

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : B65D 47/34, B05B 11/00	A1	(11) International Publication Number: WO 98/09880 (43) International Publication Date: 12 March 1998 (12.03.98)
(21) International Application Number: PCT/US97/15708 (22) International Filing Date: 5 September 1997 (05.09.97) (30) Priority Data: 08/711,700 6 September 1996 (06.09.96) US (71) Applicant: THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). (72) Inventors: BARTSCH, Eric, Richard; Apartment 32, 51 Towne Commons Way, Cincinnati, OH 45215 (US). HERSHEY, Donald, Emerson; 3156 Willis Avenue, Cincinnati, OH 45208 (US). (74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217 (US).		(81) Designated States: AU, BR, CA, CN, IL, JP, KR, MX, SG, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>
(54) Title: DISPENSING PUMP (57) Abstract A dispensing pump (12) including an actuator (18) coupled to a resilient bellow (20), wherein the bellow (20) is in fluid communication with the contents of a container (10) via an inlet valve (34). Expansion of the bellow (20), caused by the resilience of the bellow (20), creates negative pressure causing the contents of the container (10) to be drawn through the inlet valve (34) and into a space defined by the bellow (20). The dispensing pump (12) also includes an outlet valve in fluid communication with the bellow such that compression of the bellow caused by the application of pressure to the actuator creates positive pressure within the bellow causing the contents held within the bellow to be forced through the outlet valve and out of an outlet of the dispensing pump. A closure arm (68) mounted within the bellow (20) is movable between a first position where the closure arm (68) prevents the inlet valve (34) from opening and a second position where the closure arm (68) is not a hindrance to the flow of material through the inlet valve (34). 		