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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
15 June 2023 (15.06.2023)

WIPO | PCT

(10) International Publication Number
WO 2023/107434 A1

(51) International Patent Classification:
B01L 3/00 (2006.01)

(21) International Application Number:
PCT/US2022/051938

(22) International Filing Date:
06 December 2022 (06.12.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/288,287 10 December 2021 (10.12.2021) US

(71) Applicant: **ILLUMINA, INC.** [US/US]; 5200 Illumina Way, San Diego, CA 92122 (US).

(72) Inventors: **CRIVELLI, Paul**; c/o Illumina, Inc., 5200 Illumina Way, San Diego, CA 92122 (US). **DAVIDSON, Justin**; c/o Illumina, Inc., 5200 Illumina Way, San Diego, CA 92122 (US). **KHOO, Norman**; c/o Illumina, Inc., 5200 Illumina Way, San Diego, CA 92122 (US).

(74) Agent: **SU, Katharine, Nuehring** et al.; Marshall, Gerstein & Borun LLP, 233 S. Wacker Drive, 6300 Willis Tower, Chicago, IL 60606-6357 (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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, 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, CV, 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,

(54) Title: REAGENT RESERVOIRS AND RELATED SYSTEMS AND METHODS

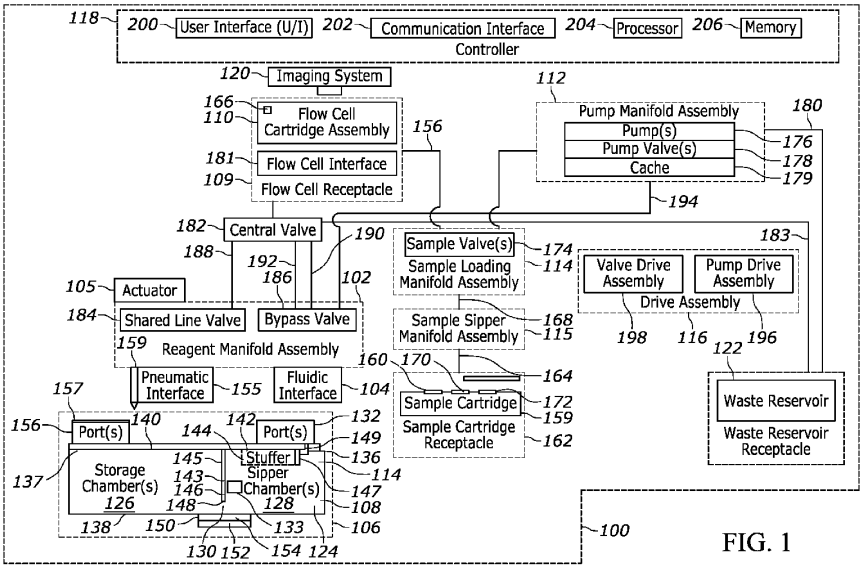


FIG. 1

(57) Abstract: Reagent reservoirs and related systems and methods are disclosed. In accordance with a first implementation, an apparatus includes a system and a reagent reservoir. The system includes a reagent reservoir receptacle. The reagent reservoir is received within the reagent reservoir receptacle and has a body and a fluidic port. The body defines a storage chamber, a sipper chamber, and a fluidic sinus fluidly coupling the storage chamber and the sipper chamber. The fluidic port is fluidly coupled to the sipper chamber.

[Continued on next page]

WO 2023/107434 A1

LV, MC, ME, 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).

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))*