

Title (en)

Calander for treating a paper web

Title (de)

Kalander für die Behandlung einer Papierbahn

Title (fr)

Calandre pour le traitement d'une bande de papier

Publication

EP 0732445 B1 19981021 (DE)

Application

EP 96103277 A 19960304

Priority

- DE 19508351 A 19950309
- DE 19534911 A 19950920

Abstract (en)

[origin: EP0732445A1] A calender has a stack of hard and soft rolls with working nips formed between adjacent hard and soft rolls, and a change-over nip formed between two soft rolls. The total number of rolls is less than ten, and the change-over nip is at (in the case of an even number of rolls), or as close as possible (in the case of an odd number) to the centre of the stack. The effective weights of the rolls and any components attached to them is such that the sum of the path loads in the nips above the change-over nip is at least 80% of the sum of the path loads in the nips below it. Pref. the calender has eight rolls (2-9) and the sum of the products of the dwell time and average nip press. in the nips above the change-over nip is at least 80% of the corresponding sum for the lower nips. In order to reduce the effect of the weights of the rolls on the path loads in the nips, the roll stack may have the rolls arranged with their axes on an inclined line. The outermost rolls are zonally controlled flexed rolls, or may be soft rolls. The soft rolls may be hollow (to reduce their weight) and have a fibre-reinforced jacket. In one embodiment, the soft rolls have a jacket of a material of low abrasion resistance (e.g. flake or spheroidal graphite) which has an outer covering of fibre-reinforced resin with an adequate abrasion resistance.

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 (examination)

- GB 202753 A 19230830 - SAMUEL MILNE
- Das Papier, 16. Jahrgang, Heft 7, Juli 1962, Seiten 277-285, Heinz Mac und Peter Schlegel: "Untersuchungen über den Glättvorgang auf dem Rollensatinierkalander"
- Das Papier, Heft 10A, 1992, Seiten V182-V189, Peter Svenka: "Elastische Walzenbezüge für Superkalander und Softkalander"

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US6248215B1; WO2006108450A1

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DE 29521610 U 19950920; CA 2169976 A 19960221; EP 96103277 A 19960304; JP 5148296 A 19960308; US 61216996 A 19960307