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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 February 2006 (09.02.2006)

PCT

(10) International Publication Number
WO 2006/014775 A1

(51) International Patent Classification[7]: A61Q 11/00, A61K 8/22, 8/81, 8/86

(21) International Application Number: PCT/US2005/025866

(22) International Filing Date: 21 July 2005 (21.07.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/902,720 29 July 2004 (29.07.2004) 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)*: **MAITRA, Prithwirja** [IN/US]; 22 Reler Lane, Apt. J, Somerset, NJ 00873 (US). **ZAIDEL, Lynette** [US/US]; 510 Cranford Avenue, Cranford, NJ 07016 (US). **CHOPRA, Suman** [US/US]; 505 Major Road, Dayton, NJ 00810 (US). **PAN, Guisheng** [CN/US]; 38 Hamilton Drive, Spotswood, NJ 08884 (US). **PRENCIPE, Michael** [US/US]; 39 Spruce Street, West Windsor, NJ 08550 (US). **IBRAHIM, Sayed** [US/US]; 152 Kingsberry Drive, Somerset, NJ 00873 (US).

(74) Agent: **BULLOCK, Kristyne, A.**; COLGATE-PALMOLIVE COMPANY, Patent Department, 909 River Road, P.O. Box 1343, Piscataway, NJ 08855-1343 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, 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)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

Published:

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ORAL CARE COMPOSITIONS WITH FILM FORMING POLYMERS

(57) Abstract: Oral care compositions comprising: a) an oral care active; and b) an acrylic film forming polymer. In various embodiments, such polymers comprise monomeric units such as acrylic acid, methacrylic acid, acrylates, and combinations thereof. In one embodiment, the film forming polymer comprises a copolymer of a first monomeric unit selected from the group consisting of acrylic acid, methacrylic acid, and combinations thereof, with a second monomeric unit selected from the group consisting of acrylates, acrylamides, acetates, and combinations thereof. In various embodiments, the polymer is a terpolymer comprising a combination of the second monomeric units. Preferably, the composition additionally comprises a lower alcohol, such as ethanol. In various embodiments, the oral care active comprises a whitening material, such as a peroxide.

WO 2006/014775 A1