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(54) Title: FLAVOR-ENHANCING COMPOSITIONS, METHODS OF MANUFACTURE, AND METHODS OF USE

(57) Abstract: A flavor-enhancing composition for an ingestible product includes a medicament for the treatment of a cough, or a cold or flu symptom; a physiological cooling agent; and a high intensity sweetener. An undesirable flavor associated with the medicament, such as bitterness, is reduced when it is combined with the physiological cooling agent and the high intensity sweetener.



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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2007/002283

A. CLASSIFICATION OF SUBJECT MATTER INV. A61K9/20 A61K31/485 A61K9/68		
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) A61K A23G		
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, WPI Data, EMBASE, BIOSIS		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 391 886 B1 (LEE KUO-CHUNG MARK [US]) 21 May 2002 (2002-05-21) column 1, line 6 - line 11 column 2, line 33 - column 3, line 2 examples 1-7	1-40
X	----- US 5 846 557 A (EISENSTADT BARBARA [US] ET AL) 8 December 1998 (1998-12-08) example 4 abstract column 2, line 28 - line 55 column 5, line 36 - column 7, line 51 column 4, line 10 - line 21 ----- -/--	1-40
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> 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. *&* document member of the same patent family
Date of the actual completion of the international search  16 November 2007		Date of mailing of the international search report  30/11/2007
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer  Spröll, Susanne

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International application No  
PCT/US2007/002283

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2004/096192 A (WARNER LAMBERT CO [US]; KULKARNI NEEMA MAHESHI [US]; KUMAR LORI DEE [U] 11 November 2004 (2004-11-11) tables 1-10 page 2, line 11 - page 5, line 16 -----	1-40
X	WO 01/70194 A (WARNER LAMBERT CO [US]) 27 September 2001 (2001-09-27) page 2, line 25 - page 3, line 24 page 11, line 11 tables 1-7 -----	1-40
X	US 2005/037055 A1 (YANG ROBERT K [US] ET AL) 17 February 2005 (2005-02-17) table 30 -----	1-33, 39, 40
X	US 2005/238695 A1 (CHAUDHARI ATMA [CA] ET AL) 27 October 2005 (2005-10-27) paragraphs [0001], [0039] examples 1-4 -----	1-40
A	US 2005/019445 A1 (WOLF FRED R [US] ET AL) 27 January 2005 (2005-01-27) the whole document -----	1-40

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Although claims 34, 37-40 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

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Continuation of Box II.2

Claims Nos.: 1-40 (in part)

The present claims 1-40 relate to an extremely large number of possible products/methods. Support and disclosure in the sense of Article 6 and 5 PCT is to be found however for only a very small proportion of the products/methods claimed, see the examples. The non-compliance with the substantive provisions is to such an extent, that the search was performed taking into consideration the non-compliance in determining the extent of the search of the claims. (PCT Guidelines 9.19 and 9.23).

The search of claims 1-40 was restricted to those claimed products/methods which appear to be supported, namely to oral compositions comprising a combination of dextromethorphan and menthol or menthol-derivatives and sucralose or neotame, cf. the examples and claims 22, 25, 29, 31, 33, 38, 40, and more generally to oral compositions comprising antitussives and cooling agents and high intensity sweeteners.

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, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2007/002283

## 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.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 34, 37-40 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2.  Claims Nos.: 1-40 (in part)  
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 allsearchable 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.

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/002283

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