

Title (en)

ARRANGEMENT FOR LOW-PRESSURE CASTING OF HIGH MELTING POINT METALS

Title (de)

ANORDNUNG FÜR DEN NIEDERDRUCKGUSS VON HOCHSCHMELZENDEN METALLEN

Title (fr)

AGENCEMENT DESTINÉ À LA COULÉE BASSE PRESSION DE MÉTAUX À POINT DE FUSION ÉLEVÉ

Publication

**EP 3990203 B1 20230510 (DE)**

Application

**EP 20739274 A 20200623**

Priority

- DE 102019209389 A 20190627
- EP 2020067442 W 20200623

Abstract (en)

[origin: WO2020260245A1] The present invention relates to an arrangement for low-pressure casting of refractory metals having a furnace chamber having one or more gas supply (6) and gas outlet openings (7) and a riser pipe (8) through a cover (5) of the furnace chamber, a melting container (3, 12), arranged in a furnace chamber, for the refractory metals and a heating device for heating the refractory metals in the melting container (3, 12). In the arrangement according to the invention, the melting container (3, 12) is designed as an exchangeable insert for a receiving mold (2) supporting the melting container (3, 12), which receiving mold is arranged in the furnace chamber, wherein a thermally insulating layer (4, 17) is formed between the receiving mold (2) and the melting container (3, 12) or is integrated in the melting container (3, 12). By means of the arrangement according to the invention, a faster and simpler exchange of the melting container can occur for different alloys, including in the case of low-pressure casting of refractory metals.

IPC 8 full level

**B22D 18/04** (2006.01); **F27B 14/10** (2006.01)

CPC (source: CN EP US)

**B22D 18/04** (2013.01 - CN EP US); **B22D 21/022** (2013.01 - US); **F27B 14/061** (2013.01 - CN); **F27B 14/063** (2013.01 - US); **F27B 14/08** (2013.01 - CN); **F27B 14/10** (2013.01 - CN EP); **F27D 11/06** (2013.01 - US); **F27B 2014/0843** (2013.01 - CN US); **F27B 2014/0881** (2013.01 - CN); **F27B 2014/104** (2013.01 - EP US); **F27B 2014/108** (2013.01 - US)

Citation (examination)

US 5319671 A 19940607 - HOPF MANFRED DR ING [DE]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**DE 102019209389 A1 20201231**; CN 114450549 A 20220506; CN 114450549 B 20240510; EP 3990203 A1 20220504; EP 3990203 B1 20230510; MX 2022000049 A 20220520; PL 3990203 T3 20230828; US 11826820 B2 20231128; US 2022347742 A1 20221103; WO 2020260245 A1 20201230

DOCDB simple family (application)

**DE 102019209389 A 20190627**; CN 202080054566 A 20200623; EP 2020067442 W 20200623; EP 20739274 A 20200623; MX 2022000049 A 20200623; PL 20739274 T 20200623; US 202017621501 A 20200623