

Title (en)

Process for replacing an intermediate roll in a calender and calender

Title (de)

Verfahren zum Austauschen einer Zwischenwalze in einem Kalanders und Kalanders

Title (fr)

Procédé pour le remplacement d'un rouleau intermédiaire dans un calandre et calandre

Publication

EP 1186700 A3 20021120 (DE)

Application

EP 01118475 A 20010801

Priority

DE 10041887 A 20000825

Abstract (en)

[origin: DE10041887C1] To exchange an intermediate calender roller, in a calendar roller assembly with more than three rollers with a press plane pitched at a given angle to vertical, at least the rollers below the intermediate roller are lowered. The lower roller immediately under the intermediate roller forms a gap for maneuver and is lowered by an additional value expressed as: $h=(r_1+r_2)(1-\cos \alpha)$ where r_1 is the radius of the intermediate roller, r_2 the radius of the neighboring roller, and α is the angle. At the same time, the neighboring roller is given a side movement (s) expressed as: $s=h \cdot \tan \alpha$. The gaps between the rollers below the intermediate roller are set at 8-15 mm according to the maneuver gap. The rollers under the intermediate roller are moved on the press plane. The limit stops for the lower rollers are adjusted to select the intermediate roller, using nuts on spindles for the adjustment. An Independent claim is included for a calender roller assembly, with rollers (9-12) under an intermediate roller (8) for exchange, aligned on an angled press plane, to be lowered parallel to the press plane (P) for an intermediate roller (8) exchange. Preferred Features: The rollers (5-12) are mounted on levers with the possible exception of a top and bottom roller (3). The levers pivot on columns (2), with an adjustable limit stop for each lever. The limit stops are formed by nuts and spindles. A control unit operates an adjustment mechanism to set the limit stops.

IPC 1-7

D21G 1/02

IPC 8 full level

D21G 1/00 (2006.01); **D21G 1/02** (2006.01)

CPC (source: EP US)

D21G 1/002 (2013.01 - EP US); **D21G 1/0293** (2013.01 - EP US); **Y10T 29/49545** (2015.01 - EP US); **Y10T 29/4973** (2015.01 - EP US); **Y10T 29/49815** (2015.01 - EP US)

Citation (search report)

- [A] DE 19856517 A1 20000615 - VOITH SULZER PAPIERTECH PATENT [DE]
- [A] EP 0979896 A2 20000216 - VOITH SULZER PAPIERTECH PATENT [DE]
- [A] US 2058352 A 19361020 - PUTNAM CHARLES P, et al

Cited by

EP1717368A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

DE 10041887 C1 20010920; CA 2355983 A1 20020225; CA 2355983 C 20050607; DE 50108369 D1 20060119; EP 1186700 A2 20020313; EP 1186700 A3 20021120; EP 1186700 B1 20051214; US 2002043354 A1 20020418; US 6651337 B2 20031125

DOCDB simple family (application)

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