

Title (en)
SURFACE MELTING FURNACE AND METHOD FOR OPERATING SURFACE MELTING FURNACE

Title (de)
OBERFLÄCHENSCHMELZOFEN UND VERFAHREN ZUM BETRIEB EINES OBERFLÄCHENSCHMELZOFENS

Title (fr)
FOUR DE FUSION SUPERFICIELLE ET PROCÉDÉ D'EXPLOITATION D'UN FOUR DE FUSION SUPERFICIELLE

Publication
EP 3124863 A4 20171101 (EN)

Application
EP 15767749 A 20150325

Priority

- JP 2014064555 A 20140326
- JP 2015059218 W 20150325

Abstract (en)
[origin: EP3124863A1] A surface melting furnace includes a furnace chamber 4, a treatment-target supply mechanism 8, and a plurality of sensors Hs and Ts. The furnace chamber 4 has a slag port 3a on its furnace bottom 3. The treatment-target supply mechanism 8 is configured to supply a treatment target to the furnace chamber 4. The sensors Hs and Ts are configured to perform measurement at different measurement locations for estimation of a profile of the molten surface of the treatment target, whereby the surface melting furnace enables the profile of the molten surface to be estimated over a large area. The treatment target supplied to the furnace chamber 4 by the treatment-target supply mechanism 8 is configured to melt from the surface and flow down to the slag port 3 a.

IPC 8 full level
F23G 5/00 (2006.01); **F23G 5/08** (2006.01); **F23G 5/50** (2006.01)

CPC (source: EP)
F23G 5/085 (2013.01); **F23G 5/50** (2013.01); **F23G 2202/20** (2013.01); **F23G 2203/202** (2013.01); **F23G 2207/101** (2013.01);
F23G 2207/114 (2013.01)

Citation (search report)

- [X] CA 2865581 A1 20130906 - NIPPON STEEL & SUMIKIN ENG CO [JP]
- [X] JP H11237019 A 19990831 - KUBOTA KK
- [A] JP H03263510 A 19911125 - KUBOTA KK
- See references of WO 2015147091A1

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)
EP 3124863 A1 20170201; EP 3124863 A4 20171101; EP 3124863 B1 20210721; JP 2015187513 A 20151029; JP 6305803 B2 20180404;
WO 2015147091 A1 20151001

DOCDB simple family (application)
EP 15767749 A 20150325; JP 2014064555 A 20140326; JP 2015059218 W 20150325