



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : B21D 39/00	A1	(11) International Publication Number: WO 00/47346 (43) International Publication Date: 17 August 2000 (17.08.00)
(21) International Application Number: PCT/US00/01298 (22) International Filing Date: 19 January 2000 (19.01.00) (30) Priority Data: 09/248,163 10 February 1999 (10.02.99) US (71) Applicant: THE JOSEPH COMPANY [US/US]; Suite 310, 28202 Cabot Road, Laguna Niguel, CA 92677 (US). (72) Inventor: SILLINCE, Mark, Erich; 9 Yew Tree Close, Eaton Bray, Dunstable, Beds (GB). (74) Agent: ROBBINS, Billy, A.; Fulbright & Jaworski L.L.P., 29th floor, 865 S. Figueroa Street, Los Angeles, CA 90017-2576 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>

(54) Title: MANUFACTURING PROCESS FOR CONTAINER INCLUDING A HEAT EXCHANGE UNIT AS AN INTEGRAL PART THEREOF

(57) Abstract

A method of manufacturing a container for receiving a food or beverage and including a heat exchange unit (12) as an integral part. The container is formed with an opening in a closed end which opening is mated with a heat exchange unit containing an adsorbent material and is permanently secured along with a valve and valve cap. The heat exchange unit is charged with a medium which, when activated, will heat or cool the food or beverage in the container depending upon whether the heat exchange unit is exothermic or endothermic.

