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(21) International Application Number: PCT/US96/07461 (22) International Filing Date: 22 May 1996 (22.05.96) (30) Priority Data: 08/458,778 2 June 1995 (02.06.95) US (71) Applicant: THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). (72) Inventors: BYRNE, Thomas, Timothy; 7745 Cedar Falls Lane, West Chester, OH 45069 (US). LOCKWOOD, Frederick, Edward; 3801 O'Leary Avenue, Cincinnati, OH 45236 (US). McNEIL, Kevin, Benson; 8126 Creek Woods Place, Maineville, OH 45039 (US). (74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217 (US).	(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, 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. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	

(54) Title: **METHOD OF CONTROLLING A TURRET WINDER**

(57) Abstract

A web winding apparatus (90) and a method of operating the apparatus are disclosed. The apparatus can include a turret assembly (200), a core loading apparatus (1000), and a core stripping apparatus (2000). The turret assembly (200) supports rotatably driven mandrels (300) for engaging hollow cores (302) upon which a paper web (50) is wound. Each mandrel (300) is driven in a closed mandrel path (320), which can be non-circular. The core loading apparatus (1000) conveys cores (302) onto the mandrels (300) during movement of the mandrels (300) along the core loading segment (322) of the closed mandrel path (320), and the core stripping apparatus (2000) removes each web wound core (302, 51) from its respective mandrel (300) during movement of the mandrel (200) along the core stripping segment (326) of the closed mandrel path (320). The turret assembly (200) can be rotated continuously, and the sheet count per wound log (51) can be changed as the turret assembly (200) is rotating. The apparatus (90) can also include a mandrel (300) having a deformable core engaging member (3100). The web (50) is transferred from a driven bedroll (59) to the turret assembly (200). The turret assembly (200) is individually driven and mechanically decoupled from the bedroll (59). The core loading apparatus (1000) and the core stripping apparatus (2000) are both individually driven and are mechanically decoupled from the rotation of the bedroll (59) and of the turret assembly (200). A common position reference is provided which can be a function of the angular position of the bedroll (59) or a function of its accumulated number of revolutions. The position of the turret assembly (200), the core loading apparatus (100) and of the core stripping apparatus (2000) is controlled in relation to the common position reference.

