

Title (en)

USE OF A HEAT-INSULATING MOULDED BODY TO INSULATE MOLTEN METALS WITH RESPECT TO THE ENVIRONMENT, OR A METALLURGICAL VESSEL

Title (de)

VERWENDUNG EINES WÄRMEDÄMMENDEN FORMKÖRPERS ZUR ISOLATION VON METALLSCHMELZEN GEGENÜBER DER ATMOSPHERE ODER EINEM METALLURGISCHEN GEFÄSS

Title (fr)

UTILISATION D'UN CORPS MOULÉ THERMO-ISOLANT POUR L'ISOLATION DE MÉTAUX EN FUSION PAR RAPPORT À L'ATMOSPHERE OU À UN RÉCIPIENT MÉTALLIQUE

Publication

**EP 3478431 A1 20190508 (DE)**

Application

**EP 17733463 A 20170627**

Priority

- DE 102016112044 A 20160630
- EP 2017065921 W 20170627

Abstract (en)

[origin: WO2018002096A1] The invention relates to the use of an unfired refractory moulded body (1) comprising a binder matrix (2) that contains at least one hardened permanent binder, and aggregate particles (3) comprising and/or consisting of biogenic silicic acid, preferably comprising and/or consisting of rice husk ash, which are integrated into the binder matrix (2), for the purpose of thermally insulating a molten metal, particularly a molten steel, and/or a metal ingot solidified out of the molten metal. The invention also relates to the use of the moulded body (1) to thermally insulate a refractory lining, particularly in multi-layer brick work or in a heat treatment furnace, or as an anti-corrosion barrier for example against alkali corrosion, or as a flame retardant lining or as a filter material for hot gases.

IPC 8 full level

**B22D 7/10** (2006.01); **B22D 11/11** (2006.01); **B22D 27/06** (2006.01); **F27D 1/00** (2006.01)

CPC (source: EP RU US)

**B22D 7/10** (2013.01 - EP RU US); **B22D 11/10** (2013.01 - EP US); **B22D 11/106** (2013.01 - EP US); **B22D 11/11** (2013.01 - EP US); **B22D 27/06** (2013.01 - EP US); **B22D 41/02** (2013.01 - EP US); **F27D 1/0006** (2013.01 - EP US); **F27D 1/10** (2013.01 - EP US); **F27B 2014/0843** (2013.01 - EP US); **F27B 2014/104** (2013.01 - EP US)

Citation (search report)

See references of WO 2018002096A1

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)

BA ME

DOCDB simple family (publication)

**DE 102016112044 A1 20180104**; **DE 102016112044 B4 20190103**; BR 112018072660 A2 20190219; BR 112018072660 B1 20221004; CN 109475929 A 20190315; CN 109475929 B 20211026; EP 3478431 A1 20190508; RU 2727488 C1 20200721; US 11150022 B2 20211019; US 2019154337 A1 20190523; WO 2018002096 A1 20180104

DOCDB simple family (application)

**DE 102016112044 A 20160630**; BR 112018072660 A 20170627; CN 201780038653 A 20170627; EP 17733463 A 20170627; EP 2017065921 W 20170627; RU 2018138003 A 20170627; US 201716313242 A 20170627