

Title (en)

DEVICE FOR PRODUCING MOLTEN SILICON

Title (de)

VORRICHTUNG ZUR HERSTELLUNG VON GESCHMOLZENEM SILIZIUM

Title (fr)

DISPOSITIF DE PRODUCTION DE SILICIUM FONDU

Publication

**EP 3802422 A1 20210414 (FR)**

Application

**EP 19728960 A 20190605**

Priority

- FR 1800572 A 20180605
- EP 2019064591 W 20190605

Abstract (en)

[origin: WO2019234072A1] The invention relates to a device (10) for producing molten silicon (11), comprising an enclosure (12) and comprising, in the enclosure: a crucible (15) intended to receive powder (19) of oxidised particles of silicon, the crucible comprising an internal volume (16) intended to contain silicon in the molten state and silica and a channel (28) for discharging silicon in the molten state out of the internal volume, the crucible comprising at least two holes (32), the straight section of each hole having a maximum dimension that is greater than or equal to a value between 1 mm and 10 mm, or at least one slot, the straight section of which has a maximum dimension that is greater than or equal to a value between 1 mm and 10 mm connecting the internal volume to the crucible; and a heating system (20) at least partly surrounding the crucible.

IPC 8 full level

**C01B 33/02** (2006.01); **C01B 33/021** (2006.01); **C01B 33/037** (2006.01); **F27B 14/10** (2006.01); **F27D 3/15** (2006.01); **H01L 31/18** (2006.01)

CPC (source: EP)

**C01B 33/021** (2013.01); **F27B 3/12** (2013.01); **F27B 14/10** (2013.01); **F27D 3/14** (2013.01); **F27D 3/1509** (2013.01)

Citation (search report)

See references of WO 2019234072A1

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)

**FR 3081856 A1 20191206; FR 3081856 B1 20201127**; CN 112512969 A 20210316; CN 112512969 B 20231212; EP 3802422 A1 20210414;  
TW 202012310 A 20200401; WO 2019234072 A1 20191212

DOCDB simple family (application)

**FR 1800572 A 20180605**; CN 201980037315 A 20190605; EP 19728960 A 20190605; EP 2019064591 W 20190605; TW 108119384 A 20190604