

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
16 November 2006 (16.11.2006)

PCT

(10) International Publication Number
WO 2006/122206 A3

(51) International Patent Classification:
A23G 1/00 (2006.01) A23G 3/20 (2006.01)

(21) International Application Number:
PCT/US2006/018133

(22) International Filing Date: 10 May 2006 (10.05.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/679,494 10 May 2005 (10.05.2005) US

(71) Applicants and

(72) Inventors: **CARROLL, Thomas J.** [US/US]; 33 Bridgeport Drive, Mechanicsburg, PA 17050 (US). **HUZINEC, Robert J.** [US/US]; 807 Zermatt Drive, Hummelstown, PA 17036 (US). **BENNETT, Christopher A.** [US/US]; 953 Weaber Avenue, Palmyra, PA 17078 (US). **MAY, Justin E.** [US/US]; 435 W. Granada Avenue, Hershey, PA 17033 (US). **HALIE, Tesfalidet** [US/US]; 62 Tinker Way, Novato, CA 94949 (US).

(74) Agent: **GROLZ, Edward W.**; Scully, Scott, Murphy & Presser PC, 400 Garden City Plaza, Garden City, NY 11530 (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, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, 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).

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:
4 October 2007

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: SUGAR ALCOHOL SANDED CHEWING GUM AND PROCESS FOR MAKING SAME

(57) Abstract: A chewing gum comprising a solid shaped chewing gum composition sanded with a sugar alcohol having a negative heat of solution and a method of mixing same. The method involves coating solid pieces of chewing gum composition with a wetting syrup and sanding the wetted pieces with sugar alcohol crystals. The chewing gum is characterized by intense initial cooling and flavor release.



WO 2006/122206 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/18133

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(8): A23G 1/00, 3/20 (2007.01) USPC: 426/104, According to International Patent Classification (IPC) or to both national classification and IPC</p>																			
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) USPC: 426/104</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 426/103, 330.4, 567, 592, 639 (text search)</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST(USPT,PGPB,EPAB,JPAB); Google patents; SciFinder Scholar (2006) Search Terms: chewing gum and sanding; chewing gum and dusting; chewing gum and xylitol dusting; xylitol and particle size; chewing gum and panning; chewing gum and extruding; chewing gum and cube</p>																			
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X</td> <td rowspan="2">WO 2001/056398 A1 (Nurmi et al.) 9 August 2001 (09.08.2001), entire document</td> <td>1-8, 14, 23-34</td> </tr> <tr> <td>Y</td> <td>9-13, 15-22, 35-43</td> </tr> <tr> <td>Y</td> <td>US 4,379,169 A (Reggio et al.) 5 April 1983 (05.05.1983), col 3-8</td> <td>9-13, 15-22, 38-40</td> </tr> <tr> <td>Y</td> <td>US 6,764,706 B1 (Heikkila et al.) 20 July 2004 (20.07.2004), col 3 and col 9</td> <td>35-43</td> </tr> <tr> <td>A</td> <td>WO1994/21827 A1 (Yli-Kyynty) 29 September 1994 (29.09.1994), pages 1-3</td> <td>35-43</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	WO 2001/056398 A1 (Nurmi et al.) 9 August 2001 (09.08.2001), entire document	1-8, 14, 23-34	Y	9-13, 15-22, 35-43	Y	US 4,379,169 A (Reggio et al.) 5 April 1983 (05.05.1983), col 3-8	9-13, 15-22, 38-40	Y	US 6,764,706 B1 (Heikkila et al.) 20 July 2004 (20.07.2004), col 3 and col 9	35-43	A	WO1994/21827 A1 (Yli-Kyynty) 29 September 1994 (29.09.1994), pages 1-3	35-43
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																	
X	WO 2001/056398 A1 (Nurmi et al.) 9 August 2001 (09.08.2001), entire document	1-8, 14, 23-34																	
Y		9-13, 15-22, 35-43																	
Y	US 4,379,169 A (Reggio et al.) 5 April 1983 (05.05.1983), col 3-8	9-13, 15-22, 38-40																	
Y	US 6,764,706 B1 (Heikkila et al.) 20 July 2004 (20.07.2004), col 3 and col 9	35-43																	
A	WO1994/21827 A1 (Yli-Kyynty) 29 September 1994 (29.09.1994), pages 1-3	35-43																	
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/>																			
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>																			
<p>Date of the actual completion of the international search</p> <p>18 April 2007 (18.04.2007)</p>		<p>Date of mailing of the international search report</p> <p>10 AUG 2007</p>																	
<p>Name and mailing address of the ISA/US</p> <p>Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201</p>		<p>Authorized officer:</p> <p>Lee W. Young</p> <p>PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774</p>																	