

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ENZYMOTEC LTD. and ENZYMOTEC USA, INC.
Petitioner

v.

NEPTUNE TECHNOLOGIES & BIORESSOURCES, INC.
Patent Owner

Case IPR2014-00556
Patent 8,278,351

Before LORA M. GREEN, JACQUELINE WRIGHT BONILLA, and
SHERIDAN K. SNEDDEN, *Administrative Patent Judges*.

SNEDDEN, *Administrative Patent Judge*.

DECISION
Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

Petitioners Enzymotec Ltd. and Enzymotec USA, Inc. (collectively, “Enzymotec”) filed a Petition (Paper 1; “Pet.”) requesting an *inter partes* review of claims 1–6, 9, 12, 13, 19–29, 32, 35, 36, and 42–46 of U.S. Patent No. 8,278,351 (“the ’351 patent”). Neptune Technologies and Bioresources, Inc. (“Neptune”) filed a Patent Owner Preliminary Response. Paper 11 (“Prelim. Resp.”).

We have jurisdiction under 35 U.S.C. § 314. The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a), which states:

THRESHOLD.—The Director may not authorize an *inter partes* review to be instituted unless the Director determines that the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.

Upon consideration of the above-mentioned Petition and Preliminary Response, we conclude that Enzymotec has established that there is a reasonable likelihood that it would prevail with respect to at least one of the challenged claims. We grant the Petition and institute an *inter partes* review as to claims 1–6, 9, 12, 13, 19–29, 32, 35, 36, and 42–46.

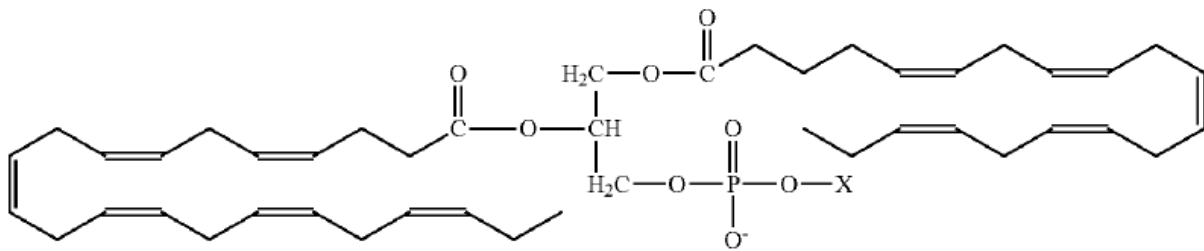
A. *Related Matters*

The ’351 patent is also the subject of an *inter partes* review in IPR2014-00003. Aker Biomarine AS (“Aker”) is the Petitioner in IPR2014-00003. Enzymotec filed a Motion for Joinder (Paper 4) requesting joinder of the current proceeding with IPR2014-00003. We have granted Enzymotec’s Motion for Joinder in an Order decided concurrently with this Decision.

B. The '351 Patent (Ex. 1001)

Phospholipids are made up of two chains of fatty acids attached to a chemical backbone made up of phosphoric acid, glycerol and nitrogenous bases (e.g., choline). Ex. 1001, col. 4, ll. 41–56. Phospholipids having choline as the nitrogenous base are referred to as phosphatidylcholines. *Id.*

The '351 patent relates to certain phospholipids and compositions containing phospholipids. The '351 patent discloses a phospholipid including two fatty acids chains of eicosapentanoic acid (“EPA”) and docosahexanoic acid (“DHA”) simultaneously. The general formula for the phospholipid is:



wherein X represents a moiety normally found in a phospholipid such as phosphatidylcholine (PC), phosphatidylethanolamine (PE) and phosphatidylinositol (PI). *Id.* at col. 2, l. 46 to col. 3, l. 2 and col. 21, ll. 1–25.

The phospholipids are derived from natural marine or aquatic sources. *Id.* at col. 1, ll. 19–22. Krill is described as the preferred source of the disclosed phospholipids, which includes krill found in the Antarctic Ocean (*Euphasia superba*) and in the Pacific Ocean (*Euphasia pacifica*). *Id.* at col. 15, ll. 8–21.

The '351 patent describes the preparation of krill extracts that preferably contain 40% weight per weight (w/w) phospholipid. *Id.* at col. 15, ll. 42–45.

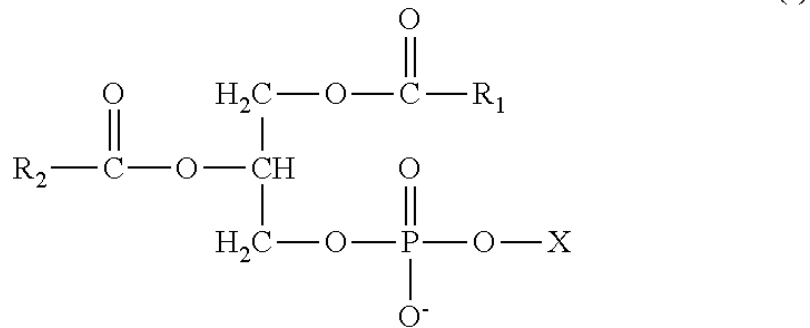
Polyunsaturated fatty acids, in particular omega-3 fatty acids, preferably make up at least 15% w/w of the total lipids in the extract. *Id.* at col. 16, ll. 47–51. DHA or EPA may account for at least 32% w/w of the total lipid content of the extract. *Id.*

at col. 16, ll. 51–54

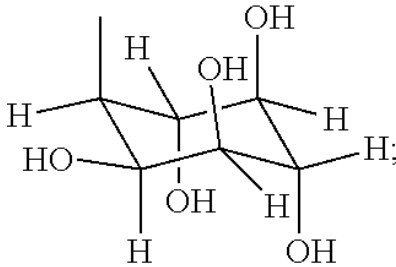
C. Illustrative Claims

Claims 1 and 24 are the only independent claims among the challenged claims and are reproduced below:

1. A krill extract comprising:
a phospholipid of the general formula (I),



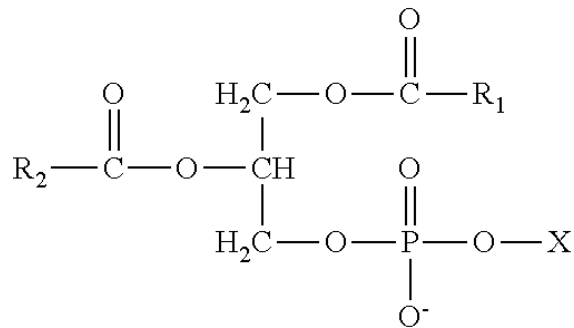
wherein R1 and R2, each together with the respective carboxyl groups to which each is attached, each independently represents a docosahexaenoic acid (DHA) or an eicosapentanoic acid (EPA) residue, and X is $-\text{CH}_2\text{CH}_2\text{NH}_3$, $-\text{CH}_2\text{CH}_2\text{N}(\text{CH}_3)_3$, or



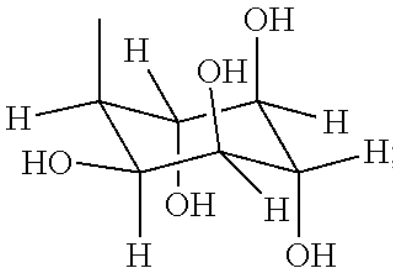
and wherein the extract is suitable for human consumption.

24. A capsule, tablet, solution, syrup, or suspension comprising
a krill extract comprising:
a phospholipid of the general formula (I),

(I)



wherein R1 and R2, each together with the respective carboxyl groups to which each is attached, each independently represents a docosahexaenoic acid (DHA) or an eicosapentanoic acid (EPA) residue, and X is —CH₂CH₂NH₃, —CH₂CH₂N(CH₃)₃, or



and wherein the extract is suitable for human consumption.

Claims 2–6, 9, 12, 13, and 19–23 depend from claim 1, either directly or indirectly. Claims 25–29, 32, 35, 36, and 42–46 depend from claim 24, either directly or indirectly.

D. The Prior Art and Supporting Evidence

Enzymotec relies on the following prior art:

Beaudoin et al., WO 00/23546 A1, published April 27, 2000 (Ex. 1002) (“Beaudoin I”).

Fricke et al., Lipid, Sterol and Fatty Acid Composition of Antarctic Krill (*Euphausia superba* Dana), 19(11) LIPIDS 821–827 (1984) (Ex. 1006) (“Fricke”).

Itano Refrigerated Food Co., Ltd., Bio & High Technology Announcement

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.