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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
12 October 2023 (12.10.2023)

WIPO | PCT

(10) International Publication Number
WO 2023/196391 A1

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

(21) International Application Number:
PCT/US2023/017557

(22) International Filing Date:
05 April 2023 (05.04.2023)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/328,382 07 April 2022 (07.04.2022) US

(71) Applicant: **MIRROR BIOLOGICS, INC.** [US/US]; 2550 Green Forest Lane, Suite 100, Lutz, Florida 33558 (US).

(72) Inventor: **HAR-NOY, Michael**; David's Crown, 6 Washington Street, Building 61 - Apartment 63, 94817 Jerusalem (IL).

(74) Agent: **SAWICKI, Z. Peter**; WESTMAN, CHAMPLIN & KOEHLER, P.A., 121 South Eighth Street, Suite 1100, Minneapolis, Minnesota 55402 (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, 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).

WO 2023/196391 A1

(54) Title: ARTIFICIAL LYMPH NODE BIOREATOR

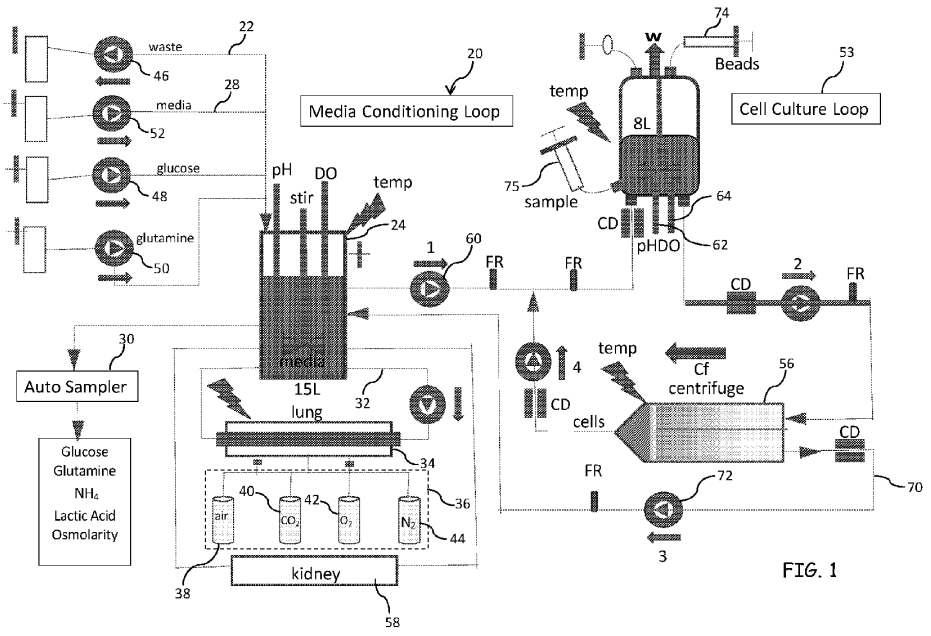


FIG. 1

(57) Abstract: A system and method for high density cell culture support utilizing two circulation circuits: a cell culture loop 53 and a media conditioning loop 20.

[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))*