Title (en)

Process for operating a calender and calender

Title (de)

Verfahren zum Betrieb eines Kalanders und Kalander

Title (fr)

Procédé de fonctionnement d'une calandre et calandre

Publication

EP 0933472 A3 20000510 (DE)

Application

EP 99101366 A 19990126

Priority

DE 19803323 A 19980129

Abstract (en)

[origin: EP0933472A2] For the operation of a calender assembly for processing web materials, and especially paper, at least one center roller in the vertical stack is curved out of the stack plane at least at one roller gap. The reaction forces for this roller are generated by an appropriate adjustment of the drive torque. The difference in the bending is increased in the rollers flanking the working gap, to reduce the pressures at the edges and/or increase the pressure at the center of the web. To relieve the edge zones, a drive takes over the guide roller on transfer of the drive torque, and the drive torques are distributed more evenly while the edge zones are under pressure. For the control of the lateral pressure profile, one parameter is monitored over the web width and, on a deviation from the control, at least part of the correction is effected through an alteration of the drive torque. The drive torques are selected so that the reaction forces of the adjacent rollers and their bending are not at zero and the shear forces in the web are close to zero. The selected torques give a smallest reaction force which is not equal to zero. One of the center rollers, next to an end roller, is bent out of the roller stack on the same side as the end roller. An Independent claim is included for a calender assembly where at least one center roller (6-11) has a degree of slimness ≥ 10. A control (28) delivers the drive torques (A5-A12), so that the reaction forces at this roller and its bend out of the center plane of the roller stack is held within the permissible range.

IPC 1-7

D21G 1/00

IPC 8 full level

D21G 1/00 (2006.01)

CPC (source: EP US)

D21G 1/00 (2013.01 - EP US); **D21G 1/0006** (2013.01 - EP US); **D21G 1/0033** (2013.01 - EP US)

Citation (search report)

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EP 0933472 A2 19990804; **EP 0933472 A3 20000510**; **EP 0933472 B1 20040331**; AT 263277 T 20040415; CA 2260508 A1 19990729; DE 19803323 A1 19990805; DE 19803323 C2 20030605; DE 59908983 D1 20040506; US 6234075 B1 20010522

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