

Title (en)
AGITATOR BALL MILL

Title (de)
RÜHRWERKSKUGELMÜHLE

Title (fr)
BROYEUR À BILLES À AGITATEUR

Publication
EP 3102332 A1 20161214 (DE)

Application
EP 15702511 A 20150206

Priority
• EP 14154350 A 20140207
• EP 2015052463 W 20150206

Abstract (en)
[origin: WO2015118090A1] The invention relates to an agitator ball mill comprising a grinding chamber (1), a rotatably mounted agitator shaft (5) which protrudes into the grinding chamber (1) and on which agitator elements (10, 20, 30) formed as paddle wheels are disposed axially spaced apart from one another, an inlet (6) for delivery of material for grinding and grinding elements, and an outlet (7) for removing the ground material. The agitator elements (10, 20, 30) are designed such that in operation the agitator elements convey a mixture consisting of material to be ground or to be dispersed and convey grinding elements through the interior of said elements outwards away from the agitator shaft (5). Return elements (17, 27, 37; 47; 57) disposed in the grinding chamber (1) are non-rotatably connected to the agitator shaft (5) and convey the mixture laterally adjacent to and/or between the agitator elements (10, 20, 30) and inwards towards the agitator shaft (5).

IPC 8 full level
B02C 17/16 (2006.01)

CPC (source: EP KR US)
B02C 17/16 (2013.01 - US); **B02C 17/161** (2013.01 - EP KR US); **B02C 17/163** (2013.01 - EP KR US); **B02C 17/166** (2013.01 - US); **B02C 17/168** (2013.01 - US); **B02C 17/20** (2013.01 - US); **B02C 2017/165** (2013.01 - US)

Citation (search report)
See references of WO 2015118090A1

Cited by
EP4000735A1; US11919007B2

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)
EP 2905080 A1 20150812; CN 106061613 A 20161026; CN 106061613 B 20181211; DK 3102332 T3 20180702; EP 3102332 A1 20161214; EP 3102332 B1 20180328; ES 2669612 T3 20180528; JP 2017505228 A 20170216; JP 6734195 B2 20200805; KR 102385148 B1 20220411; KR 20160117601 A 20161010; MY 180354 A 20201128; PL 3102332 T3 20180928; US 10464069 B2 20191105; US 2017014830 A1 20170119; WO 2015118090 A1 20150813

DOCDB simple family (application)
EP 14154350 A 20140207; CN 201580007622 A 20150206; DK 15702511 T 20150206; EP 15702511 A 20150206; EP 2015052463 W 20150206; ES 15702511 T 20150206; JP 2016550816 A 20150206; KR 20167024585 A 20150206; MY PI2016702553 A 20150206; PL 15702511 T 20150206; US 201515116381 A 20150206