## UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RIMFROST AS

Petitioner

v.

AKER BIOMARINE ANTARCTIC AS

Patent Owner

Case No.: IPR2018-01178

U.S. Patent 9,375,453

Issue Date: June 28, 2016

Title: Bioeffective Krill Oil Compositions

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE PURSUANT TO 37 C.F.R. § 42.23 (b)

## TABLE OF CONTENTS

I.	INTF	RODUCTION1				
II.	SAM	COLLATERAL ESTOPPEL PRECLUDES PO FROM ADVANCING THE SAME PATENTABILITY ARGUMENTS REJECTED IN IPR2018-00295, PR2017-00746 AND IPR2017-00745				
III.	CLAIMS 1-32 WOULD HAVE BEEN OBVIOUS					
	A.	Have	Claims 1-3, 5-10, 12, 14-17, 19-20, 23-26, 28 and 30-32 Would Have Been Obvious In View of Breivik II, Catchpole, Bottino II And Sampalis II			
		1.	Extract 2 of Catchpole Example 18 Contained Approximately 32-37% Triglycerides	6		
		2.	Catchpole Discloses Krill Oil Extracts Having Greater Than 5% Ether Phospholipids As Recited In Claim 23	12		
		3.	A POSITA Would Have Combined The Conventional Extraction Techniques Disclosed In The Cited References And Obtained The Claimed Method Of Producing The Recited Polar Krill Oil	14		
		4.	PO's Argument That PAF Concerns Taught Away From Polar Krill Oil Having Greater Than About 3% Ether Phospholipid Lacks Merit	20		
	B.	Claim 4 Is Obvious in View of Breivik II, Catchpole, Bottino II, Sampalis I and Sampalis II		23		
	C.		ns 11, 18, 21 and 27 Would Have Been Obvious In View of vik II, Catchpole, Bottino II, Sampalis I And Fricke 1984	24		
	D.		ns 13, 22 and 29 Would Have Been Obvious Based On vik II, Catchpole, Bottino II, Sampalis I and Randolph	26		



-		_		$\sim$		***		_	~ 4	4 0	
l'n	tor	Partes	D D X 71	ΔXX ( 'α	ICA NIC	v idi	27M	V 1	11	1//	!
ш	ıcı	rancs	1/6/1	cw Ca	らた エメイ	) II I	$\mathbf{X} \mathbf{\angle U} \mathbf{I}$	0-1	JI	1 / O	,

US	Patent No.	9,375,453
$\circ$ . $\circ$ .	I atom I to	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

IV.	CONCLUSION	28
V.	CERTIFICATE OF COMPLIANCE	29



Inter Partes Review Case No.: IPR2018-01178

### I. INTRODUCTION

Patent Owner's Response, Paper 38 ("POR") proffers three meritless arguments why challenged claims 1-32 of U.S. Patent No. 9,375,453 ("the '453 patent") would not have been obvious.

First, ignoring the actual data reported in Example 18, Patent Owner ("PO") erroneously concludes that Extract 2 did not contain any triglycerides.

Second, PO arbitrarily categorizes conventional extraction techniques as either "selective" or "non-selective," and then baselessly contends that a POSITA would not have combined ranges for polar lipids extracted using these so-called different techniques.

Third, PO posits that a POSITA would have been deterred from preparing krill oil having greater than about 3% ether phospholipids because of purported concerns about Platelet Activating Factor ("PAF") activity.

If the *first* and *third* arguments look familiar, they should - - PO proffered these same arguments in one or more of the following "krill IPRs": IPR2018-00295; IPR2017-00746, IPR2017-00745. In fact, the current Response reads as though PO believes that repetition and stridency will overcome the fact that PO had a full and fair opportunity to litigate its "no triglycerides" and "PAF teaching away" arguments. But that each of these arguments was expressly rejected by the



Board as evidenced by the factual findings and conclusions of law detailed in three comprehensive Final Written Decisions finding every claim of U.S. Patent Nos. 9,320,765 ("the '765 patent"), 9,029,877 ("the '877 patent") and 9,078,905 ("the '905 patent") unpatentable. *See e.g.*, IPR2018-00295, Final Written Decision (Paper 35) ("-295 FWD", Exhibit 1129); IPR2017-00746, Final Written Decision (Paper 23) ("-746 FWD", Exhibit 1104); IPR2017-00745, Final Written Decision (Paper 24) ("-745 FWD", Exhibit 1103).

The legitimacy of -746 FWD and -745 FWD was even acknowledged by PO's CEO who candidly admitted:

Early in the process, [PO] became **aware of the weakness in these two patents** and have since upgraded this particular patent family. **The outcome of this** [PTAB] hearing was therefore as expected. However, we wanted to see how the United States Patent and Trademark Office argued their decisions. Exhibit 1111, p. 2 (emphasis added).

The Board has already fully considered and expressly rejected two of the arguments PO recycles in an effort to rebut substantial evidence demonstrating that the challenged claims of the '453 patent are unpatentable. PO's remaining argument fares no better. Conventional extraction techniques, regardless of how categorized by PO, could have been predictably modified by a POSITA with a reasonable expectation of obtaining a method of producing polar krill oil as recited



# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

#### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

#### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

#### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

### **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

