

98051667

1985

**PCT**WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: D21H 27/00 // 11:02	A1	(11) International Publication Number: WO 97/33043 (43) International Publication Date: 12 September 1997 (12.09.97)
(21) International Application Number: PCT/US97/02485 (22) International Filing Date: 14 February 1997 (14.02.97) (30) Priority Data: 50/013,308 8 March 1996 (08.03.96) US Not furnished 17 December 1996 (17.12.96) US (71) Applicant: KIMBERLY-CLARK WORLDWIDE, INC. [US/US]; 401 North Lake Street, Neenah, WI 54956 (US). (72) Inventors: HOLLENBERG, David, Henry; 201 West Morning- side Drive, Kaukauna, WI 54130 (US). HORTON, James, Ellis, Jr.; 1106 East North Street, Appleton, WI 54911 (US). LAKE, Andrew, Michael; 501 Jerelyn Court, Combined Locks, WI 54113 (US). (74) Agents: CROFT, Gregory, E. et al.; Kimberly-Clark World- wide, Inc., 401 North Lake Street, Neenah, WI 54956 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, 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, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the</i> <i>claims and to be republished in the event of the receipt of</i> <i>amendments.</i>
(54) Title: HIGH-DENSITY ABSORBENT STRUCTURE (57) Abstract Low-density uncreped through-air-dried webs containing bleached chemithermomechanical pulp fibers and a wet-strength resin are calendered to significantly increase density and reduce caliper. When wetted, these webs substantially return to their original caliper and density and substantially regain their original fluid-handling characteristics. Consequently, these webs are very thin when dry and thick when wet. They can be used for a wide variety of applications, including paper towels, wipers and fluid-handling components for infant care and personal care products.		