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(71) Applicant and

(72) Inventor: **AZZAR, James, Douglas** [US/US]; 208 Pioneer Club Road S.E., East Grand Rapids, Michigan 49506 (US).

(74) Agents: **SLOAN, Robert, V.** et al.; Sughrue Mion, PLLC, 2100 Pennsylvania Ave., NW, Suite 800, Washington, District of Columbia 20037-3213 (US).

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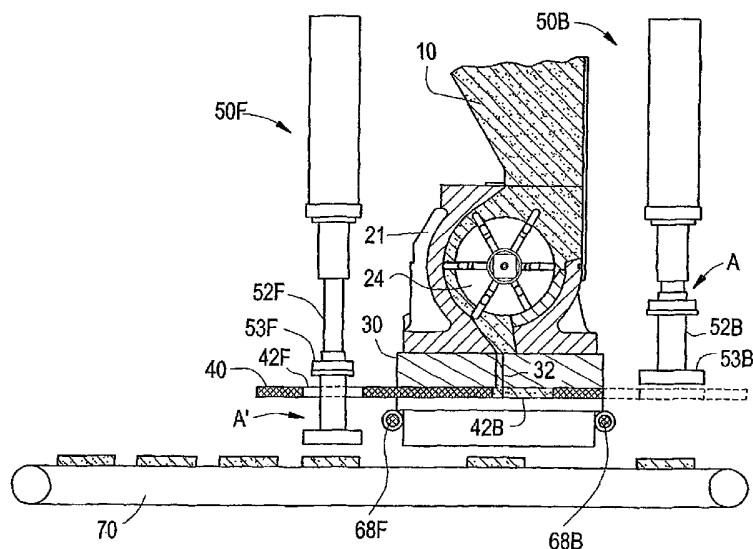
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(54) Title: APPARATUS AND METHOD FOR PORTIONING FLOWABLE MATERIALS



(57) Abstract: The invention relates to a portioning apparatus and a method. The apparatus includes a hopper (10) and augers (12) to push flowable material (5) to a rotor (20). Retractable vanes (28) on the rotor push the flowable material toward a fill slot (32) as the rotor rotates. Below the fill slot, there is a mold plate (40) with front and back mold cavities (42F, 42B). In a front fill position, the mold plate is positioned so the front mold cavities are filled with flowable material from the fill slot while flowable material in the back mold cavities are pushed out by knockouts (50). In a back fill position, the flowable material in the front mold cavities are pushed out by front knockouts while the back mold cavities are filled with flowable material from the fill slot. The mold plate reciprocates between the front fill position and the back fill position for high output of portioned material.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/18930

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B29C 45/40

US CL : 264/328.8, 328.11; 425/556,572,574,575,588

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 264/328.8, 328.11; 425/183,197,556,567,572,574,575,585,586,588,DIG3

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,118,831 A (HOLLY et al) 14 March 1989 (14.03.1989)	
A	US 4,768,941 A (WAGNER) 06 September 1988 (06.09.1988)	
A	US 6,416,314 B1 (LABRUNO) 09 July 2002 (09.07.2002)	
A, P	US 6,604,935 B2 (TOURNOUR et al) 12 August 2003 (12.08.2003)	
A, P	US 6,713,111 B1 (TOURNOUR et al) 30 March 2004 (30.03.2004)	

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner of Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Tim Heitbrink

Telephone No. 571-272-0987