

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

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2022/232322 A1

(43) International Publication Date
03 November 2022 (03.11.2022)

(51) International Patent Classification:

CI2N 5/077 (2010.01) A23L 13/00 (2016.01)
CI2N 5/071 (2010.01)

Published:

— with international search report (Art. 21(3))

(21) International Application Number:

PCT/US2022/026603

(22) International Filing Date:

27 April 2022 (27.04.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/180,828 28 April 2021 (28.04.2021) US

(71) Applicant: **UPSIDE FOODS, INC.** [US/US]; 804 Heinz Avenue, Berkeley, California 94710 (US).

(72) Inventor; and

(71) Applicant: **ARORA, Neha** [US/US]; c/o Upside Foods, Inc., 804 Heinz Avenue, Berkeley, California 94710 (US).

(72) Inventor: **VALENZUELA, Rachel Anne Porras**; c/o Upside Foods, Inc., 804 Heinz Avenue, Berkeley, California 94710 (US).

(74) Agent: **KELLER, Ryan, E.** et al.; Keller Preece PLLC, 1010 North 500 East, Suite 210, North Salt Lake, UT 84054 (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, JM, 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).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

(54) Title: GENERATION OF CELL-BASED PRODUCTS FOR HUMAN CONSUMPTION

(57) Abstract: The present disclosure relates to methods of preparing cell-based products for human consumption, in particular, from populations of such cell types as hepatocytes, adipocytes, myoblasts, and/or fibroblasts.

WO 2022/232322 A1