

Title (en)
Process and apparatus for producing a smooth and glossy web

Title (de)
Verfahren und Vorrichtung zur Glätte- und Glanzerzeugung

Title (fr)
Procédé et dispositif pour produire une bande lisse et brillante

Publication
EP 0529385 B1 19960131 (DE)

Application
EP 92113589 A 19920810

Priority
DE 4126233 A 19910808

Abstract (en)
[origin: US5318670A] The invention has as its object the provision of a method and an apparatus for the generation of smoothness and gloss on paper which essentially precludes a re-erection of the surface fibers after the smoothing process. This is achieved in that the surface of a paper web (1) to be smoothed is heated to a temperature above the glass transition temperature of the fibers at the surface of the web without subjecting the web to a press nip, and then these fibers are deformed and fixed in the deformed state in a subsequent process step under the simultaneous action of pressure with shock cooling. Accordingly, there is associated with each surface of the paper web (1) to be smoothed a heating device (2) and also a subsequent cooled body (5, 9, 10) which presses against the surface.

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US 5318670 A 19940607; AT E133730 T1 19960215; CA 2075402 A1 19930209; CA 2075402 C 19990316; DE 4126233 C1 19920917; DE 59205219 D1 19960314; EP 0529385 A1 19930303; EP 0529385 B1 19960131; FI 923326 A0 19920721; FI 923326 A 19930209; FI 97408 B 19960830; FI 97408 C 19961210; JP 3495381 B2 20040209; JP H05209400 A 19930820

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US 92674192 A 19920806; AT 92113589 T 19920810; CA 2075402 A 19920806; DE 4126233 A 19910808; DE 59205219 T 19920810; EP 92113589 A 19920810; FI 923326 A 19920721; JP 20773892 A 19920804