

Title (en)

METHODS AND APPARATUS FOR HEAT TREATMENT AND SAND REMOVAL FOR CASTINGS

Title (de)

VERFAHREN UND VORRICHTUNG FÜR WÄRMEBEHANDLUNG UND SANDENTFERNUNG FÜR GUSSTEILE

Title (fr)

PROCEDES ET APPAREIL DE TRAITEMENT A CHAUD ET D'ELIMINATION DU SABLE POUR PIECES MOULEES

Publication

EP 1575722 A2 20050921 (EN)

Application

EP 03785083 A 20030807

Priority

- US 0324928 W 20030807
- US 40196902 P 20020808

Abstract (en)

[origin: WO2004014581A2] A system and method for heat treating castings and removing sand cores therefrom. The castings are initially located in indexed positions with their x, y, and z coordinates known. The castings are passed through a heat treatment station typically having a series of nozzles mounted in preset positions corresponding to the known indexed positions of the castings passing through the heat treatment station. The nozzles apply fluid to the castings for heat treating the castings and degrading the sand cores for removal from the castings.

IPC 1-7

B22D 29/00

IPC 8 full level

B22C 19/00 (2006.01); **B22D 29/00** (2006.01); **C21D 9/00** (2006.01)

CPC (source: EP)

B22D 29/002 (2013.01); **B22D 29/003** (2013.01); **B22D 29/006** (2013.01); **C21D 9/00** (2013.01)

Citation (search report)

See references of WO 2004014581A2

Citation (examination)

- WO 0108836 A1 20010208 - CONS ENG CO INC [US]
- US 5158130 A 19921027 - SAHARI HARRI [FI]
- EP 0466419 A2 19920115 - ADVANCED PLASTICS PARTNERSHIP [US]

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 2004014581 A2 20040219; **WO 2004014581 A3 20051013**; AU 2003259701 A1 20040225; CA 2495514 A1 20040219; CA 2495514 C 20091103; CN 100335208 C 20070905; CN 1753746 A 20060329; EP 1575722 A2 20050921; EP 2027952 A2 20090225; EP 2027952 A3 20100120; EP 2027953 A2 20090225; EP 2027953 A3 20100120; HK 1087664 A1 20061020; JP 2006504531 A 20060209; MX PA05001393 A 20050428

DOCDB simple family (application)

US 0324928 W 20030807; AU 2003259701 A 20030807; CA 2495514 A 20030807; CN 03821775 A 20030807; EP 03785083 A 20030807; EP 08167057 A 20030807; EP 08167058 A 20030807; HK 06107872 A 20060714; JP 2004527921 A 20030807; MX PA05001393 A 20030807