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Published:

- with international search report (Art. 21(3))
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(88) Date of publication of the international search report:

3 December 2009



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(54) Title: FLAVOR BEAD COMPOSITIONS

(57) Abstract: A flavor bead contains a hydrophobic core and a hydrophilic shell, in which the hydrophilic shell contains a hydrocolloid hydrogel, water, and at least 50 wt.% sweetener.

**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/US2008/069740

**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. A23L1/0524 A23L1/0532 A23L1/22 A61K8/02 A61K8/11  
 A61K8/65 A61K8/73 A61Q11/00

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)  
 A23L A23P A61K

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 practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/175489 A1 (CLARK JAMES C [US] ET AL) 9 September 2004 (2004-09-09) claims	1-14
X	US 2006/182867 A1 (HILL CLARE [GB] ET AL) 17 August 2006 (2006-08-17) claims	1-14
X	US 2006/286200 A1 (CASTRO ARMANDO J [US] ET AL) 21 December 2006 (2006-12-21) examples; tables	1-14
X	WO 2004/077956 A (WRIGLEY W M JUN CO [US]; CLARK JAMES [US]; SHEN CHUNGSEA [US]) 16 September 2004 (2004-09-16) page 6; claims; examples	1-12
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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
- \*E\* earlier document but published on or after the international filing date
- \*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)
- \*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

- \*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
- \*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
- \*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.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

9 October 2009

Date of mailing of the international search report

20/10/2009

Name and mailing address of the ISA/

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Popa, Marian

## INTERNATIONAL SEARCH REPORT

International application No

PCT/US2008/069740

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 586 023 B1 (SONG JOO H [US] ET AL) 1 July 2003 (2003-07-01) the whole document	1-12
X	US 2003/219514 A1 (JONES ADRIENNE SARAH [GB] ET AL) 27 November 2003 (2003-11-27) the whole document	1-12
P,X	WO 2008/027251 A (WRIGLEY W M JUN CO [US]; CHITIKOV SOFIA [US]; GRASELA DIANNA [US]; SIT) 6 March 2008 (2008-03-06) the whole document	1-14
P,X	WO 2007/135583 A (FIRMENICH & CIE [CH]; TROPHARDY GIL [FR]) 29 November 2007 (2007-11-29) the whole document	1-14
A	US 5 300 305 A (STAPLER JUDITH H [US] ET AL) 5 April 1994 (1994-04-05)	
A	US 4 162 282 A (HATCHER C WILLIAM [US] ET AL) 24 July 1979 (1979-07-24) cited in the application	
A	US 4 422 985 A (MORISHITA TAKASHI [JP] ET AL) 27 December 1983 (1983-12-27) cited in the application	
A	JACKSON L S ET AL: "MICROENCAPSULATION AND THE FOOD INDUSTRY" LEBENSMITTEL WISSENSCHAFT UND TECHNOLOGIE, ACADEMIC PRESS, LONDON, GB, vol. 24, 1 January 1991 (1991-01-01), pages 289-297, XP001009807 ISSN: 0023-6438	
A	WO 2007/019882 A (SYMRISE GMBH & CO KG [DE]; MACHINEK ARNOLD [DE]; WONSCHIK JOCHEN [DE];) 22 February 2007 (2007-02-22)	
A	LENNOX S: "GELATIN ALTERNATIVES IN GUMMI CONFECTIONS" MANUFACTURING CONFECTIONER, CHICAGO, IL, US, vol. 82, no. 5, 1 May 2002 (2002-05-01), pages 65-72, XP008033085 ISSN: 0163-4364	

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2008/069740

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: 1-14 (partial)  
because they relate to subject matter not required to be searched by this Authority, namely:  
see FURTHER INFORMATION sheet PCT/ISA/210
2.  Claims Nos.: 1-14 (partial)  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

Continuation of Box II.1

Claims Nos.: 1-14 (partial)

The initial phase of the search revealed a very large number of documents relevant to the issue of novelty. So many documents were retrieved that it is impossible to determine which parts of the claims may be said to define subject-matter for which protection might legitimately be sought (Article 6 PCT). For these reasons, the search was performed taking into consideration the non-compliance in determining the extent of the search of these claims.

The search of claims 1-14 was restricted to: examples.

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Continuation of Box II.2

Claims Nos.: 1-14(partial)

The initial phase of the search revealed a very large number of documents relevant to the issue of novelty. So many documents were retrieved that it is impossible to determine which parts of the claims may be said to define subject-matter for which protection might legitimately be sought (Article 6 PCT). For these reasons, the search was performed taking into consideration the non-compliance in determining the extent of the search of these claims.

The search of claims 1-14 was restricted to: examples.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2)PCT declaration be overcome.

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2008/069740

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2004175489	A1	09-09-2004	NONE	
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2008/069740

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2007019882	A	22-02-2007 EP	1917003 A1
			07-05-2008