

Title (en)
PROCESS AND APPARATUS FOR ROUGHENING A SUPPORT FOR PHOTSENSITIVE LAYERS

Publication
EP 0390033 B1 19930616 (DE)

Application
EP 90105701 A 19900326

Priority
DE 3910213 A 19890330

Abstract (en)
[origin: CA2013299A1] A mechanically roughened substrate is conveyed through an electrolytic bath and is given a superposed electrochemical roughening, which is carried out by means of electrodes which are arranged in the electrolytic bath at a specific spacing from the substrate. The electrodes are connected to corresponding windings on the secondary side of a three-phase transformer. The corresponding windings on the primary side of the three-phase transformer are connected to a three-phase frequency converter, to which three-phase current is applied via leads. The three-phase frequency converter transforms the line frequency of the three-phase current supplied into a frequency range of about 50 to 300 Hz at a voltage of between about 1 and 380 V.

IPC 1-7
B41N 3/03; **C25F 3/04**

IPC 8 full level
B41N 3/03 (2006.01); **B41N 3/04** (2006.01); **C25F 3/04** (2006.01)

CPC (source: EP KR US)
B41N 3/03 (2013.01 - KR); **B41N 3/034** (2013.01 - EP US); **C25F 3/04** (2013.01 - EP US); **Y10S 204/09** (2013.01 - EP US)

Cited by
US6261438B1; EP0967302A1; CN102165106A; EP1013468A1; EP0585586A1; US5358610A; US6221236B1

Designated contracting state (EPC)
DE GB IT

DOCDB simple family (publication)
EP 0390033 A1 19901003; **EP 0390033 B1 19930616**; BR 9001389 A 19910409; CA 2013299 A1 19900930; DE 3910213 A1 19901011; DE 59001749 D1 19930722; JP H02298300 A 19901210; KR 900014155 A 19901023; US 5082537 A 19920121

DOCDB simple family (application)
EP 90105701 A 19900326; BR 9001389 A 19900327; CA 2013299 A 19900329; DE 3910213 A 19890330; DE 59001749 T 19900326; JP 8477590 A 19900330; KR 900004208 A 19900329; US 50095590 A 19900329