

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
11 April 2024 (11.04.2024)



(10) International Publication Number
WO 2024/077065 A3

(51) International Patent Classification:

C12M 3/00 (2006.01) C12M 1/34 (2006.01)

(21) International Application Number:

PCT/US2023/075947

(22) International Filing Date:

04 October 2023 (04.10.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/378,334 04 October 2022 (04.10.2022) US

(71) Applicant: **RAPID MICRO BIOSYSTEMS, INC.**

[US/US]; 1001 Pawtucket Blvd West, Suite 280, Lowell, Massachusetts 01854 (US).

(72) Inventors: **BLACK, Hunter**; c/o RAPID MICRO

BIOSYSTEMS, INC., 1001 Pawtucket Blvd West, Suite 280, Lowell, Massachusetts 01854 (US). **LEFORT, David**; c/o RAPID MICRO BIOSYSTEMS, INC., 1001 Pawtucket

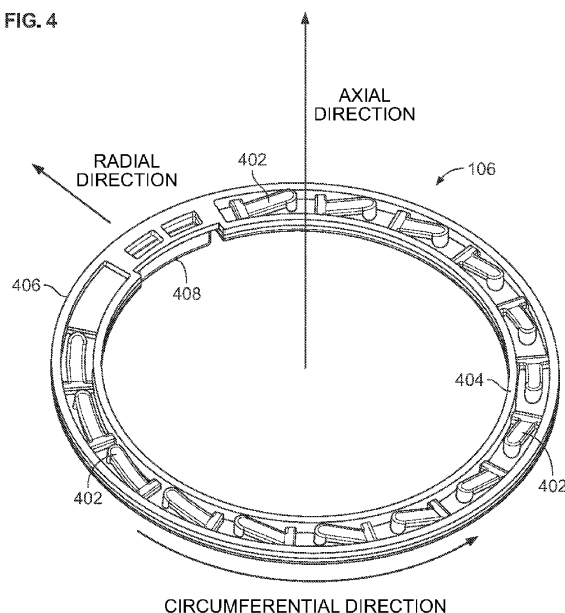
et Blvd West, Suite 280, Lowell, Massachusetts 01854 (US). **MORAD, Blair**; 132 County Rd., Ipswich, Massachusetts 01938 (US). **CHUNG, Victor**; 51 Dell Ave, Melrose, Massachusetts 02176 (US). **BEACH, Kaitlin**; 13 Kenilworth Road, Shrewsbury, Massachusetts 01545 (US). **MARTIN, Jason**; 49 Bridle Path, Sudbury, Massachusetts 01776 (US). **GRIFFIN, Frank Owen**; 100 Lovejoy Wharf, 11N, Boston, Massachusetts 02114 (US). **FRANCO, Ethan**; 14 Dawes St, Unit 1, Dorchester, Massachusetts 02125 (US). **VOLIS, Kayla**; 144 Thissell Ave, Unit 3, Dracut, Massachusetts 01826 (US). **ISAACS, Toby**; 418 East County Rd, Rutland, Massachusetts 01543 (US). **PARADIS, Taylor**; 276 Mill Rd, Unit 2103, Chelmsford, Massachusetts 01824 (US).

(74) Agent: **CANNING, Kevin J.** et al.; Goodwin Procter LLP, 100 Northern Avenue, Boston, Massachusetts 02210 (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,

(54) Title: CUTTING SUBASSEMBLY AND CONDITIONING ASSEMBLY FOR AN ENVIRONMENT

FIG. 4



(57) Abstract: This application relates to improvements in environments for microbial testing. Exemplary embodiments provide a uniquely configured tray containing an environment conditioning material, such as an oxygen scavenger material, for use with a cassette assembly. Furthermore, some embodiments provide a cutting mechanism that allows the tray to be reliably breached, thereby exposing the material inside to the environment. Some embodiments can cut open the material with specially-configured cutter teeth, which can easily be deployed by twisting or pushing two halves of the cassette assembly.

[Continued on next page]



WO 2024/077065 A3

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, MU, 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, SC, 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, 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))*

(88) Date of publication of the international search report:

02 August 2024 (02.08.2024)