

Title (en)

ROLLER MILL WITH A SYNCHRONISING DEVICE

Title (de)

WALZENMÜHLE MIT EINER GLEICHLAUFEinRICHTUNG

Title (fr)

BROYEUR À CYLINDRES DOTÉ D'UN DISPOSITIF DE SYNCHRONISATION

Publication

EP 4103328 B1 20231025 (DE)

Application

EP 21703285 A 20210209

Priority

- DE 102020201892 A 20200214
- EP 2021053044 W 20210209
- BE 202005092 A 20200214

Abstract (en)

[origin: WO2021160592A1] The present invention relates to a roller mill (10) for comminuting bulk material, comprising a first milling roller (12) and a second milling roller (14), which are arranged so as to be opposite one another and which can be driven in a contra-rotating manner, wherein a milling gap (16) is formed between the milling rollers (12, 14), and a floating bearing unit (26) for receiving the first milling roller (12), and a fixed bearing unit (28) for receiving the second milling roller (14), wherein the floating bearing unit (26) has two bearings (34, 36) which each receive one end of the first milling roller (12), wherein the floating bearing unit (26) has mounted thereon a plurality of hydraulic actuators (38, 40) for applying a force to the floating bearing unit (26), and wherein the bearings (34, 36) of the floating bearing unit (26) are connected to one another by way of a synchronizing device (42), wherein the synchronizing device (42) has a coupling element (62, 64; 82) that prevents a relative movement of the bearings (34, 36) in a coupling position and allows a relative movement of the bearings (34, 36) in a free position.

IPC 8 full level

B02C 4/32 (2006.01); **B02C 4/02** (2006.01)

CPC (source: EP US)

B02C 4/02 (2013.01 - EP US); **B02C 4/32** (2013.01 - EP 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

DOCDB simple family (publication)

WO 2021160592 A1 20210819; AU 2021220242 A1 20220728; AU 2021220242 B2 20230810; BR 112022016038 A2 20221004; BR 112022016038 A8 20221116; CA 3160767 A1 20210819; CL 2022002194 A1 20230421; CN 114867560 A 20220805; CN 114867560 B 20230704; EP 4103328 A1 20221221; EP 4103328 B1 20231025; EP 4103328 C0 20231025; PE 20221615 A1 20221012; PL 4103328 T3 20240506; US 12109574 B2 20241008; US 2023085467 A1 20230316

DOCDB simple family (application)

EP 2021053044 W 20210209; AU 2021220242 A 20210209; BR 112022016038 A 20210209; CA 3160767 A 20210209; CL 2022002194 A 20220812; CN 202180007706 A 20210209; EP 21703285 A 20210209; PE 2022001734 A 20210209; PL 21703285 T 20210209; US 202117799186 A 20210209