US009044043B2

(12) **United States Patent**
van Anholt et al.

(10) **Patent No.: US 9,044,043 B2**
(45) **Date of Patent: *Jun. 2, 2015**

(54) **BALANCED FAT COMPOSITION AND USE THEREOF IN A LIQUID NUTRITIONAL COMPOSITION SUITABLE FOR ENTERAL FEEDING**

(75) Inventors: **Rogier Daniël van Anholt**, Deventer (NL); **Zandrie Hofman**, Bennekom (NL); **Wynette Hermina Agnes Kiers**, Zetten (NL)

(73) Assignee: **N.V. NUTRICIA**, Zoetermeer (NL)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 267 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **13/514,275**

(22) PCT Filed: **Dec. 7, 2010**

(86) PCT No.: **PCT/NL2010/050825**

§ 371 (c)(1),
(2), (4) Date: **Aug. 7, 2012**

(87) PCT Pub. No.: **WO2011/071376**

PCT Pub. Date: **Jun. 16, 2011**

(65) **Prior Publication Data**

US 2012/0309831 A1 Dec. 6, 2012

(30) **Foreign Application Priority Data**

Dec. 7, 2009 (WO) PCT/NL2009/050741

(51) **Int. Cl.**

A61K 31/20	(2006.01)
A23D 7/00	(2006.01)
A23L 1/29	(2006.01)
A23L 1/30	(2006.01)
A23D 9/00	(2006.01)

(52) **U.S. Cl.**
CPC ***A23L 1/296*** (2013.01); ***A23D 7/003*** (2013.01); ***A23L 1/3008*** (2013.01); ***A23D 9/00*** (2013.01); *A23V 2002/00* (2013.01)

(58) **Field of Classification Search**
CPC ... A23V 2002/00; A23L 1/296; A23L 1/3008
USPC 514/560
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,223,285	A	6/1993	DeMichele et al.	
5,403,826	A	4/1995	Cope et al.	
7,045,143	B1 *	5/2006	Sawatzki et al.	424/439
2003/0003194	A1	1/2003	Roussel et al.	

FOREIGN PATENT DOCUMENTS

DE	43 04 394	A1	9/1993
EP	0 626 176	A2	11/1994
EP	0 756 827	A2	2/1997
EP	1 964 554	A1	9/2008
EP	1 972 345	A1	9/2008
FR	2 909 839	A1	6/2008
WO	WO-94/02166	A1	2/1994
WO	WO-02/098242	A1	12/2002
WO	WO-2008/046871	A2	4/2008
WO	WO-2008/054192	A1	5/2008

OTHER PUBLICATIONS

Fleith M et al: "Dietary PUFA for Preterm and Term Infants: Review of Clinical Studies", Critical Reviews in Food Science and Nutrition, vol. 45, No. 3, Jan. 1, 2005, pp. 205-229, XP009096126.
International Search Report for PCT/NL2010/050825—mailed May 23, 2011.
International Search Report for PCT/NL2009/050227, dated Jan. 25, 2010.

* cited by examiner

Primary Examiner — Paul Zarek
(74) *Attorney, Agent, or Firm* — Gilberto M. Villacorta; Sunit Talapatra; Foley & Lardner LLP

(57) **ABSTRACT**

This invention relates to a balanced fat composition and use thereof in a liquid nutritional composition, in particular suitable for tube feeding. This invention further relates to said liquid nutritional composition for providing enteral nutrition to patients in need thereof, in particular for providing a complete enteral nutrition, in particular for providing a long-term enteral nutrition. More specifically, the balanced fat composition and the liquid nutritional composition comprising said balanced fat composition comprises specific amounts of linoleic acid (LA), alpha-linolenic acid (ALA), docosahexaenoic acid (DHA), eicosapentaenoic acid (EPA), at least one medium chain fatty acid (MCFA), and at least one monounsaturated fatty acid (MUFA). The invention relates further to a method for providing enteral nutrition to patients in need thereof comprising administering an effective amount of said liquid nutritional composition comprising the balanced fat composition according to the invention.

19 Claims, 2 Drawing Sheets