

Title (en)
Calender

Title (de)
Kalander

Title (fr)
Calandre

Publication
EP 1087057 A3 20010816 (DE)

Application
EP 00119970 A 20000914

Priority
DE 19945780 A 19990924

Abstract (en)
[origin: DE19945780C1] The intermediate roller (8) in a calender roller stack has a bearing support mounting (2) with an overload safety system (41). The overload safety system (41) is tripped by forces so that, on a breach of a given force threshold value, the force loading is reduced on the intermediate roller (8). The intermediate roller (8) is mounted in levers (11), with the overload safety system (41) between at least one lever (11) and the bearing support mounting (2). The overload safety system (41) is fitted to both axial ends of the intermediate calender roller (8), and can be fitted with a force display. The overload safety system can have a hydraulic support which acts parallel to the press direction on the roller (8) or a holder bonded to it, to give a balance between the hydraulic forces on both sides. The balance is achieved by a difference pressure valve, with a rapid force relaxation action for at least one adjustable bending roller in the calender assembly. The hydraulic support can have a hydrostatic action, and have two pretensed hydraulic cylinders. The overload safety system can have a spring unit, and a sensor which reacts to path movements, using parallel plate springs, or it uses a roller axis. The sensor is an end position limit switch or a non-contact proximity switch. The overload safety system can be a shear bolt (41).

IPC 1-7
D21G 1/00

IPC 8 full level
D21G 1/00 (2006.01); **D21G 1/02** (2006.01)

CPC (source: EP US)
D21G 1/00 (2013.01 - EP US); **D21G 1/0226** (2013.01 - EP US)

Citation (search report)

- [A] DE 19633671 A1 19980305 - VOITH SULZER FINISHING GMBH [DE]
- [A] US 4838156 A 19890613 - HAFNER PAUL [DE], et al
- [A] DE 3803490 A1 19890817 - REXROTH MANNESMANN GMBH [DE]

Cited by
CN108987148A

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DE 19945780 C1 20010118; DE 50005314 D1 20040325; EP 1087057 A2 20010328; EP 1087057 A3 20010816; EP 1087057 B1 20040218; US 6701833 B1 20040309

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