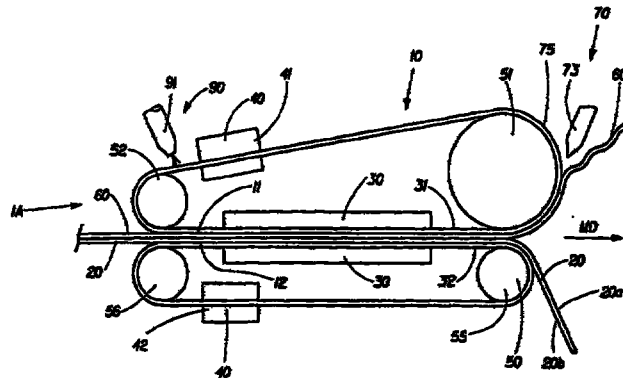


PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : D21F 11/14, 5/00		A1	(11) International Publication Number: WO 99/32716
			(43) International Publication Date: 1 July 1999 (01.07.99)
(21) International Application Number: PCT/US98/26459 (22) International Filing Date: 14 December 1998 (14.12.98) (30) Priority Data: 08/994,927 19 December 1997 (19.12.97) US (71) Applicant: THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). (72) Inventors: McLAUGHLIN, Carol, Ann; 5857 Lisa Court, Mason, OH 45040 (US). TROKHAN, Paul, Dennis; 1356 Warvel Road, Hamilton, OH 45013 (US). RICHARDS, Mark, Ryan; 2912 Elmo Place, Middletown, OH 45042 (US). STELLJES, Michael, Gomer, Jr.; 8354 Ashley Hall Court, West Chester, OH 45069 (US). HUSTON, Larry, Leroy; 8141 Pepperwood Drive, West Chester, OH 45069 (US). (74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).		(81) Designated States: AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>	

(54) Title: **PROCESS AND APPARATUS FOR MAKING FORESHORTENED CELLULOSIC STRUCTURE**

(57) Abstract

A process and an apparatus for making a foreshortened paper web are disclosed. A wet web (60) disposed on a fluid-permeable papermaking fabric (20) is being pressed between two parallel and mutually opposed first and second press surfaces (11, 12), the first press surface (11) contacting the web (60), and the second press surface (12) contacting the fabric. In the continuous process, the press surfaces, the web and the fabric (20) move in a machine direction. Under pressure, at least selected portions of the web become densified and adhered to the first press surface (11) which can be treated with a creping adhesive (91). The first surface (11) is heated to create a temperature differential between two surfaces. The temperature differential causes the water contained in the web (60) to move from the web into the fabric (20), thereby drying the web. After the web is released from the pressure, the web is foreshortened either by creping or by transferring the web to a slower moving transfer fabric. Creping is performed with a creping doctor blade (73) juxtaposed with the creping surface having the web adhered thereto. A creping adhesive may be deposited on the creping surface according to a predetermined pattern. The creping surface may comprise the first press surface. Optionally, the web may be calendered after being foreshortened.