

Title (en)  
VERTICAL ROLLER MILL

Title (de)  
VERTIKALES WALZWERK

Title (fr)  
MOULIN À CYLINDRES VERTICAUX

Publication  
**EP 2517794 A1 20121031 (EN)**

Application  
**EP 09852580 A 20091225**

Priority  
JP 2009071663 W 20091225

Abstract (en)  
A vertical roller mill which enables the crushing of coal or petroleum cokes is provided. To realize this, a vertical roller mill which includes a rotary table 1 driven to rotate, and a plurality of grinding rollers 2 including free rollers placed at fixed positions on the rotary table 1 so as to surround the rotation center line of the rotary table 1 to bite and crush a raw material to be ground between the rotary table 1 and the grinding rollers 2 with the rotary driving of the rotary table 1, wherein a plurality of oblique slit grooves 6 inclined in the table rotation direction or the reverse rotation direction thereof with respect to the table radius line are provided at predetermined intervals in the perimeter direction on an annular crushing portion 3 on the upper face of the rotary table. Each of the oblique slit grooves 6 is placed in a region of the angle exceeding 45° to the radius line. The grinding rollers 1 have on the outer circumference surfaces thereof slit grooves 7 parallel to a straight line right-angled to the rotation direction or the oblique slit grooves 7 inclined at an angle of 45° or less with respect to the straight line. The feed control of the raw material by the oblique slit grooves 6 provided on the annular crushing portion 3 of the rotary table 1 and the biting and crushing of the raw material by the slit grooves 7 provided on the outer circumference surfaces of the grinding rollers 2 promote the crushing of the raw material to be ground.

IPC 8 full level  
**B02C 15/04** (2006.01); **F23K 1/00** (2006.01); **F23K 3/02** (2006.01)

CPC (source: EP KR)  
**B02C 15/003** (2013.01 - EP); **B02C 15/004** (2013.01 - EP); **B02C 15/04** (2013.01 - KR); **F23K 1/00** (2013.01 - EP KR); **F23K 3/02** (2013.01 - KR); **F23K 2201/1006** (2013.01 - EP)

Citation (search report)  
See references of WO 2011077565A1

Cited by  
CN108906232A

Designated contracting state (EPC)  
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