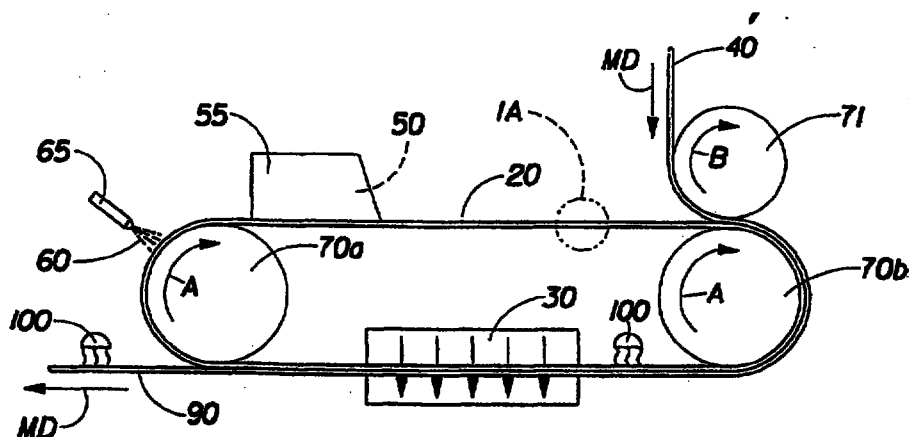




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(21) International Application Number: PCT/US99/20129 (22) International Filing Date: 1 September 1999 (01.09.99) (30) Priority Data: 09/150,385 9 September 1998 (09.09.98) US (71) Applicant: THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). (72) Inventors: AMPULSKI, Robert, S.; 5674 Red Oak Drive, Fairfield, OH 45014 (US). VITENBERG, Vladimir; Apartment 1401, 2200 Victory Parkway, Cincinnati, OH 45206 (US). HUSTON, Larry, L.; 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: AE, 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, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR (Utility model), 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, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, 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 PAPERMAKING BELT USING FLUID PRESSURE DIFFERENTIAL

**(57) Abstract**

A process and an apparatus for making a papermaking belt (90) are provided, the belt comprising a reinforcing structure (40) and a resinous framework (50) joined together. The preferred continuous process comprises the steps of depositing a flowable resinous material onto a patterned molding surface (20); continuously moving the molding surface and the reinforcing structure at a transport velocity such that at least a portion of the reinforcing structure is in a face-to-face relationship with a portion of the molding surface; applying a fluid pressure differential to transfer the flowable resinous material from the molding surface onto the reinforcing structure and causing the flowable resinous material and the reinforcing structure to join together; and solidifying the resinous material thereby forming the resinous framework joined to the reinforcing structure. The apparatus comprises a molding member having a patterned molding surface preferably comprising a plurality of molding pockets to carry a flowable resinous material therein; a means for depositing the flowable resinous material into the molding pockets of the molding surface; a means for moving the reinforcing structure and the molding member in a predetermined direction; and a means for creating a fluid pressure differential sufficient to transfer the flowable resinous material from the molding member to the reinforcing structure.