

Title (en)

PROCESS AND DEVICE FOR HANDLING METALS IN A VACUUM

Publication

**EP 0462988 B1 19930929 (DE)**

Application

**EP 90903585 A 19900220**

Priority

DE 3906340 A 19890224

Abstract (en)

[origin: WO9010087A1] The invention concerns a process for handling metals, in particular steel, in a vacuum, in which molten metal is contained in a vessel (30) for in vacuo handling which is tightly sealed by a lid (20). To obtain a process and a device for handling metals, in particular steel, in a vacuum, which obviate the conventional drawbacks by simple means, which dispense with the need for free space in the ladle (46) and which do not prevent gas from escaping from the melt (41), the surface (42) of the molten metal is subjected to different partial vacuums during in vacuo handling.

IPC 1-7

**C21C 7/10**; **C22B 9/04**

IPC 8 full level

**C21C 7/10** (2006.01); **C22B 9/04** (2006.01)

CPC (source: EP KR US)

**C21C 7/10** (2013.01 - EP KR US)

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IT LI LU NL SE

DOCDB simple family (publication)

**WO 9010087 A1 19900907**; BR 9007161 A 19920128; CA 2009923 A1 19900824; CA 2009923 C 19990914; CN 1022115 C 19930915; CN 1045128 A 19900905; DE 3906340 A1 19900830; DE 3906340 C2 19910131; DE 59002951 D1 19931104; EP 0462988 A1 19920102; EP 0462988 B1 19930929; ES 2020091 A6 19910716; JP 2722011 B2 19980304; KR 920700297 A 19920219; KR 970005200 B1 19970414; US 5242485 A 19930907; ZA 901414 B 19901128

DOCDB simple family (application)

**DE 9000121 W 19900220**; BR 9007161 A 19900220; CA 2009923 A 19900213; CN 90100842 A 19900220; DE 3906340 A 19890224; DE 59002951 T 19900220; EP 90903585 A 19900220; ES 9000090 A 19900115; JP 50358790 A 19900220; KR 900702326 A 19901024; US 75265491 A 19910822; ZA 901414 A 19900223