



(43) International Publication Date
27 September 2012 (27.09.2012)

(10) International Publication Number
WO 2012/128982 A3

- (51) International Patent Classification:
A23K 1/16 (2006.01)
- (21) International Application Number:
PCT/US2012/028712
- (22) International Filing Date:
12 March 2012 (12.03.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/465,404 18 March 2011 (18.03.2011) US
- (71) Applicant (for all designated States except US): **NESTEC S.A.** [CH/CH]; Avenue Nestle 55, CH-1800 Vevey (CH).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **SATYARAJ, Ebenezer** [US/US]; 16300 Centerpointe Drive, Wildwood, Missouri 63040 (US).
- (74) Agent: **GUFFEY, Wendell Ray**; Nestle Purina Petcare Global, Resources, Inc., Checkerboard Square 11T, St. Louis, Missouri 63164 (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, 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, QA, RO, RS, RU, RW, 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, RW, 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))

- (88) Date of publication of the international search report:
24 April 2014

(54) Title: COMPOSITIONS AND METHODS USEFUL FOR AMELIORATING AGE RELATED MALADIES

(57) Abstract: The invention provides methods and compositions useful for ameliorating age related maladies, enhancing and maintaining immune function, enhancing and maintaining cognitive function, enhancing and maintaining muscle strength, enhancing and maintaining balance, and reducing and mitigating oxidative stress in an animal. The compositions comprise a combination of at least two of one or more unsaturated fatty acids (UFA); one or more nitric oxide releasing compounds (NORC); one or more anti-glycation agents; and colostrum, and the methods comprise administering to an animal a therapeutically effective amount of the compositions.



WO 2012/128982 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2012/028712

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A23K 1/16 (2012.01)

USPC - 426/531

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)

IPC(8) - A23D 7/00, 9/00; A23K 1/00, 1/16; A61K 31/00, 36/00 (2012.01)

USPC - 424/725; 426/2, 106, 531, 602, 656

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)

Patbase, Google Patents, Google Scholar

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2010/0233304 A1 (PAN) 16 September 2010 (16.09.2010) entire document	1-14, 17, 19-36, 39, 41-46, 48-53 ----- 15, 16, 18, 37, 38, 40, 47, 54
Y	US 2002/0119928 A1 (MCANALLEY) 29 August 2002 (29.09.2002) entire document	15, 16, 18, 37, 38, 40
Y	US 2010/0316769 A1 (CZARNECKI-MAULDEN et al) 16 December 2010 (16.12.2010) entire document	47
Y	US 2004/0166206 A1 (ARCHIBALD et al) 26 August 2004 (26.08.2004) entire document	54

☐ Further documents are listed in the continuation of Box C.

* 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

07 June 2012

Date of mailing of the international search report

20 JUN 2012

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450

Facsimile No. 571-273-3201

Authorized officer:

Blaine R. Copenheaver

PCT Helpdesk: 571-272-4300

PCT OSP: 571-272-7774