758713A; WO9213663A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

US 4637558 A 19870120; AT E32314 T1 19880215; DE 3341894 C1 19850314; DE 3469140 D1 19880310; EP 0144031 A1 19850612; EP 0144031 B1 19880203; JP H051105 B2 19930107; JP S61500478 A 19860320; WO 8502137 A1 19850523

DOCDB simple family (application)

US 75204685 A 19850627; AT 84113922 T 19841117; DE 3341894 A 19831119; DE 3469140 T 19841117; DE 8400247 W 19841117; EP 84113922 A 19841117; JP 50438784 A 19841117