

Title (en)
IMPROVED FURNACE APPARATUS FOR CRYSTAL PRODUCTION

Title (de)
VERBESSERTE OFENVORRICHTUNG ZUR KRISTALLHERSTELLUNG

Title (fr)
APPAREIL DE FOUR AMÉLIORÉ POUR LA PRODUCTION DE CRISTAUX

Publication
EP 4248002 A1 20230927 (EN)

Application
EP 21811073 A 20211119

Priority

- EP 20208651 A 20201119
- DE 102020215755 A 20201211
- EP 2021082331 W 20211119

Abstract (en)
[origin: US2023407519A1] The disclosure refers to a furnace apparatus, in particular a furnace apparatus for growing crystals, in particular for growing SiC crystals. The furnace apparatus includes a furnace unit, where the furnace unit includes a furnace housing, at least one crucible unit where the crucible unit is arranged inside the furnace housing, where the crucible unit includes a crucible housing, where the housing has an outer surface and an inner surface, where the inner surface at least partially defines a crucible volume, where a receiving space for receiving a source material is arranged or formed inside the crucible volume, where a seed holder unit for holding a defined seed wafer is arranged inside the crucible volume, and at least one heating unit for heating the source material, where the receiving space for receiving the source material is at least in parts arranged between the heating unit and the seed holder unit.

IPC 8 full level
C30B 35/00 (2006.01); **C30B 23/00** (2006.01); **C30B 23/02** (2006.01); **C30B 29/36** (2006.01)

CPC (source: EP US)
C30B 23/005 (2013.01 - EP US); **C30B 23/02** (2013.01 - EP); **C30B 23/066** (2013.01 - US); **C30B 29/36** (2013.01 - EP US); **C30B 35/00** (2013.01 - EP); **H01L 21/02529** (2013.01 - EP); **H01L 21/02631** (2013.01 - EP)

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
US 2023407519 A1 20231221; EP 4248002 A1 20230927

DOCDB simple family (application)
US 202118037672 A 20211119; EP 21811073 A 20211119