

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 October 2007 (18.10.2007)

PCT

(10) International Publication Number
WO 2007/117629 A3

(51) International Patent Classification:
A61K 8/46 (2006.01) A61K 9/68 (2006.01)
A61Q 11/00 (2006.01)

(21) International Application Number:
PCT/US2007/008624

(22) International Filing Date: 5 April 2007 (05.04.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/789,525 5 April 2006 (05.04.2006) US

(71) Applicant (for all designated States except US): CAD-
BURY ADAMS USA, LLC [US/US]; 389 Interpace Park-
way, Parsippany, NJ 07054 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): TANCREDI, Doris
[US/US]; 14 Stonebridge Road, Sparta, NJ 07871 (US).
MING, Ding [US/US]; 21 Valley Forge Lane, Morris
Plains, NJ 07950 (US). VINCENT, Jack, W. [US/US];
3032 Marsh Haven, Seabrook Island, SC 29455 (US).

(74) Agents: BUDZYN, Ludomir, A. et al.; Hoffmann &
Baron, LLP, 6900 Jericho Turnpike, Syosset, NY 11791
(US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BH, 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, 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, MG, MK, MN, MW, MX, MY,
MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,
RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, 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, 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, MT, 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).

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

(88) Date of publication of the international search report:
10 January 2008

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



WO 2007/117629 A3

(54) Title: IMPACT OF CALCIUM PHOSPHATE COMPLEX ON DENTAL CARIES

(57) Abstract: The present invention relates to chewing gum and confectionery compositions and methods for reducing dental caries in mammals. In particular, the compositions may include a gum base or carrier, sweetening agents and casein phosphopeptide-calcium phosphate (CPP-ACP). The compositions may be employed to slow the progression and enhance the regression of carious lesions in mammals, particularly in humans.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US07/08624

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **A61K 8/46(2006.01),9/68(2006.01);A61Q 11/00(2006.01)**

 USPC: 424/48,57,440
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 424/48, 57, 440

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,780,844 B1 (REYNOLDS) 24 August 2004 (24.08.2004), see the entire document.	1-49
Y	US 5,833,954 A (CHOW ET AL) 10 November 1998 (10.11.1998), see the entire document.	1-49

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:		
"A"	document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E"	earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means	
"P"	document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

Date of the actual completion of the international search 09 November 2007 (09.11.2007)	Date of mailing of the international search report 21 NOV 2007
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer Frederick Krass Telephone No. (571) 272-1600 <i>Janice Ford for</i>

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/08624

Continuation of B. FIELDS SEARCHED Item 3:

STN, EAST

search terms: ("casein phosphopetide") and ("calcium phosphate") and (confectionary or candy or candies or nougat)