

Title (en)

DEVICE FOR AXIALLY SHIFTING ROLLS IN THE STAND OF A ROLLING MILL

Publication

EP 0348711 A3 19910717 (DE)

Application

EP 89110436 A 19890609

Priority

DE 3821571 A 19880625

Abstract (en)

[origin: EP0348711A2] In the hitherto known devices, the axial shifting of rolls in the stand of a rolling mill is carried out on slideways, the sliding friction resistances of the hydraulic shifting machinery arranged externally on the roll stand which occur in the slideways having to be overcome by increased energy consumption. In addition, these roll-shifting devices are of complicated structure and are hard to get at and difficult to maintain owing to the pressure and lever elements which are arranged externally on the roll stand and project a long way outwards. According to the invention, these disadvantages are eliminated in a simple way by the fact that the inner bearing ring (5), fastened to the bearing journal (2) of the roll (1), of the radial bearing (3) in the form of a roller bearing is arranged so as to be axially moveable with respect to the outer bearing ring (7, 8) of the radial bearing (3), and that the shifting system is integrated in the axial bearing (4) as a hydraulic pressure system (16, 20, 22, 23).

IPC 1-7

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IPC 8 full level

B21B 31/18 (2006.01); **B21B 31/07** (2006.01)

CPC (source: EP US)

B21B 31/18 (2013.01 - EP US); **B21B 31/07** (2013.01 - EP US)

Citation (search report)

- [X] GB 2024454 A 19800109 - NIPPON STEEL CORP
- [Y] JP S5893507 A 19830603 - MITSUBISHI HEAVY IND LTD
- [XP] WO 8901368 A1 19890223 - NIPPON KOKAN KK [JP]
- [A] EP 0257383 A2 19880302 - SCHLOEMANN SIEMAG AG [DE]

Cited by

EP0920925A3; EP2737962A1

Designated contracting state (EPC)

AT BE DE ES FR GB IT LU NL SE

DOCDB simple family (publication)

EP 0348711 A2 19900103; EP 0348711 A3 19910717; EP 0348711 B1 19940824; AT E110307 T1 19940915; DE 3821571 A1 19891228; DE 58908224 D1 19940929; ES 2058393 T3 19941101; JP 2747029 B2 19980506; JP H0246904 A 19900216; RU 1831388 C 19930730; UA 12310 A 19961225; US 4989436 A 19910205

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