



(51) International Patent Classification:

A61K 33/40 (2006.01) **A61K 31/65** (2006.01)
A61C 17/00 (2006.01) **A61K 31/7052** (2006.01)
A61C 19/06 (2006.01) **A61K 31/00** (2006.01)
A61K 31/09 (2006.01) **A61K 33/16** (2006.01)
A61K 31/155 (2006.01) **A61K 33/42** (2006.01)
A61K 31/17 (2006.01) **A61P 1/02** (2006.01)
A61K 31/43 (2006.01) **A61P 31/02** (2006.01)
A61K 31/4425 (2006.01)

(21) International Application Number:

PCT/CA2013/000314

(22) International Filing Date:

2 April 2013 (02.04.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

13/437,553 2 April 2012 (02.04.2012) US

(71) Applicant: **KLOX TECHNOLOGIES INC.** [CA/CA];
275 Boulevard Armand-Frappier, Laval, Québec H7V 4A7
(CA).

(72) Inventors: **PIERGALLINI, Remigio**; Via Bologna #11,
63038 Grottammare Ascoli Piceno (IT). **LOUPIS,**
Nikolaos; Dionisou #1, Papadamanti Kifissia, 14562

Athens (GR). **RASTOGI, Shipra**; 3095 Edouard Mont-
petit, #114, Laval, Québec H7T 1V3 (CA).

(74) Agent: **SMART & BIGGAR**; 1000 de la Gauchetière
Street West, Suite 3300, Montréal, Québec H3B 4W5
(CA).

(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,

[Continued on next page]

(54) Title: PREVENTING OR TREATING PERIODONTAL DISEASE

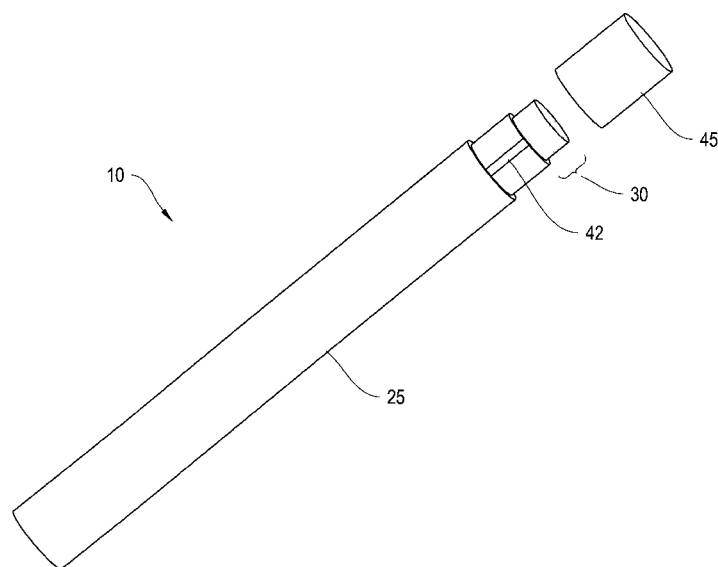


FIG. 1

(57) Abstract: The disclosure relates to a method for treating or preventing periodontal disease, such as gingivitis or periodontitis. The method may comprise providing an antimicrobial composition disposed within a reservoir, the reservoir being fluidly connected to an exterior surface of an applicator having a frictional stress value sufficient to cause mechanical displacement of a biofilm present on an oral cavity surface; dispensing said antimicrobial composition through said applicator onto said exterior surface of said applicator; applying the antimicrobial composition to the oral cavity surface; and rubbing said applicator onto said oral cavity surface and exerting pressure towards said oral cavity surface.

WO 2013/149322 A1



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, **Published:**
ML, MR, NE, SN, TD, TG).

— *with international search report (Art. 21(3))*