

Title (en)

METHOD OF FINISHING PAPER UTILIZING SUBSTRATA THERMAL MOLDING.

Title (de)

VEREDLUNGSVERFAHREN FÜR PAPIER MIT WÄRMEVERFORMUNG DER TRÄGERSCHICHTEN.

Title (fr)

PROCEDE DE FINISSAGE DE PAPIER FAISANT APPEL AU MOULAGE THERMIQUE DES COUCHES INFERIEURES.

Publication

EP 0245250 A4 19881123 (EN)

Application

EP 85905975 A 19851106

Priority

US 8502194 W 19851106

Abstract (en)

[origin: WO8702722A1] Process for producing gloss and smoothness on the surface of a paper web (1), comprising: A. advancing a web (1) of papermaking fibers through a nip formed by a smooth metal finishing drum (2) and a resilient backing roll (3, 5) providing a nip pressure on the web (1) of at least 13,780 KN/M<2> (2000 psi); and B. heating the drum (2) to a temperature at least high enough to heat a critical substrata portion of the web (1) to a temperature of at least the dynamic Tg of the fibers to provide an unexpected increase in gloss and surface flatness without excessively densifying the entire sheet.

IPC 1-7

D21F 11/00; **D21G 1/00**; **B05D 3/12**

IPC 8 full level

D21G 1/00 (2006.01); **D21F 11/00** (2006.01); **D21G 9/00** (2006.01)

CPC (source: EP)

D21G 9/009 (2013.01)

Citation (search report)

- [A] DE 1259692 B 19680125 - WARREN S D CO
- [AD] US 3124481 A 19640310
- [AD] US 3254593 A 19660607 - BEACHLER EDWARD D
- [AD] US 4012543 A 19770315 - RANGER HOWARD LEE, et al
- [T] DAS PAPIER, vol. 40, no. 10A, October 1986, pages V137-V143, Darmstadt, DE; G. HUNGER: "Derzeitiger Stand und Entwicklungstendenzen der Glättung und Satinage"
- See references of WO 8702722A1

Cited by

DE4112537A1; US5387782A; DE4321061A1; DE4321061B4; EP0943034B2; EP0598737B2

Designated contracting state (EPC)

AT CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

WO 8702722 A1 19870507; AT E53085 T1 19900615; DE 3577894 D1 19900628; EP 0245250 A1 19871119; EP 0245250 A4 19881123; EP 0245250 B1 19900523; FI 872939 A0 19870703; FI 872939 A 19870703; FI 88733 B 19930315; JP S63500188 A 19880121; JP S6356360 B2 19881108

DOCDB simple family (application)

US 8502194 W 19851106; AT 85905975 T 19851106; DE 3577894 T 19851106; EP 85905975 A 19851106; FI 872939 A 19870703; JP 50510785 A 19851106