

Title (en)
VERTICAL ROLLER MILL

Title (de)
VERTIKALES WALZWERK

Title (fr)
BROYEUR À CYLINDRES VERTICAUX

Publication
EP 2777814 B1 20190501 (EN)

Application
EP 12847541 A 20121108

Priority
• JP 2011006325 W 20111111
• JP 2012007187 W 20121108

Abstract (en)
[origin: EP2777814A1] A vertical roller mill of the present invention is configured such that: a grinding ability thereof is high; the size thereof is reduced; and the maintenance of a reducer is easily performed by taking out the reducer through a predetermined passage to the outside. A vertical roller mill (50) includes: a rotating table (14) configured to cause grinding objects to be betten between the rotating table (14) and each of a plurality of grinding rollers (13), arranged substantially about a reducer (12) along a substantially circumferential direction, to grind the grinding objects, the rotating table (14) being rotated by a rotary driving unit (15) coupled to the rotating table (14) via a reducer (12); arm supporters (18) configured to respectively support a plurality of grinding rollers (13) via first and second arms (17 and 23) at positions above the reducer (12); stand legs (28) configured to support a plurality of arm supporters (18); and a passage (32) through which the reducer (12) passes under the grinding rollers (13) to be taken out from the vertical roller mill (50).

IPC 8 full level
B02C 15/04 (2006.01); **B02C 15/00** (2006.01)

CPC (source: EP)
B02C 15/00 (2013.01); **B02C 15/007** (2013.01); **B02C 15/04** (2013.01)

Citation (opposition)
Opponent : thyssenkrupp Ind. Sol.
• CN 101318154 A 20081210 - GUICAI ZHANG [CN]
• DE 19603655 A1 19970807 - LOESCHE GMBH [DE]
• US 4218023 A 19800819 - BRUNDIEK HORST [DE]
• DE 102004062400 A1 20060706 - LOESCHE GMBH [DE]
• KARL MENSEL: "Quadropol's new dimension", INTERNATIONAL CEMENT REVIEW, August 2006 (2006-08-01), pages 76 - 80, XP055679468

Cited by
CN106268459A

Designated contracting state (EPC)
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DOCDB simple family (publication)
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DOCDB simple family (application)
EP 12847541 A 20121108; CN 201280052955 A 20121108; IN 3273CHN2014 A 20140430; JP 2012007187 W 20121108