

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
20 February 2025 (20.02.2025)



(10) International Publication Number
WO 2025/038727 A2

- (51) **International Patent Classification:**
A61K 31/353 (2006.01) *A61K 9/00* (2006.01)
- (21) **International Application Number:**
PCT/US2024/042276
- (22) **International Filing Date:**
14 August 2024 (14.08.2024)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
63/532,772 15 August 2023 (15.08.2023) US
63/672,400 17 July 2024 (17.07.2024) US
- (71) **Applicant: DEBUT BIOTECHNOLOGY, INC.**
[US/US]; 11545 Sorrento Valley Rd., Suite 310, San Diego,
CA 92121 (US).
- (72) **Inventor: OSWALD, Taylor;** 100 Park Plaza, #417, San
Diego, CA 92101 (US).

(74) **Agent: SCHOEN, Adam M.** et al.; Brown Rudnick LLP,
One Financial Center, Boston, MA 02111 (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).

Published:

- *without international search report and to be republished
upon receipt of that report (Rule 48.2(g))*

(54) **Title:** FORMULATIONS OF DIHYDROKAEMPFEROL

(57) **Abstract:** The invention provides compositions comprising dihydrokaempferol. The compositions of the invention may be administered topically, on the skin of the subject. The invention further provides methods of administration of compositions comprising dihydrokaempferol for amelioration or treatment of a skin condition. The compositions of the invention may also be applied for improving the general appearance of the skin.

WO 2025/038727 A2