(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 7 April 2011 (07.04.2011)

(10) International Publication Number WO 2011/039340 A3

(51) International Patent Classification: A23L 1/22 (2006.01) A23L 1/228 (2006.01) A23L 1/226 (2006.01)

(21) International Application Number:

PCT/EP2010/064622

(22) International Filing Date:

1 October 2010 (01.10.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0917325.3

2 October 2009 (02.10.2009)

GB

- (71) Applicant (for all designated States except US): GIVAU-DAN SA [CH/CH]; Chemin de la Parfumerie 5, CH-1214 Vernier (CH).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): HAIBER, Stephan [DE/NL]; P/A Huizerstraatweg 28, NL-1411 GP Naarden (NL). RENES, Harry [NL/NL]; Eaglelaan 173, NL-8241 AS Lelystad (NL).
- Agent: MCSTEA, John, Anthony; Ueberlandstrasse 138, CH-8600 Duebendorf (CH).
- (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, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
- (88) Date of publication of the international search report:

25 August 2011



(54) Title: FLAVOUR ENHANCEMENT

(57) Abstract: A method of providing umami taste to a consumable composition, comprising the addition to the composition of monosodium glutamate, in which the proportion of monosodium glutamate that would normally be used is reduced and replaced with a compensatory proportion of γ -amino butyric acid. A substantial reduction in MSG content is made possible.

INTERNATIONAL SEARCH REPORT

International application No PCT/EP2010/064622

	FICATION OF SUBJECT MATTER A23L1/22 A23L1/226 A23L1/2	228				
According to	o International Patent Classification (IPC) or to both national classific	eation and IPC				
B. FIELDS	SEARCHED					
Minimum do A23L	ocumentation searched (classification system followed by classificat	tion symbols)				
Documenta	tion searched other than minimum documentation to the extent that	such documents are included in the fields sea	arched			
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)						
EPO-In	ternal, WPI Data, FSTA					
C. DOCUM	ENTS CONSIDERED TO BE RELEVANT					
Category*	Citation of document, with indication, where appropriate, of the re	elevant passages	Relevant to claim No.			
Х	WO 2005/096841 A1 (SYMRISE GMBH & CO KG [DE]; LEY JAKOB [DE]; KINDEL GUENTER [DE]; KRAMME) 20 October 2005 (2005-10-20) page 12, line 22 - page 13, line 8		1-6			
А	WO 2004/075663 A1 (FIRMENICH & CIE [CH]; FREROT ERIC [FR]; BENZI FRANCOIS [CH]) 10 September 2004 (2004-09-10) page 2, line 1 - line 16		1-6			
А	EP 1 356 744 A1 (NESTLE SA [CH]) 29 October 2003 (2003-10-29) paragraph [0002] paragraph [0006]		1-6			
A	EP 1 252 825 A1 (NESTLE SA [CH]) 30 October 2002 (2002-10-30) paragraph [0006] - paragraph [0007]		1-6			
Furt	ner documents are listed in the continuation of Box C.	X See patent family annex.				
* Special c	ategories of cited documents :	"T" later document published after the inte	rnational filing date			
"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		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				
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)		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				
"O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but		cannot be considered to involve an inv document is combined with one or mo ments, such combination being obviou in the art.	re other such docu-			
later than the priority date claimed		&" document member of the same patent family				
	actual completion of the international search	Date of mailing of the international sea	rch report			
	January 2011	01/07/2011				
Name and r	nailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040,	Authorized officer				
Fax: (+31-70) 340-3016		Saunders, Thomas				

International application No. PCT/EP2010/064622

INTERNATIONAL SEARCH REPORT

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:				
2. Claims Nos.: 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:				
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:				
see additional sheet				
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.: 1-6				
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

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-6

Consumable composition comprising monosodium glutamate and gamma-amino butyric acid.

. . .

2. claim: 7

Umami-flavoured consumable composition containing
1-(hetero)aryl-3-(pyridine-2-yl)propan-1-one compound of
formula (I).

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/EP2010/064622

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2005096841 A1	20-10-2005	CN 1937929 A DE 102004017076 A1 EP 1734835 A1 US 2010331349 A1	28-03-2007 27-10-2005 27-12-2006 30-12-2010
WO 2004075663 A1	10-09-2004	EP 1599103 A1 JP 2006519289 A	30-11-2005 24-08-2006
EP 1356744 A1	29-10-2003	AT 386444 T AU 2003233960 A1 DE 60225114 T2 WO 03088768 A1 ES 2300418 T3 PT 1356744 E	15-03-2008 03-11-2003 26-02-2009 30-10-2003 16-06-2008 28-03-2008
EP 1252825 A1	30-10-2002	WO 02087361 A1 EP 1385393 A1	07-11-2002 04-02-2004