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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
29 June 2023 (29.06.2023)

WIPO | PCT

(10) International Publication Number
WO 2023/118872 A1

(51) International Patent Classification:
C12M 1/12 (2006.01)

(21) International Application Number:
PCT/GB2022/053352

(22) International Filing Date:
21 December 2022 (21.12.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2118858.6 22 December 2021 (22.12.2021) GB

(71) Applicant: **CELLULAR AGRICULTURE LTD** [GB/GB]; Felin y Glyn, Pontnewydd, Llanelli Carmarthenshire SA15 5TL (GB).

(72) Inventors: **FAKHAR, Moein Mir**; Cellular Agriculture Ltd, Felin y Glyn, Pontnewydd, Llanelli Carmarthenshire SA15 5TL (GB). **ELLIS, Marianne Jane**; Cellular Agriculture Ltd, Felin y Glyn, Pontnewydd, Llanelli Carmarthenshire SA15 5TL (GB).

(74) Agent: **DOCUMENT HANDLING - (HGF) YORK**; HGF Ltd, 1 City Walk, Leeds Yorkshire LS11 9DX (GB).

(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, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI,

(54) Title: CELL CULTURE CONSTRUCT

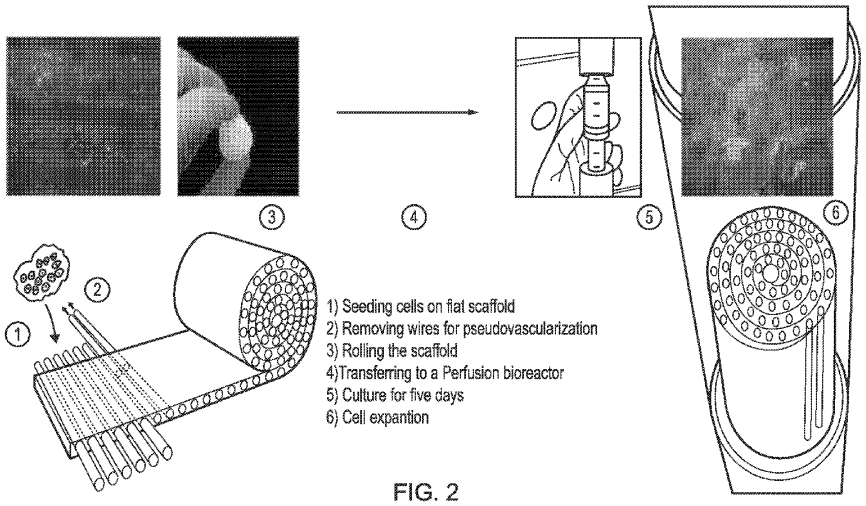


FIG. 2

(57) Abstract: The present invention relates to a construct for perfusion bioreactor cell culture. The construct comprises at least one flexible polymer sheet for rolling or folding in use, and a plurality of channels for transport of cell culture medium to cells and/or hosting cells in use. The present invention further relates to methods of forming a construct for perfusion bioreactor cell culture, a system for perfusion bioreactor cell culture, a method of culturing cells, and a comestible product obtainable by the system or method.

WO 2023/118872 A1

[Continued on next page]

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))*