

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RIMFROST AS
Petitioner,

v.

AKER BIOMARINE ANTARCTIC AS
Patent Owner.

Case IPR-2018-01178

U.S Patent No. 9,375,453

PATENT OWNER'S CONTINGENT MOTION TO AMEND

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	A. The Proposed Substitute Claims Are Patentable Over The Prior Art At Issue In This Proceeding.....	12
	1. None of Petitioner’s references, alone or in combination, teach or suggest extraction of a krill oil from dried krill meal made by grinding, cooking and drying <i>E. superba</i>	13
	2. None of Petitioner’s references, alone or in combination, teach or suggest encapsulated krill oil compositions comprising “from 5% to 8% ether phospholipids w/w of said krill oil.”.....	15
	3. None of Petitioner’s references, alone or in combination, teaches or suggests producing krill oil containing “astaxanthin esters in amount of from 100 mg/kg to 700 mg/kg of said krill oil.”.....	19
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LIST OF EXHIBITS

<u>EXHIBIT NO.</u>	<u>EXHIBIT DESCRIPTION</u>
2001	Declaration of Dr. Nils Hoem in Support of Patent Owner's Response
2002	Yamaguchi, K. et al. "Supercritical Carbon Dioxide Extraction of Oils from Antarctic Krill", J. Agric. Food Chem. 1986, 34, 904-907
2003	Prescott, S. et al. "Platelet-Activating Factor and Related Lipid Mediators", Annu. Rev. Biochem. 2000. 69:419-45
2004	Zimmerman, G. et al. "The platelet-activating factor signaling system and its regulators in syndromes of inflammation and thrombosis", Crit. Care Med 2002, Vol. 30, No. 5 (Suppl): S294-S301
2005	Calder, P. "n-3 Polyunsaturated fatty acids, inflammation, and inflammatory diseases ¹⁻³ ", Am. J. Clin. Nutr. 2006; 83(suppl): 1505S-19S
2006	Fricke, H. et al. "1-O-Alkylglycerolipids in Antarctic Krill (<i>Euphausia Superba</i> DANA)", Comp. Biochem. Physiol. Vol. 85B, No. 1, pp. 131-134, 1986

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- 2007 Reply Declaration of Dr. Stephen J. Tallon, IPR2017-00745,
U.S. Patent No. 9,078,905, dated January 24, 2018
- 2008 Zierenberg et al., Intestinal absorption of
polyenephosphatidylcholine in man, *J. Lipid. Res.* (1982)
23:1136-1142
- 2009 Blank et al., Meats and fish consumed in the American diet
contain substantial amounts of ether-linked phospholipids. *J*
Nutr. (1992) 122(8):1656-61
- 2010 Hartvigsen et al., 1-O-Alkyl-2-(w-oxo)acyl-sn-glycerols from
Shark Oil and Human Milk Fat Are Potential Precursors of
PAF Mimics and GHB. *Lipids* (2006) 41, 679–693
- 2011 Marathe et al., Inflammatory Platelet-activating Factor-like
Phospholipids in Oxidized Low Density Lipoproteins Are
Fragmented Alkyl Phosphatidylcholines. *J. Biol. Chem.* (1999)
274(40):28395-28404
- 2012 U.S. Appl. 14/020,162 as filed
- 2013 Petition for Post Grant Review, U.S. Patent No. 9,644,170,
Case No. PGR2018-00033

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