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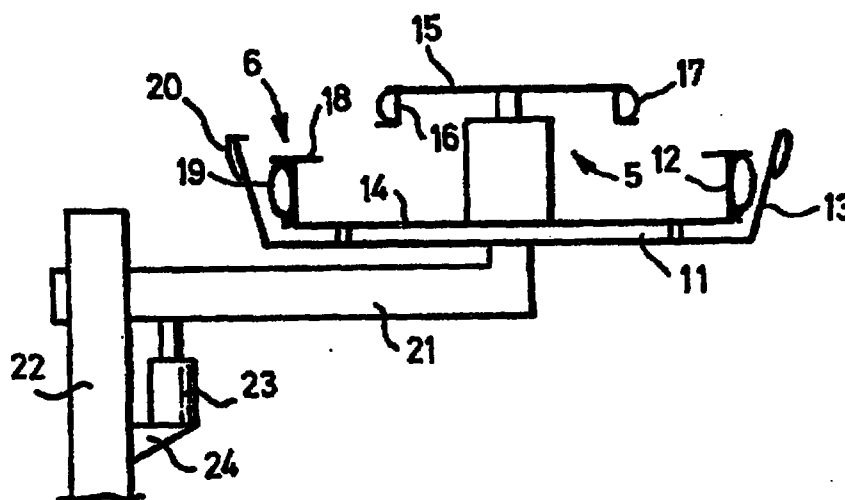
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International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : B65G 69/18		A1	(11) International Publication Number: WO 97/05050
			(43) International Publication Date: 13 February 1997 (13.02.97)
(21) International Application Number: PCT/GB96/01632		(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, 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).	
(22) International Filing Date: 5 July 1996 (05.07.96)			
(30) Priority Data: 9515256.7 25 July 1995 (25.07.95) GB			
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		Published With international search report. PCT + PF13 + PF13 Amends Amends 	

(54) Title: MATERIAL HANDLING APPARATUS



(57) Abstract

The invention relates to apparatus (1) for handling flowable material, particularly particulate material, which is held in a discharge container such as an IBC (2) having an opening (3) normally covered by a transport cap (4), the apparatus (1) comprising a device (5) which is adapted to engage and remove the transport cap (4) and means (6) to cover at least a rim of a cap (4) during such removal. The problem of contamination is overcome using the apparatus (1) which is in the form of an annular metal (in the embodiment) cowl (11) which has two peripheral spaced apart upstanding walls (12, 13), the inner wall rising from an internal base (14) in the embodiment and from which also rises the engaging and removing device (5) which in the embodiment shown comprises a pneumatic piston and cylinder arrangement. The piston carries an extractor means in the form of an annular disc or spider (15) having a depending peripheral wall (16) which carries an inflatable ring or tyre (17). The external surface of the inner wall (12) carries at its rim a lip seal (18) which is mounted over an inflatable ring (19). The outer wall (13) is higher than the inner wall (12), and carries an annular seal (20) too, which extends over the lip seal (18).