

Title (en)

HEAT TREATMENT AND SAND REMOVAL FOR CASTINGS

Title (de)

WÄRMEBEHANDLUNG UND SANDENTFERNUNG VON GUSSTEILEN

Title (fr)

TRAITEMENT THERMIQUE ET RETRAIT DES NOYAUX DE SABLE DES PIECES COULEES

Publication

**EP 1225993 B1 20080611 (EN)**

Application

**EP 00952228 A 20000727**

Priority

- US 0020466 W 20000727
- US 14639099 P 19990729
- US 15090199 P 19990826
- US 20274000 P 20000510

Abstract (en)

[origin: WO0108836A1] A system and method for heat treating castings (13, 53) and removal cores (54) therefrom. The castings (13, 53) are initially located in indexed positions with their x, y, and z coordinates known. The castings (13, 53) are passed through a series of nozzle stations (41, 63) each having a series of nozzles (42, 64, 64') mounted in present positions corresponding to the known indexed positions of the castings passing through the nozzle stations (41, 63). The nozzle (42, 64, 64') apply heated fluids to the castings (13, 53) for heat treating the castings (13, 53) and dislodging the sand cores (54) for removal from the castings (13, 53).

IPC 8 full level

**B22D 29/00** (2006.01); **B22D 47/00** (2006.01); **B22C 5/00** (2006.01); **B22D 29/04** (2006.01); **B22D 30/00** (2006.01); **C21D 1/00** (2006.01);  
**C21D 9/00** (2006.01)

CPC (source: EP KR)

**B22D 29/00** (2013.01 - KR); **B22D 29/003** (2013.01 - EP); **C21D 9/0068** (2013.01 - EP)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**WO 0108836 A1 20010208**; AT E397986 T1 20080715; AU 6496600 A 20010219; AU 781487 B2 20050526; CA 2391349 A1 20010208;  
CA 2391349 C 20090915; CN 1172760 C 20041027; CN 1315601 C 20070516; CN 1364104 A 20020814; CN 1672835 A 20050928;  
DE 60039180 D1 20080724; EP 1225993 A1 20020731; EP 1225993 A4 20040901; EP 1225993 B1 20080611; HK 1048085 A1 20030321;  
HK 1048085 B 20050603; HK 1080784 A1 20060504; JP 2003505254 A 20030212; JP 2006061988 A 20060309; JP 3817476 B2 20060906;  
KR 100805514 B1 20080220; KR 20020026552 A 20020410; MX PA02000936 A 20020806

DOCDB simple family (application)

**US 0020466 W 20000727**; AT 00952228 T 20000727; AU 6496600 A 20000727; CA 2391349 A 20000727; CN 00810835 A 20000727;  
CN 200410078968 A 20000727; DE 60039180 T 20000727; EP 00952228 A 20000727; HK 03100189 A 20030108; HK 06100922 A 20060120;  
JP 2001513545 A 20000727; JP 2005310562 A 20051025; KR 20027001148 A 20020128; MX PA02000936 A 20000727