

Title (en)
Device for filtering and treating molten metal

Title (de)
Vorrichtung zum Filtern und Behandeln von flüssigen Metallen

Title (fr)
Dispositif pour filtrer et traiter du métal en fusion

Publication
EP 0936007 A1 19990818 (FR)

Application
EP 99400242 A 19990203

Priority
FR 9801634 A 19980211

Abstract (en)
A device (1) for filtering and treating molten metal, comprising a series of filter plates (2, 3) maintained at a predetermined distance from each other by peripheral walls (5) to form a cavity (6) inside which is a plate (7) of material for treating the molten metal having a shape such that it leaves at least one uncovered region (9), is characterised in that the ratio between the number of free holes (4a) in a filter plate (2, 3) situated in the regions (9) not covered by the plate (7) of treatment material and the total number of holes (4a, 4) in the filter plate (2, 3) is 10-75 (20-65) ((35-50)) %. Utilisation of the device in a casting operation is also claimed.

Abstract (fr)
Le rapport entre le nombre des trous libres (4a) d'une plaque filtrante (2, 3) situés dans les régions (9) non recouvertes par la plaque de traitement (7), d'une part, et le nombre total des trous (4, 4a) de ladite plaque filtrante (2, 3), d'autre part, n'est pas inférieur à 10%, et/ou n'est pas supérieur à 75%. <IMAGE>

IPC 1-7
B22D 1/00; **C21C 1/10**; **B22C 9/08**

IPC 8 full level
B22C 9/08 (2006.01); **B22D 1/00** (2006.01); **C21C 1/10** (2006.01)

CPC (source: EP US)
B22C 9/086 (2013.01 - EP US); **B22D 1/007** (2013.01 - EP US); **C21C 1/10** (2013.01 - EP US)

Citation (search report)
• [DA] EP 0578517 A1 19940112 - DAUSSAN & CO [FR]
• [A] EP 0249897 A1 19871223 - OET METALCONSULT SRL [IT]
• [A] US 3658115 A 19720425 - RYNTZ EDWARD F JR, et al
• [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 037 (C - 473) 4 February 1988 (1988-02-04)

Designated contracting state (EPC)
BE DE ES GB IT NL SE

DOCDB simple family (publication)
EP 0936007 A1 19990818; **EP 0936007 B1 20030507**; BR 9900575 A 20000104; CN 1067441 C 20010620; CN 1225948 A 19990818; DE 69907531 D1 20030612; DE 69907531 T2 20040325; FR 2774611 A1 19990813; FR 2774611 B1 20000428; US 6216768 B1 20010417

DOCDB simple family (application)
EP 99400242 A 19990203; BR 9900575 A 19990211; CN 98109392 A 19980529; DE 69907531 T 19990203; FR 9801634 A 19980211; US 24402599 A 19990204