

Title (en)
Induction smelting furnace

Title (de)
Induktionsschmelzofen

Title (fr)
Four de fusion à induction

Publication
EP 0461306 B1 19970416 (DE)

Application
EP 90123415 A 19901206

Priority
DE 4018925 A 19900613

Abstract (en)
[origin: US5121406A] The invention relates to an induction melting furnace 1 for metals which are difficult to melt including an induction coil 2 surrounding the crucible 3 and a mold receptacle 4 surrounded by an annular chamber 5 to hold the cooling agent. The crucible 3 is disposed in a housing 7 provided with a vacuum connection 6. In order to improve the microporous nature, the melt contained in the mold receptacle 4 is compressed by means of a pressure which is build up in the mold receptacle 4 prior to the cooling.

IPC 1-7
F27B 14/00

IPC 8 full level
B22D 18/02 (2006.01); **B22D 18/06** (2006.01); **B22D 21/06** (2006.01); **B22D 23/00** (2006.01); **F27B 5/05** (2006.01); **F27B 14/00** (2006.01); **F27B 14/04** (2006.01); **F27B 14/06** (2006.01); **F27B 14/14** (2006.01)

CPC (source: EP KR US)
F27B 14/00 (2013.01 - EP US); **F27B 14/06** (2013.01 - KR); **F27B 14/061** (2013.01 - EP US)

Citation (examination)
DE 3108336 A1 19820107 - SANSHA ELECTRIC MFG CO LTD [JP]

Cited by
FR2695197A1; FR2711034A1; US5528620A

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI

DOCDB simple family (publication)
EP 0461306 A1 19911218; **EP 0461306 B1 19970416**; AT E151862 T1 19970515; DE 4018925 A1 19911219; DE 4018925 C2 19930415; DE 59010700 D1 19970522; JP 2935281 B2 19990816; JP H0510676 A 19930119; KR 920001164 A 19920130; US 5121406 A 19920609

DOCDB simple family (application)
EP 90123415 A 19901206; AT 90123415 T 19901206; DE 4018925 A 19900613; DE 59010700 T 19901206; JP 1848391 A 19910118; KR 910003278 A 19910228; US 55916890 A 19900730