Title (en)

Roll-type rolling mill

Title (de)

Walzen-Typ-Walzwerk

Title (fr)

Laminoir du type cylindre

Publication

EP 1470871 A3 20060405 (EN)

Application

EP 04009664 A 20040423

Priority

- JP 2003119575 A 20030424
- JP 2004094803 A 20040329

Abstract (en)

[origin: EP1470871A2] Disclosed is a roll-type rolling mill which can accurately position rolling rolls at respective predetermined positions. This roll-type rolling mill 20 includes a casing 21 and rolling rolls 22 to 24 disposed within the casing 21. The rolling roll 22 is supported and rotated by a drive shaft 25. The rolling rolls 23, 24 are supported and rotated by driven shafts 26, 27, respectively. A driven mechanism 28 is provided for rotating the driven shaft upon the rotation of the drive shaft 25. The driven mechanism 28 comprises bevel gears 47 to 50. The drive shaft 25 and each of the driven shafts 26, 27 are fixed by a tie rod 29. The position of each of the drive shaft 25 and each of the driven shafts 26, 27 relative to the tie rod 29 is regulated by a screw shaft 30.

[origin: EP1470871A2] A roll-type rolling mill (20) comprises a casing (21); several rolling rolls (22 - 24); a drive shaft (25); driven shafts (26, 27); a tie rod (29) within the casing; a driven mechanism (28) driven by one of the rolling rolls to drive the other rolling roll; and a position adjustment member (30). The outer peripheral surfaces of the rolling mills are located to face each other. One of the rolling rolls is mounted on the drive shaft, and the other rolling rolls are mounted on the driven shaft. The tie rod is axially passed through the drive shaft and the driven shaft to position both the shafts relative to the casing. The position adjustment member varies the position of both shafts relative to the tie rod along the axial direction of the tie rod.

IPC 8 full level

B21B 31/16 (2006.01); **B21B 31/18** (2006.01); **B21B 13/10** (2006.01)

CPC (source: EP)

B21B 13/103 (2013.01); **B21B 31/18** (2013.01); B21B 2273/22 (2013.01)

Citation (search report)

- [X] US 3861187 A 19750121 - LEEUWESTEIN KURT
- [X] BRAUER H ET AL: "Developments - Rolling mill blocks in modern Kocks mills", IRON AND STEEL ENGINEER., vol. 55, no. 1, January 1978 (1978-01-01), USASSOCIATION OF IRON AND STEEL ENGINEERS. PITTSBURGH., pages 55 - 67, XP002366042
- [X] BRAUER H: "Weiterentwicklungen der Dreiwalzen-Umformblöcke", STAHL UND EISEN, VERLAG STAHLEISEN, DÜSSELDORF, DE, vol. 112, no. 7, 15 July 1992 (1992-07-15), pages 53 - 60,130, XP000293327, ISSN: 0340-4803

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

EP 04009664 A 20040423; DE 602004018867 T 20040423; JP 2004094803 A 20040329