

Title (en)

Calender for treating a paper web

Title (de)

Kalender für die Behandlung einer Papierbahn

Title (fr)

Calandre pour le traitement d'une bande de papier

Publication

EP 0732443 B2 20040526 (DE)

Application

EP 96103275 A 19960304

Priority

DE 19508352 A 19950309

Abstract (en)

[origin: EP0732443A1] A calender for processing a paper web comprises a stack of alternately hard and soft rolls, with working nips formed between the pairs of rolls. The arrangement is such that one side of the paper and then the other comes into contact with the hard rolls. Either the stack comprises six to eight rolls (2-9) and includes two adjacent soft rolls (4, 5) which form a change-over nip (12), or two similar stacks having four or five rolls each are employed. The soft rolls have a plastic jacket whose recovery characteristics ensure that, if, e.g. a particle with a thickness of up to 1mm passes through the nip, the resultant permanent deformation in the roll has a depth of not more than 5% of the thickness of the particle. Pref. the plastic jacket, which consists of a fibre-reinforced epoxy resin, is designed for a nip pressure in excess of 42 N/mm², and the permanent deformation after passing a 1mm particle is less than 0.04 mm. The uppermost and/or the lowest rolls can be controllably flexed, and at least one of the rolls adjoining a working nip can be heated to more than 100 degrees C.

IPC 1-7

D21G 1/00; **D21G 1/02**

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 1/0233** (2013.01 - EP US)

Citation (opposition)

Opponent :

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- T.L. Schuelke, "Supercalender: Improvements that enhance quality, productivity and safety", Finishing and Converting Conference 1993, Seiten 289-309
- N. Gamsjäger: "Eölastische Kalenderwalzenbezüge auf Basis Faser-Kunststoff-Verbund", Sonderdruck aus "Das Papier" 48, 1994, Nr. 6, Seiten 334-348
- Scapa Kern GmbH: "Reference List "TopTec"", Seiten 1-5, November 1994; "Reference List "TopTec SC"", Seite 1/1, November 1994; "Elastic Calender Covers", Deckblatt und Seiten 1-4, Nr. ECC031-0.DOC, 06.05.1993
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EP0866167A1; US5988055A; EP0779393A1; US5746124A; US6688218B2

Designated contracting state (EPC)

DE FI FR GB

DOCDB simple family (publication)

DE 19508352 A1 19960912; **DE 19508352 B4 20050721**; DE 59600686 D1 19981126; EP 0732443 A1 19960918; EP 0732443 B1 19981021; EP 0732443 B2 20040526; US 5704285 A 19980106

DOCDB simple family (application)

DE 19508352 A 19950309; DE 59600686 T 19960304; EP 96103275 A 19960304; US 61217296 A 19960307