

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

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2022/026740 A1

(43) International Publication Date
03 February 2022 (03.02.2022)

(51) International Patent Classification:

A61K 36/539 (2006.01) A61K 36/48 (2006.01)
A61K 31/00 (2006.01) A61P 31/12 (2006.01)

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

(21) International Application Number:

PCT/US2021/043745

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))

(22) International Filing Date:

29 July 2021 (29.07.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/058,698 30 July 2020 (30.07.2020) US

(71) Applicant: **UNIGEN, INC.** [US/US]; 2121 South State Street, Tacoma, Washington 98405 (US).

(72) Inventors: **YIMAM, Mesfin**; 2121 South State Street, Tacoma, Washington 98405 (US). **HORM, Teresa**; 2121 South State Street, Tacoma, Washington 98405 (US). **BROWNELL, Lidia**; 2121 South State Street, Tacoma, Washington 98405 (US). **O'NEAL, Alexandria**; 2121 South State Street, Tacoma, Washington 98405 (US). **JIA, Qi**; 2121 South State Street, Tacoma, Washington 98405 (US).

(74) Agent: **THOMPSON, Sandra**; Finlayson Toffer Roosevelt & Lilly LLP, 15615 Alton Parkway, Suite 270, Irvine, California 92618 (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).

(54) Title: A STANDARDIZED BIOFLAVONOID COMPOSITION FOR REGULATION OF HOMEOSTASIS OF HOST DEFENSE MECHANISM

(57) Abstract: Bioflavonoid compositions for establishment and regulation of homeostasis of host defense mechanism, are disclosed and comprise at least one standardized bioflavonoid extract enriched for at least one free-B-ring flavonoid and at least one standardized bioflavonoid extract enriched for at least one flavan. Contemplated compositions are effective for respiratory diseases and conditions.

WO 2022/026740 A1