

Title (en)

Process and apparatus for treating a web of paper or board

Title (de)

Verfahren und Vorrichtung zum Behandeln einer Bahn aus Papier oder Karton

Title (fr)

Procédé et appareil de traitement d'une bande de papier ou carton

Publication

EP 1593778 B1 20111005 (DE)

Application

EP 05101506 A 20050228

Priority

DE 102004022416 A 20040506

Abstract (en)

[origin: EP1593778A1] The functional coating is applied contactlessly, followed by satining (a glossing process) of the coated web. Satining is effected in a wide nip shoe-calender (9). (A wide nip (18) is a nip prolonged by pronounced indentation under pressure). The calender has a rotary shoe roller (10) with outer covering (11) around it, operating against a counter-roller (14). The nip temperature is held below 60[deg]C. With a wide nip length of at least 40 mm, the stretching load is set to 600 N/mm at most. The casing of the shoe roller is held fixed and the counter-roller is pressed into it. A curtain coater (4) applies the functional coating, which is thermo-sensitive. Web speed through the nip is 900-1300 m/min. Pressure applied in the nip compresses web thickness by 2.5% at most. An independent claim is included for corresponding equipment.

IPC 8 full level

D21H 25/14 (2006.01); **B05D 1/30** (2006.01); **D21G 1/00** (2006.01); **D21H 23/46** (2006.01); **D21H 23/50** (2006.01)

CPC (source: EP US)

D21H 25/14 (2013.01 - EP US); **D21H 23/46** (2013.01 - EP US); **D21H 23/50** (2013.01 - EP US); **Y10S 118/04** (2013.01 - EP US)

Cited by

EP2157239A1; EP1736321A1; US7833573B2

Designated contracting state (EPC)

DE FI SE

DOCDB simple family (publication)

EP 1593778 A1 20051109; EP 1593778 B1 20111005; DE 102004022416 A1 20051215; DE 102004022416 B4 20130221;
US 2005257906 A1 20051124; US 7422659 B2 20080909

DOCDB simple family (application)

EP 05101506 A 20050228; DE 102004022416 A 20040506; US 12295505 A 20050504