

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

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2022/023523 A1

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

(51) International Patent Classification:

A61K 8/24 (2006.01) *A61K 8/9789* (2017.01)
A61K 8/64 (2006.01) *A61Q 11/00* (2006.01)
A61K 8/9783 (2017.01)

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))
- with sequence listing part of description (Rule 5.2(a))

(21) International Application Number:

PCT/EP2021/071393

(22) International Filing Date:

30 July 2021 (30.07.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

16/944,502 31 July 2020 (31.07.2020) US

(71) Applicant: **VVARDIS AG** [CH/CH]; Sihlbruggstr. 109,
6340 Baar (CH).

(72) Inventors: **HUG, Michael**; Rigiweg 11, 4800 Zofingen
(CH). **ABIVARDI BRÖNNER, Haleh**; Krähbühlsteig 4,
8044 Zürich (CH). **ABIVARDI SIGNER, Golnar**; Zuger-
str. 114, 6330 Cham (CH). **LYSEK, Dominikus Amadeus**;
Mülligerstr. 16t, 5210 Windisch (CH).

(74) Agent: **MORE, Solveig**; Bavariaring 20, 80336 München
(DE).

(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: ANTI-INFLAMMATORY AND SENOLYTIC DENTAL CARE PRODUCT WITH TOOTH WHITENING CHARACTERISTICS

(57) Abstract: The present invention relates to the field of dental care, e.g., with toothpaste, tooth gel, mouthwash, mouth spray or oral care foam. In particular, it provides an anti-inflammatory and senolytic dental care product with tooth whitening characteristics. The dental care product comprises calcium phosphate particles of a specific size, the self-assembling peptide P 11-4 or oligopeptide 104 of SEQ ID NO: 1, an extract of a plant of the genus *Rhododendron*, and an extract of a plant of the genus *Leontopodium*. The dental care product may further comprise an extract of a plant of the genus *Eleutherococcus*, such as *Eleutherococcus senticosus*.



WO 2022/023523 A1