

Title (en)

Cluster mill with hydraulic adjustment.

Title (de)

Vielwalzengerüst mit hydraulischer Anstellung.

Title (fr)

Laminoin à plusieurs cylindres avec serrage hydraulique.

Publication

EP 0429812 B1 19931215 (DE)

Application

EP 90119485 A 19901011

Priority

DE 3939124 A 19891125

Abstract (en)

[origin: JPH03169406A] PURPOSE: To separate roll arrangement for away and to fix a hydraulic pressurizing mechanism during stretching work by separating a part which is necessary to control a roll pressure from a part for moving the arrangement of a roll assembly. CONSTITUTION: So as to easily introduce the tip of a strip, lifting devices 11, 12 are started so that the upper part 2 is moved from the position where the interval between work rolls is separated to the working position. Simultaneously an adjusting device 14 is begun to work and the upper part 2 can be lowered. After that, a pressure medium for forming a roll pressure is introduced into a cylinder space between a piston 16 and the collar 18 of a cylinder casing 17. Therefore, since the free height of the cylinder space is extremely low, even when the quantity of the pressure medium is small, the roll pressure is extremely strongly adjusted.

IPC 1-7

B21B 13/14; **B21B 31/32**

IPC 8 full level

B21B 13/14 (2006.01); **B21B 31/04** (2006.01); **B21B 31/32** (2006.01)

CPC (source: EP US)

B21B 13/147 (2013.01 - EP US); **B21B 31/32** (2013.01 - EP US); **B21B 31/04** (2013.01 - EP US); **B21B 2203/36** (2013.01 - EP US)

Cited by

EP0693328A1; EP2234739A4; EP0998992A3; US5355707A; EP0572829A1; CN109500092A; WO0123114A3

Designated contracting state (EPC)

DE ES FR GB IT SE

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EP 0429812 A2 19910605; **EP 0429812 A3 19911211**; **EP 0429812 B1 19931215**; DE 3939124 A1 19910529; DE 3939124 C2 19920423; DE 59003882 D1 19940127; ES 2049387 T3 19940416; JP H03169406 A 19910723; RU 1809788 C 19930415; US 5142896 A 19920901

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