

Title (en)

METHOD FOR DISCHARGING POORLY GRINDABLE PARTICLES FROM A SPIRAL JET MILL

Title (de)

VERFAHREN ZUR AUSSCHLEUSUNG SCHWER MAHLBARER PARTIKEL AUS EINER SPIRALSTRAHLMÜHLE

Title (fr)

PROCÉDÉ DE DÉCHARGE DES PARTICULES DIFFICILEMENT BROYABLES D'UN DÉSINTÉGRATEUR À JET HÉLICOÏDAL

Publication

EP 3613508 B1 20230927 (DE)

Application

EP 19190424 A 20190807

Priority

DE 102018120596 A 20180823

Abstract (en)

[origin: JP2020028877A] To optimize a grinding process to the effect that residues, which remain inside the grinding chamber during the grinding process, can be removed more quickly and more efficiently therefrom than is the case in the prior art. SOLUTION: The present invention relates to a method of grinding, separating, and discharging hard to grind parts of a material mixture of components with different grindability from a spiral jet mill. In the method according to the invention, the hard to grind parts are discharged from a process chamber via at least one additional discharge nozzle. The invention further relates to a spiral jet mill for comminuting and classifying grinding material. The spiral jet mill according to the invention includes: at least one process chamber enclosed by a housing; at least one grinding material feeding part leading into the at least one process chamber; at least two grinding nozzles; and a fine material outlet radially enclosed by a separator wheel; at least one discharge nozzle being assigned to the process chamber. SELECTED DRAWING: Figure 1

IPC 8 full level

B02C 19/06 (2006.01); **B02C 25/00** (2006.01)

CPC (source: CN EP KR RU US)

B02C 19/06 (2013.01 - RU); **B02C 19/061** (2013.01 - CN EP KR US); **B02C 23/02** (2013.01 - KR); **B02C 23/16** (2013.01 - US);
B02C 25/00 (2013.01 - EP KR)

Cited by

EP4088818A1; WO2022238573A1

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 3613508 A1 20200226; **EP 3613508 B1 20230927**; CN 110856830 A 20200303; CN 110856830 B 20220415;
DE 102018120596 A1 20200227; DK 3613508 T3 20231218; ES 2966925 T3 20240425; FI 3613508 T3 20231219; JP 2020028877 A 20200227;
JP 6934491 B2 20210915; KR 102277738 B1 20210716; KR 20200023208 A 20200304; LT 3613508 T 20231227; PL 3613508 T3 20240304;
RU 2732837 C1 20200923; SI 3613508 T1 20240329; US 11235337 B2 20220201; US 2020061631 A1 20200227

DOCDB simple family (application)

EP 19190424 A 20190807; CN 201910735624 A 20190809; DE 102018120596 A 20180823; DK 19190424 T 20190807;
ES 19190424 T 20190807; FI 19190424 T 20190807; JP 2019125488 A 20190704; KR 20190101613 A 20190820; LT 19190424 T 20190807;
PL 19190424 T 20190807; RU 2019125652 A 20190814; SI 201930679 T 20190807; US 201916544163 A 20190819