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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NUTRITIONAL SUPPLEMENT CONTAINING LONG-CHAIN POLYUNSATURATED FATTY ACIDS

(57) Abstract: The present invention relates to a nutritional supplement for administration to children. The supplement comprises a protein component, a carbohydrate component, and a fat or lipid component which further comprises a source of DHA. The supplement has an  $\omega$ -6: $\omega$ -3 fatty acid ratio of about 6:1 or less. The present invention also relates to a method of providing nutrition to a pediatric subject comprising administering to the subject a nutritional supplement comprising a protein component; a carbohydrate component; and a fat or lipid component, which further comprises a source of DHA, wherein the composition has an  $\omega$ -6: $\omega$ -3 fatty acid ratio of about 6:1 or less.



WO 2007/070611 A3

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2006/047642

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. A23L1/29 A23L1/30 A61K31/202

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 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, WPI Data, FSTA

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JENSEN R G: "LIPIDS IN HUMAN MILK" LIPIDS, CHAMPAIGN, IL, US, vol. 34, no. 12, 1999, pages 1243-1271, XP008040614 ISSN: 0024-4201 table 10	1-21
X	WO 2005/084129 A2 (HTL HIGH TECH LIPIDS LTD [IL]; ROZEN GEILA [IL]; SHOCHAT IRIT [IL]) 15 September 2005 (2005-09-15) page 6, lines 21-33; claims 1-29,62,63	1-30
X	US 2005/054724 A1 (MUSTAD VIKKIE A [US] ET AL) 10 March 2005 (2005-03-10) claims 1-45; examples A-D	1-30
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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
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
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- \*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

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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2006/047642

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 2004/219188 A1 (COMER GAIL M [US] ET AL) 4 November 2004 (2004-11-04) paragraph [0055]; claims 1-23; tables 1-4,9	1-30
X	DE 43 04 394 A1 (FRESENIUS AG [DE]) 2 September 1993 (1993-09-02) claims 1-17; examples 1-17	1-30
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Y	SIMOPOULOS A P: "The importance of the ratio of omega-6/omega-3 essential fatty acids" BIOMEDICINE AND PHARMACOTHERAPY, ELSEVIER, PARIS, FR, vol. 56, no. 8, October 2002 (2002-10), pages 365-379, XP002438414 ISSN: 0753-3322 pages 374-376	1-30
Y	KOLETZKO B ET AL: "EFFECTS OF DIETARY LONG-CHAIN POLYUNSATURATED FATTY ACIDS ON THE ESSENTIAL FATTY ACID STATUS OF PREMATURE INFANTS" EUROPEAN JOURNAL OF PEDIATRICS, SPRINGER VERLAG, vol. 148, no. 7, 1989, pages 669-675, XP009046783 ISSN: 0340-6199 pages 674-675; table 1	1-30
Y	MORLION B J ET AL: "P.98 What is the optimum omega-3 to omega-6 fatty acid (FA) ratio of parenteral lipid emulsions in postoperative trauma?" CLINICAL NUTRITION, CHURCHILL LIVINGSTONE, LONDON, GB, vol. 16, August 1997 (1997-08), page 49, XP004683442 ISSN: 0261-5614 the whole document	1-30
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## INTERNATIONAL SEARCH REPORT

International application No

PCT/US2006/047642

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 03/043445 A (GERBER PROD [US]; NOVARTIS NUTRITION AG [CH]; CARY JULIE [US]; COLETTA) 30 May 2003 (2003-05-30) cited in the application page 5, paragraph 3; examples 1-12	1-30
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A	US 5 374 657 A (KYLE DAVID J [US]) 20 December 1994 (1994-12-20) claims 1-22; tables 2-6	1-30

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2006/047642

## Box 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.: 26-30 (partly)  
because they relate to subject matter not required to be searched by this Authority, namely:  
Although claims 26-30 are directed to a method of treatment of the human body, the search has been carried out and based on the alleged effects of the compound/composition.
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 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 fee, this Authority did not invite payment of any additional fee.
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.
- No protest accompanied the payment of additional search fees.

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No

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Information on patent family members

International application No

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