

Title (en)

METHOD AND DEVICE FOR REMOVING THE CORE OF WATER-SOLUBLE CASTING CORES

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ENTKERNEN WASSERLÖSLICHER GIESSKERNE

Title (fr)

PROCEDE ET DISPOSITIF DE DENOYAUTAGE DE NOYAUX DE COULEE SOLUBLES DANS L'EAU

Publication

EP 1419024 A2 20040519 (DE)

Application

EP 02776941 A 20020823

Priority

- EP 02776941 A 20020823
- DE 10141633 A 20010824
- EP 0209442 W 20020823

Abstract (en)

[origin: WO03018224A2] The invention relates to a method for removing the core of water-soluble casting cores from sand. According to the invention, the casting cores are partially dissolved in a water-filled dissolving basin (I.5). A sand-permeable conveyor belt (1.10) provided with driver elements (I.II) for the discharge of sand conveys the cast parts (I.9) into a core-removing basin (I.8) where the sand is expelled by means of water jets from program-controllable movable water jet nozzles (I.13). The removal of residual sand occurs through targeted movement in a water-filled residual sand removal basin(I.6). The used sand (12) thus arising in the basins (I.5, 1.6, I.8) is cleared out, cleaned in a sand washing device, dried and used for the production of a new casting core. The water thus arising is concentrated in a vaporization device and re-used as a secondary raw material. The distillate is made available once more for the system.

IPC 1-7

B22D 29/00

IPC 8 full level

B22C 5/00 (2006.01); **B22C 9/00** (2006.01); **B22D 29/00** (2006.01)

CPC (source: EP US)

B22D 29/006 (2013.01 - EP US)

Citation (search report)

See references of WO 03018224A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03018224 A2 20030306; WO 03018224 A3 20031211; WO 03018224 A8 20040812; AU 2002339451 A1 20030310;
AU 2002339451 A8 20051020; DE 10141633 A1 20030313; EP 1419024 A2 20040519; JP 2005500166 A 20050106;
US 2004195713 A1 20041007

DOCDB simple family (application)

EP 0209442 W 20020823; AU 2002339451 A 20020823; DE 10141633 A 20010824; EP 02776941 A 20020823; JP 2003522726 A 20020823;
US 48755804 A 20040224