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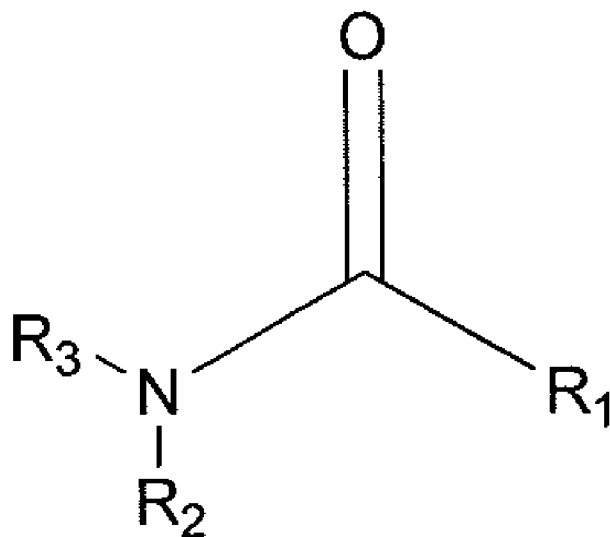
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10022 (US).(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU,
RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ,
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UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, 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,

[Continued on next page]

(54) Title: N-ACYL-AMINO ACID DERIVATIVES AS FOOD FLAVOURING COMPOUNDS



(1)

(57) Abstract: A flavour composition comprising a com-
pound according to the formula (I) or edible salts thereof,
wherein R₁ is an alkyl residue containing 6 to 20 carbon
atoms, or an alkene residue containing from 9 to 25 carbon
atoms with 1 to 6 double bonds, R₁ together with the car-
bonyl group to which it is attached is a residue of a
carboxylic acid, and NR₂R₃, in which R₃ is H or together
with R₂ and the N-atom to which they are attached, a 5-
membered ring, is a residue of an amino acid, in particular a
proteinogenic amino acid, ornithine, gamma-aminobutyric
acid or beta alanine, or a 1-amino cycloalkyl carboxylic
acid.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *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))*

Published:

— *with international search report (Art. 21(3))*

(88) Date of publication of the international search report:

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2013/034299

A. CLASSIFICATION OF SUBJECT MATTER
INV. A23L1/227 C07C233/47 C07C233/49 C07C321/14 C07D207/16
ADD.

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 C07C C07D

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)

EPO-Internal, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2009/141294 A1 (NESTEC SA [CH]; RIERA CELINE [CH]; MENOZZI CANDICE [CH]; ROBERT FABIEN) 26 November 2009 (2009-11-26) cited in the application claim 1 figure 2	1,2,9-27
A	EP 2 140 770 A1 (NESTEC SA [CH]) 6 January 2010 (2010-01-06) claim 1 ----- -/--	1,2,9-27



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 application or patent 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

2 July 2013

Date of mailing of the international search report

27/09/2013

Name and mailing address of the ISA/

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Panday, Narendra

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2013/034299

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BURSTEIN ET AL: "Potential anti-inflammatory actions of the elmiric (lipoamino) acids", BIOORGANIC & MEDICINAL CHEMISTRY, PERGAMON, GB, vol. 15, no. 10, 7 April 2007 (2007-04-07), pages 3345-3355, XP022024191, ISSN: 0968-0896, DOI: 10.1016/J.BMC.2007.03.026 page 3353, paragraph 5.2.2 - paragraph 5.2.3 -----	1,2,10, 17,21
X	GB 1 130 480 A (ROEHM & HAAS GMBH) 16 October 1968 (1968-10-16) example 7 -----	1,2,10
T	EP 2 597 082 A1 (SYMRISE AG [DE]) 29 May 2013 (2013-05-29) compounds 2, 4, 6 claims 1, 7, 10, 13 -----	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2013/034299

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.:

2(completely); 1, 9-27(partially)

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

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

1. claims: 2(completely); 1, 9-27(partially)

compounds according to claim 2, compositions/preparations containing them, uses thereof, methods implying their use.

2. claims: 3(completely); 1, 9-27(partially)

compounds according to claim 2, compositions/preparations containing them, uses thereof, methods implying their use.

3. claims: 4(completely); 1, 9-27(partially)

compounds according to claim 4, compositions/preparations containing them, uses thereof, methods implying their use.

4. claims: 5(completely); 1, 9-27(partially)

compounds according to claim 5, compositions/preparations containing them, uses thereof, methods implying their use.

5. claims: 6(completely); 1, 9-27(partially)

compounds according to claim 6, compositions/preparations containing them, uses thereof, methods implying their use.

6. claims: 7(completely); 1, 9-27(partially)

compounds according to claim 7, compositions/preparations containing them, uses thereof, methods implying their use.

7. claims: 8(completely); 1, 9-27(partially)

compounds according to claim 8, compositions/preparations containing them, uses thereof, methods implying their use.

8. claims: 1, 9-27(all partially)

compounds according to claim 1 not included in any of claims 2 to 8, compositions/preparations containing them, uses thereof, methods implying their use.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2013/034299

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2009141294	A1	26-11-2009	CA 2725155 A1 26-11-2009
			CN 102036571 A 27-04-2011
			EP 2296492 A1 23-03-2011
			JP 2011520457 A 21-07-2011
			US 2011129583 A1 02-06-2011
			WO 2009141294 A1 26-11-2009

EP 2140770	A1	06-01-2010	NONE

GB 1130480	A	16-10-1968	DE 1262216 B 07-03-1968
			DE 1543829 A1 02-01-1970
			GB 1130480 A 16-10-1968
			NL 6705232 A 16-10-1967

EP 2597082	A1	29-05-2013	NONE
