

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
14 July 2011 (14.07.2011)

(10) International Publication Number
WO 2011/084781 A2

(51) International Patent Classification:

A61K 31/19 (2006.01) *A61Q 11/00* (2006.01)
A61K 36/45 (2006.01) *A61P 1/02* (2006.01)
A61K 31/05 (2006.01)

(21) International Application Number:

PCT/US2010/061491

(22) International Filing Date:

21 December 2010 (21.12.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/288,359 21 December 2009 (21.12.2009) US

(71) Applicant (*for all designated States except US*): **COLGATE-PALMOLIVE COMPANY** [US/US]; 300 Park Avenue, New York, NY 10022 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **WANG, Wei** [CN/US]; 239 Bromley Place, East Brunswick, NJ 08816 (US). **BARNES, Virginia** [US/US]; 115 Back Brook Road, Ringoes, NJ 08551 (US). **TRIVEDI, Harsh M.** [US/US]; 30 Burniston Court, Hillsborough, NJ 08844 (US). **XU, Tao** [US/US]; 160 Pine Street, Newton, MA 02466 (US).

(74) Agent: **HEBLE, Nikhil A.**; Colgate-Palmolive Company, Patent Department, 909 River Road, Piscataway, NJ 08855 (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, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, 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: ORAL CARE COMPOSITIONS AND METHODS

(57) Abstract: Described herein are compositions comprising a MMP-13 inhibitor, and methods of using the same.



WO 2011/084781 A2