

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
03 June 2021 (03.06.2021)



(10) International Publication Number
WO 2021/108024 A1

- (51) International Patent Classification:
B65B 3/00 (2006.01) *B65B 7/28* (2006.01)
A61J 1/10 (2006.01) *B65B 31/02* (2006.01)
A61J 1/14 (2006.01) *B65B 43/14* (2006.01)
A61M 1/00 (2006.01) *B65B 57/00* (2006.01)
B65B 3/26 (2006.01) *B65B 51/10* (2006.01)
B65B 7/02 (2006.01)
- (21) International Application Number:
PCT/US2020/052774
- (22) International Filing Date:
25 September 2020 (25.09.2020)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
62/939,870 25 November 2019 (25.11.2019) US
- (71) Applicant: **DEKA PRODUCTS LIMITED PARTNERSHIP** [US/US]; 340 Commercial Street, Manchester, NH 03101-1129 (US).
- (72) Inventors: **KAMEN, Dean**; 15 Westwind Drive, Bedford, NH 03110 (US). **BIASI, John, J.**; 7 Jared Circle, Nashua, NH 03063 (US). **TRACEY, Brian, D.**; 151 Talent Rd, Litchfield, NH 03052 (US). **MORGAN, Frederick**; 9 Arrowhead Drive, Bedford, NH 03110 (US). **DUBE, Jeremy, S.**; 47 Loon Cove Rd., Alton Bay, NH 03810 (US). **BRADLEY, Margaret, B.**; 67 West Merrimack St. Apt. 2, Manchester, NH 03101 (US). **HUGHES, Thaddeus, J.**; 106 W River Drive, Manchester, NH 03104 (US). **JOHNSON, Hans, E.**; 104 Balsam Place, Apt. 203, Tewksbury, MA 01876 (US). **HAYNES, Michael, J.**; 54 Wilton St., Manchester, NH 03103 (US). **NARO, Trevor**,

(54) Title: SYSTEM FOR PRODUCING AND PACKAGING FLUID, SEALING MEMBER DISPENSER, RESERVOIR FEEDING APPARATUS, BAG SEALING APPARATUS, RESERVOIR FILLING SET, METHOD FOR FILLING A RESERVOIR OR A BAG, FILLING AND SAMPLING NOZZLE

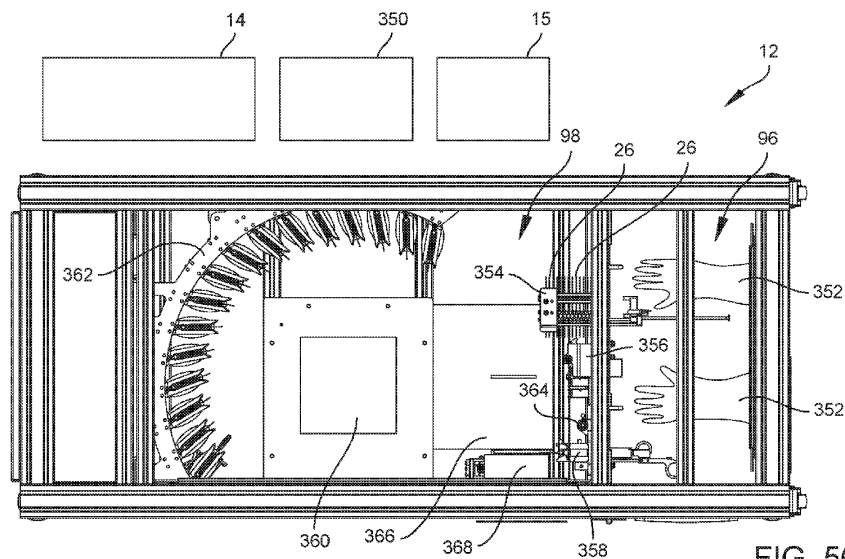


FIG. 56

(57) Abstract: A system for producing and packaging fluid may comprise a water distillation device. The system may further comprise a mixing circuit coupled to an output of the water distillation device and including a source of concentrate. The mixing circuit may include a plurality of flow controllers configured to adjust the flow of fluid through the mixing circuit so as to generate a preset fluid. The system may further comprise an enclosure including an antechamber and a packaging compartment. The system may further comprise a reservoir dispenser in the packaging compartment having a feed plate and a housing block. The reservoir dispenser may include a bias member which urges the feed plate toward the housing block. The system may further comprise a filling station in the packaging compartment including a filling nozzle coupled to the mixing circuit. The system may further comprise a sealing station in the packaging

[Continued on next page]

WO 2021/108024 A1

M.; 6 Piermont Street, Nashua, NH 03063 (US). **LAN-GENFELD, Christopher, C.**; 35 Cathedral Circle, Nashua, NH 03063 (US). **LAWLER, Robert, H. Jr.**; 557 South Commerical Street, Apt 409, Manchester, NH 03101 (US). **CURTIN, Paul, R.**; 11 Griffin Avenue, Londonderry, NH 03063 (US). **MOREAU, Timothy, D.**; 43 Mission Avenue, Manchester, NH 03104 (US). **WALDRON, Keller**; 555 Canal Street, Apt. 805, Manchester, NH 03101 (US). **LOPEZ, Manuel**; 113 Willow Street, Apt. 2, Manchester, NH 03013 (US). **GEIB, Alexander, N.**; 3124 Countryside Drive, Allison Park, PA 15101 (US). **FULTON, Colleen, N.**; 111 Tenney Hill Road, Dunbarton, NH 03046 (US). **KILIAN, Donald**; 12 Spring Street, Epsom, NH 03234 (US). **TRILLING, Jeremy, E.**; 1412 Cedar Avenue, Napa, CA 94559 (US). **HURLEY, Gregory, J.**; 32 Partridge Road, Windham, NH 03087 (US).

(74) **Agent: MANDRO, Kevin, D.**; Toohey Law Group LLC, 340 Commercial Street, Manchester, NH 03101 (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, IT, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

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

compartment having a ram and a sealing member dispenser. The system may further comprise a quarantine repository in the packaging compartment having a plurality of reservoir holders. The system may further comprise a labeler in the packaging compartment. The system may further comprise an output chute from the packaging compartment to an exterior of the enclosure.