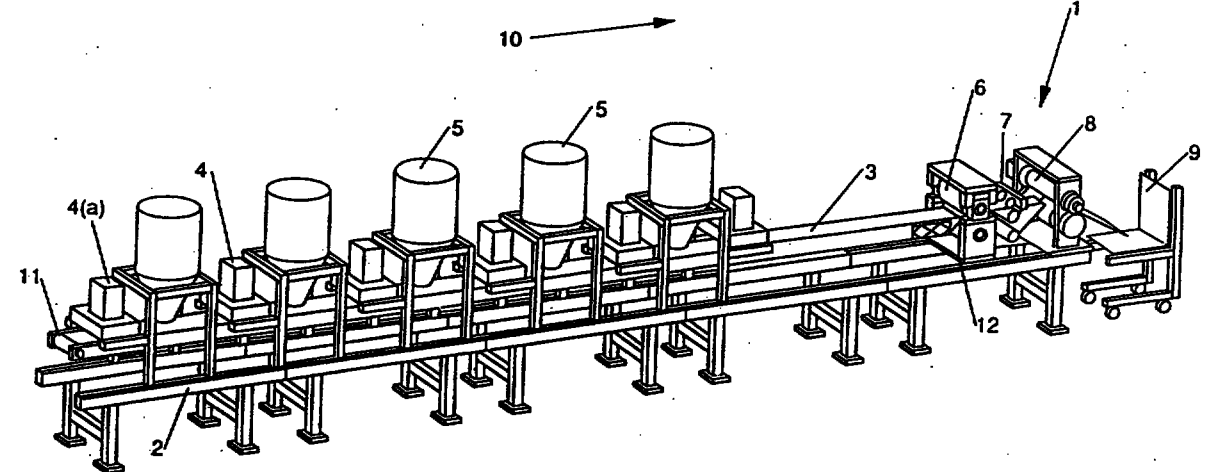




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁵ : A61L 15/60, A61F 13/15 C08J 5/18, B29C 35/06 B32B 31/12	A1	(11) International Publication Number: WO 94/07547 (43) International Publication Date: 14 April 1994 (14.04.94)
(21) International Application Number: PCT/US93/09022 (22) International Filing Date: 23 September 1993 (23.09.93) (30) Priority data: 07/955,638 2 October 1992 (02.10.92) US (71) Applicant: THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). (72) Inventors: REZAI, Ebrahim ; Rokoh-Kan, #203, 6-7, Miy- atsuka-cho, 45239, Ashiya-shi, Hyogo 659 (JP). LAHR- MAN, Frank, Henry ; 10642 Thornview Drive, Cincin- nati, OH 45241 (US). IWASAKI, Toshiaki ; East Coat 2 Bangai, #602, 1-14, Koyo-cho-Naka, Higashinada-ku, Kobe 658 (JP). BENSON, Douglas, Herrin ; 185 Jamis- on Road, West Harrison, IN 47060 (US). KOLODESH, Michael, Sulya ; Apt. 1212, 5-15, Koyo-cho-Naka, Hi- gashinada-ku, Kobe 658 (JP).		(74) Agents: REED, T., David et al.: The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45202 (US). (81) Designated States: AU, BB, BG, BR, BY, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, 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>
This Sheet Has Been Replaced 		
(54) Title: METHOD AND APPARATUS FOR MAKING COHESIVE SHEETS FROM PARTICULATE ABSORBENT POLYMERIC COMPOSITIONS		
		
(57) Abstract A method and apparatus (1) for making a cohesive sheet from particulate substantially water insoluble, absorbent hydrogel-forming polymer materials. The method comprises the steps of continuously layering dry absorbent gelling particles onto a conveyor. The particles are then sprayed with a liquid mixture, which is a solution of water and a cross-linking agent for the polymers in the particulate material. The amount sprayed is sufficient to cause effective surface cross-linking of the particulate material after the sheet is cured. The layering and spraying steps can then be repeated a number of times if desired. Pressure is then applied to the particulate material by passing it through a pair of compaction rolls. The apparatus (1) comprises a conveyor (3), one or more feeders (5) for layering the dry absorbent gelling particles onto the conveyor, one or more sprayers (4) for spraying the particles on the conveyor with the liquid mixture and a pair of compaction rolls (6).		