



(51) International Patent Classification:

A23G 9/04 (2006.01) B67D 1/08 (2006.01)

(21) International Application Number:

PCT/US2018/020021

(22) International Filing Date:

27 February 2018 (27.02.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/464,490 28 February 2017 (28.02.2017) US

(71) Applicant: **THE COCA-COLA COMPANY** [US/US];
One Coca-Cola Plaza, NW, Atlanta, Georgia 30313 (US).

(72) Inventor: **SEKITA, Miyako**; 4-4-14 Aomi, Koto-ku,
Tokyo, 135-0064 (JP).

(74) Agent: **GENCO, Brian C.** et al.; MEUNIER CARLIN &
CURFMAN LLC, 999 Peachtree St. NE, Suite 1300, At-
lanta, Georgia 30309 (US).

(81) Designated States (unless otherwise indicated, for every

kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every

kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

(54) Title: WATERLESS ICE CRYSTAL NUCLEATOR FOR SUPERCOOLED BEVERAGES

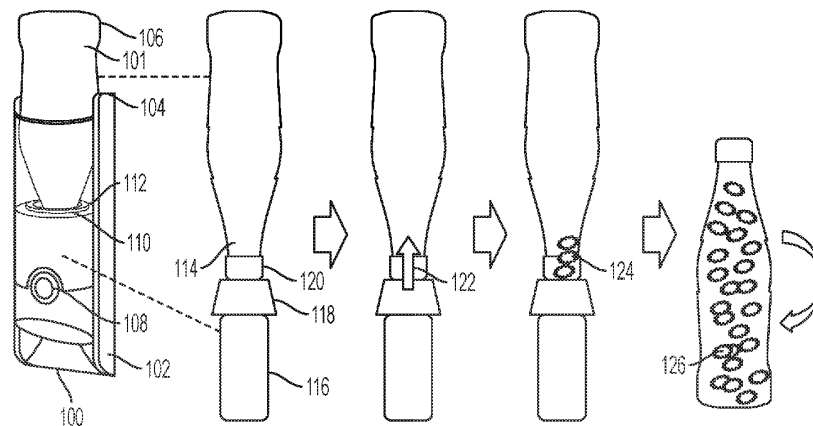


FIG. 1

(57) Abstract: A beverage nucleator system for a supercooled beverage container may include a frame for receiving a beverage container and an ultrasonic device positioned therein. The frame may include a beverage container aperture therein sized to allow direct contact between an ultrasonic transmitter coupled to the ultrasonic device and a closure on the container. The ultrasonic transmitter may operate at a 28 kHz frequency with a power of 5 W for 1-5 seconds. The beverage nucleator system provides for consistent nucleation of supercooled beverages without requiring a fluid or gel transmission medium.

[Continued on next page]

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

— *with international search report (Art. 21(3))*