

Title (en)  
PURIFICATION OF DHA CONTAINING OILS

Title (de)  
REINIGUNG VON DHA-HALTIGEN ÖLEN

Title (fr)  
PURIFICATION D'HUILES CONTENANT DU DHA

Publication  
**EP 3585369 A4 20200826 (EN)**

Application  
**EP 18757985 A 20180221**

Priority  
• US 201762462015 P 20170222  
• US 2018018975 W 20180221

Abstract (en)  
[origin: WO2018156596A1] The various examples presented herein are directed to an oil composition comprising at least one carotenoid in an amount greater than 50 mg/kg by weight of the oil composition; a docosahexaenoic acid (DHA) content greater than about 25% of the total weight of fatty acids present in the oil composition; and less than 80 ppb of trans-2-pentanal (t-2-P), less than 30 ppb of hexanal, less than 15 ppb heptanal, or less 1500 ppb of dimethyldisulfide (DMDS).

IPC 8 full level  
**A61K 31/05** (2006.01); **A23K 20/158** (2016.01); **A23L 29/00** (2016.01); **A23L 33/115** (2016.01); **A61K 31/015** (2006.01); **A61K 31/202** (2006.01); **A61P 27/02** (2006.01)

CPC (source: EP KR)  
**A23K 20/158** (2016.05 - EP KR); **A23L 33/115** (2016.07 - EP KR); **A23L 33/30** (2016.07 - KR); **A23L 33/40** (2016.07 - KR); **A61K 31/015** (2013.01 - EP KR); **A61K 31/202** (2013.01 - EP KR); **A61P 27/02** (2017.12 - EP); **C11B 1/00** (2013.01 - KR); **C11B 3/00** (2013.01 - KR); **A23V 2002/00** (2013.01 - KR); **A23V 2250/1868** (2013.01 - KR)

Citation (search report)  
• [I] US 2001025114 A1 20010927 - BIJL HENDRIK LOUIS [NL], et al  
• [XI] REEM ABUZAYTOUN ET AL: "Oxidative Stability of Algal Oils As Affected by Their Minor Components", JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol. 54, no. 21, 26 September 2006 (2006-09-26), US, pages 8253 - 8260, XP055714942, ISSN: 0021-8561, DOI: 10.1021/jf061047s  
• [XA] SPROSTON MOLLY J ET AL: "Enzymatic Modification of Anhydrous Milkfat with n-3 and n-6 Fatty Acids for Potential Use in Infant Formula: Comparison of Methods", JOURNAL OF THE AMERICAN OIL CHEMISTS' SOCIETY (JAOCS), SPRINGER, DE, vol. 93, no. 2, 8 December 2015 (2015-12-08), pages 251 - 265, XP035947533, ISSN: 0003-021X, [retrieved on 20151208], DOI: 10.1007/S11746-015-2763-8  
• [XA] YEISER MICHAEL ET AL: "Growth and tolerance of infants fed formula with a new algal source of docosahexaenoic acid: Double-blind, randomized, controlled trial", PROSTAGLANDINS LEUKOTRIENES AND ESSENTIAL FATTY ACIDS, vol. 115, December 2016 (2016-12-01), pages 89 - 96, XP029825315, ISSN: 0952-3278, DOI: 10.1016/J.PLEFA.2016.09.001  
• [A] ZOU LONG ET AL: "Oxidative stability of structured lipid-based infant formula emulsion: Effect of antioxidants", FOOD CHEMISTRY, ELSEVIER LTD, NL, vol. 178, 21 January 2015 (2015-01-21), pages 1 - 9, XP029142129, ISSN: 0308-8146, DOI: 10.1016/J.FOODCHEM.2015.01.073  
• [A] HONOLD PHILIPP J ET AL: "Potential seaweed-based food ingredients to inhibit lipid oxidation in fish-oil-enriched mayonnaise", EUROPEAN FOOD RESEARCH AND TECHNOLOGY, SPRINGER BERLIN HEIDELBERG, BERLIN/HEIDELBERG, vol. 242, no. 4, 10 October 2015 (2015-10-10), pages 571 - 584, XP035868087, ISSN: 1438-2377, [retrieved on 20151010], DOI: 10.1007/S00217-015-2567-Y  
• [A] F.V.K. YOUNG: "The Chemical & Physical Properties of Crude Fish Oils for Refiners & Hydrogenators", FISH OIL BULLETIN NO. 18, 1 June 1986 (1986-06-01), pages 1 - 18, XP055106916, Retrieved from the Internet <URL:http://www.ifo.net/system/files/FOB17.PDF> [retrieved on 20140311]  
• [A] CARLOS MACKU ET AL: "Headspace volatile compounds formed from heated corn oil and corn oil with glycine", JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol. 39, no. 7, 1 July 1991 (1991-07-01), US, pages 1265 - 1269, XP055715147, ISSN: 0021-8561, DOI: 10.1021/jf00007a014  
• See references of WO 2018156596A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2018156596 A1 20180830**; AU 2018225557 A1 20190919; CN 110267654 A 20190920; EP 3585369 A1 20200101; EP 3585369 A4 20200826; JP 2020510716 A 20200409; KR 20200019111 A 20200221

DOCDB simple family (application)  
**US 2018018975 W 20180221**; AU 2018225557 A 20180221; CN 201880010589 A 20180221; EP 18757985 A 20180221; JP 2019543933 A 20180221; KR 20197026013 A 20180221