

Title (en)

THERMAL TREATMENT OF MINERAL RAW MATERIALS USING A MECHANICAL FLUIDISED BED REACTOR

Title (de)

THERMISCHE BEHANDLUNG VON MINERALISCHEN ROHSTOFFEN MIT EINEM MECHANISCHEN WIRBELBETTREAKTOR

Title (fr)

TRAITEMENT THERMIQUE DE MATIÈRES PREMIÈRES MINÉRALES À L'AIDE D'UN RÉACTEUR À LIT FLUIDISÉ MÉCANIQUE

Publication

EP 4093889 A1 20221130 (DE)

Application

EP 21700686 A 20210111

Priority

- DE 102020200602 A 20200120
- LU 101613 A 20200120
- EP 2021050370 W 20210111

Abstract (en)

[origin: WO2021148267A1] The invention relates to a device for the thermal treatment of mineral raw materials, in particular lithium ores, said device comprising a comminution device (10), a granulation device (30) and a heat treatment device, characterized in that the granulation device (30) is a mechanical fluidized bed reactor.

IPC 8 full level

C22B 1/243 (2006.01); **C22B 1/14** (2006.01); **C22B 1/245** (2006.01); **C22B 26/12** (2006.01)

CPC (source: EP US)

C22B 1/14 (2013.01 - EP); **C22B 1/2406** (2013.01 - US); **C22B 1/243** (2013.01 - EP US); **C22B 1/245** (2013.01 - EP);
C22B 26/12 (2013.01 - EP US); **F27B 7/18** (2013.01 - US); **F27B 7/2033** (2013.01 - EP); **F27D 13/00** (2013.01 - US); **F27D 15/02** (2013.01 - US);
F27D 2003/0083 (2013.01 - US); **F27M 2003/03** (2013.01 - US)

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)

WO 2021148267 A1 20210729; AU 2021211083 A1 20220707; AU 2021211083 B2 20230105; CA 3162196 A1 20210729;
CA 3162196 C 20240611; EP 4093889 A1 20221130; EP 4093889 B1 20231025; ES 2963642 T3 20240401; FI 4093889 T3 20231120;
PT 4093889 T 20231121; RS 64839 B1 20231229; US 2023047215 A1 20230216

DOCDB simple family (application)

EP 2021050370 W 20210111; AU 2021211083 A 20210111; CA 3162196 A 20210111; EP 21700686 A 20210111; ES 21700686 T 20210111;
FI 21700686 T 20210111; PT 21700686 T 20210111; RS P20231083 A 20210111; US 202117792942 A 20210111