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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
31 March 2022 (31.03.2022)

WIPO | PCT

(10) International Publication Number
WO 2022/067184 A1

(51) International Patent Classification:
B01L 3/00 (2006.01) *C12M 1/34* (2006.01)
C12M 1/00 (2006.01) *C12M 3/00* (2006.01)

(21) International Application Number:
PCT/US2021/052206

(22) International Filing Date:
27 September 2021 (27.09.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/084,271 28 September 2020 (28.09.2020) US

(71) Applicant: **COMBINATI INCORPORATED** [US/US]; 5823 Newton Drive, Carlsbad, California 92008 (US).

(72) Inventors: **HUNG, Ju-Sung**; 5823 Newton Drive, Carlsbad, California 92008 (US). **LINN, Felicia**; 9691 Cabernet Court, Patterson, California 95363 (US). **ZAYAC, Andrew**; 1129 Junipero Ave, Redwood City, California 94061 (US).

(74) Agent: **ADRIANOWYCZ, Matthew**; Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, California 94304-1050 (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).

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

(54) **Title:** DEVICES AND METHODS FOR SAMPLE PROCESSING

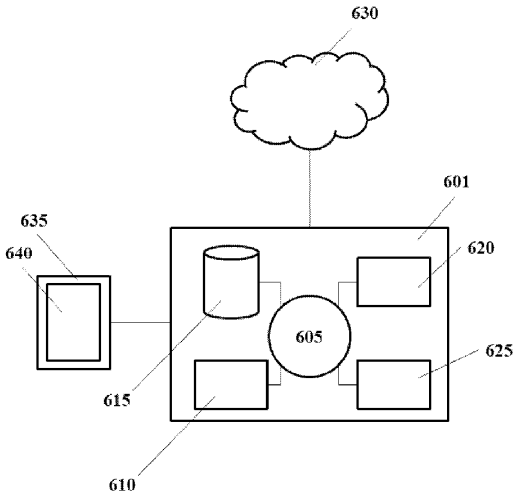


FIG. 6

(57) **Abstract:** The present disclosure provides systems, methods, and devices for processing a biological sample. The device may be a microfluidic device comprising a first channel, at least one chamber, and a second channel. The first channel may be in fluid communication with the chamber. The chamber may be configured to receive a portion of the biological sample from the channel. The second channel may be configured for pressurized outgassing of the chamber, first channel, or both the chamber and first channel.

WO 2022/067184 A1