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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
30 January 2020 (30.01.2020)

WIPO | PCT

(10) International Publication Number
WO 2020/023834 A1

(51) International Patent Classification:
C12M 1/00 (2006.01) *C12M 1/34* (2006.01)

(21) International Application Number:
PCT/US2019/043591

(22) International Filing Date:
26 July 2019 (26.07.2019)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

62/711,264	27 July 2018 (27.07.2018)	US
62/722,626	24 August 2018 (24.08.2018)	US
62/749,809	24 October 2018 (24.10.2018)	US

(71) Applicant: **ABEC, INC.** [US/US]; 3998 Schelden Circle, Bethlehem, Pennsylvania 18017 (US).

(72) Inventors: **RUDOLPH, Eric**; c/o ABEC, Inc., 3998 Schelden Circle, Bethlehem, Pennsylvania 18017 (US). **SILVERBERG, Pete**; c/o ABEC, Inc., 3998 Schelden Circle, Bethlehem, Pennsylvania 18017 (US).

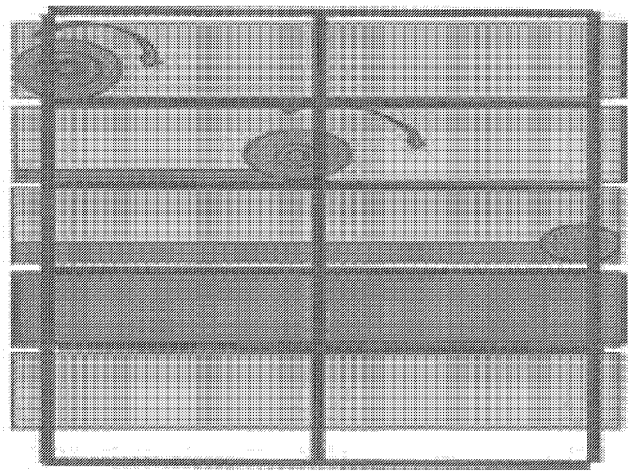
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, 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).

WO 2020/023834 A1

(54) **Title:** DISPOSABLE CONTAINERS AND REACTION SYSTEMS

FIG. 1
Prior art (US 2016/0272931)



(57) **Abstract:** This disclosure relates to equipment utilized to manufacture chemical agents, particularly biopharmaceuticals, using Disposable Containers (DCs), and particular those used for storing and/or supplying buffers and other solutions in systems for carrying out reactions in reaction vessels. In some embodiments, the DC comprises a first and second end, one or more attachment connectors at the first end, and one or more conveyance connectors at the second end. Systems comprising and methods for using and/or testing the same are also disclosed.

[Continued on next page]

Published:

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

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*