

Title (en)
AGITATOR BALL MILL

Title (de)
RÜHRWERKSKUGELMÜHLE

Title (fr)
BROYEUR À BOULETS À AGITATEUR

Publication
EP 4000735 B1 20230802 (DE)

Application
EP 21208681 A 20211117

Priority
EP 20208296 A 20201118

Abstract (en)
[origin: US2022152621A1] An agitator ball mill comprising a grinding chamber having a cylindrical wall, and further having a rotatably mounted agitator shaft extending into the grinding chamber and on which at least one agitator element is arranged inside the grinding chamber. The mill further comprises an inlet for supplying to the grinding chamber material to be ground and grinding bodies, an outlet for removal of the ground material, and an induction heater for the material to be ground located in the grinding chamber, the induction heater comprising an inductor and a susceptor. The at least one agitator element comprises a susceptor material which forms the susceptor of the induction heater, wherein the inductor comprises at least one coil which is arranged outside the cylindrical wall of the grinding chamber and encompasses the grinding chamber, and wherein the cylindrical wall of the grinding chamber consists of an electrically and magnetically non-conductive material.

IPC 8 full level
B02C 17/18 (2006.01); **B02C 17/16** (2006.01)

CPC (source: CN EP KR US)
B02C 17/04 (2013.01 - US); **B02C 17/16** (2013.01 - EP); **B02C 17/163** (2013.01 - CN KR US); **B02C 17/18** (2013.01 - KR); **B02C 17/1815** (2013.01 - CN EP US); **B02C 17/24** (2013.01 - CN); **B02C 19/18** (2013.01 - KR); **B02C 17/163** (2013.01 - EP)

Cited by
WO2024184601A1; FR3146415A1

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 4000735 A1 20220525; EP 4000735 B1 20230802; EP 4000735 C0 20230802; CN 114534866 A 20220527; ES 2961896 T3 20240314; JP 2022081453 A 20220531; KR 20220068155 A 20220525; PL 4000735 T3 20240318; US 11919007 B2 20240305; US 2022152621 A1 20220519; US 2024253052 A1 20240801

DOCDB simple family (application)
EP 21208681 A 20211117; CN 202111311851 A 20211108; ES 21208681 T 20211117; JP 2021187368 A 20211117; KR 20210153606 A 20211110; PL 21208681 T 20211117; US 202117528665 A 20211117; US 202418432260 A 20240205