



(43) International Publication Date
27 June 2013 (27.06.2013)

(10) International Publication Number
WO 2013/096321 A3

(51) International Patent Classification:

A61K 8/37 (2006.01) *A61Q 17/04* (2006.01)
A61K 8/34 (2006.01) *A61K 8/22* (2006.01)
A61K 8/64 (2006.01) *A61K 8/66* (2006.01)
A61Q 11/00 (2006.01)

(21) International Application Number:

PCT/US2012/070371

(22) International Filing Date:

18 December 2012 (18.12.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/577,499 19 December 2011 (19.12.2011) US

(71) Applicant: **COLGATE-PALMOLIVE COMPANY**
[US/US]; 300 Park Avenue, New York, New York 10022
(US).

(72) Inventors: **BOYD, Thomas J.**; 226 High Street,
Metuchen, New Jersey 08840 (US). **XU, Guofeng**; 40 Sil-
vers Lane, Plainsboro, New Jersey 08536 (US). **ADAMS,**
Richard; 111 Kingsland Circle, Monmouth Junction, New
Jersey 08852 (US). **PIERCE, Robert**; 10 Runyon Drive,
Basking Ridge, New Jersey 07920 (US). **MILLER,**
Steven; 66 Sycamore Lane, Skillman, New Jersey 08558
(US). **VISCIO, David**; 7937 East Rusty Spur Trail,
Prescott Valley, Arizona 86315 (US). **FOSSER, Kari A.**;
118 Somerset Road, Wilmington, Delaware 19808 (US).
DICOSIMO, Robert; 1607 Masters Way, Chadds Ford,
Pennsylvania 19317-9720 (US). **WANG, Hong**; 605 Kazio
Court, Kennett Square, Pennsylvania 19348 (US).

(74) Agent: **HEBLE, Nikhil A.**; Colgate-Palmolive Company,
909 River Road, P.O. Box 1343, Piscataway, New Jersey
08855-1343 (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, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU,
RW, 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, RW, SD, SL, 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,
ML, MR, NE, SN, TD, TG).

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))
- with information concerning authorization of rectification
of an obvious mistake under Rule 91.3 (b) (Rule 48.2(i))

(88) Date of publication of the international search report:

27 March 2014

(15) Information about Correction:

Previous Correction:

see Notice of 29 August 2013

(54) Title: PERACID-GENERATING COMPOSITIONS

(57) Abstract: Described herein are tooth whitening strips comprising an hydratable adhesive film having a granular bleaching in-
gredient attached thereto, wherein upon hydration, the granular bleaching ingredient releases hydrogen peroxide which is used by an
enzyme catalyst having perhydrolytic activity to enzymatically produce an effective amount of peracid bleaching agent from an acyl
donor substrate. Methods of making and use the tooth whitening strips are also provided.



WO 2013/096321 A3