

Title (en)

ELECTROMAGNETIC STIRRING AND HEATING OF AN INGOT

Title (de)

ELEKTROMECHANISCHES RÜHREN UND ERWÄRMEN EINES BLOCKS

Title (fr)

AGITATION ET CHAUFFAGE ÉLECTROMAGNÉTIQUES D'UN LINGOT

Publication

**EP 3967422 A1 20220316 (EN)**

Application

**EP 20195612 A 20200910**

Priority

EP 20195612 A 20200910

Abstract (en)

An electromagnetic stirring and heating device (6) for an ingot casting device for ingot casting is presented. The ingot casting device comprises a mould (1-3) for casting of an ingot. The electromagnetic stirring and heating device (6) is arranged at a top of the mould. The electromagnetic stirring and heating device is configured to macroscopic stir the ingot with a varying frequency in the range 0-10 Hz, and to heat at a top of the ingot with a superimposed varying frequency in the range 20-200 Hz, on top of the electromagnetic stirring varying frequency. A method and an ingot casting device therefore are also presented.

IPC 8 full level

**B22D 7/00** (2006.01); **B22D 27/02** (2006.01); **B22D 27/15** (2006.01)

CPC (source: EP)

**B22D 7/00** (2013.01); **B22D 27/02** (2013.01); **B22D 27/15** (2013.01)

Citation (search report)

- [XI] US 2019366425 A1 20191205 - GRANDFIELD JOHN FRANCIS [AU], et al
- [XI] US 2008164004 A1 20080710 - KOLESNICHENKO ANASTASIA [UA], et al
- [A] US 4470448 A 19840911 - MELFORD DAVID A [GB], et al
- [A] US 2015028724 A1 20150129 - SUMMERS ERIC [US], et al

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

Designated extension state (EPC)

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DOCDB simple family (publication)

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