

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4808295

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST
<b>SEQUENCE:</b>	1

**CONVEYING PARTY DATA**

Name	Execution Date
BIORIGINAL FOOD & SCIENCE CORP.	12/19/2017

**RECEIVING PARTY DATA**

<b>Name:</b>	BANK OF MONTREAL
<b>Street Address:</b>	115 S LASALLE ST, 20TH FLOOR WEST
<b>Internal Address:</b>	ATTN: JACQUELINE LENTZ
<b>City:</b>	CHICAGO
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	60603

**PROPERTY NUMBERS Total: 21**

Property Type	Number
Patent Number:	9145534
Patent Number:	7087432
Patent Number:	7193134
Patent Number:	7671252
Patent Number:	7473820
Patent Number:	8003853
Patent Number:	8088978
Patent Number:	8841512
Patent Number:	7977469
Patent Number:	8318914
Patent Number:	8088906
Application Number:	13485765
Application Number:	13339428
Application Number:	12438373
Application Number:	12747670
Application Number:	12995733
Application Number:	13060458
Application Number:	15098191

PATENT

Property Type	Number
Application Number:	14684682
Application Number:	15173799
Application Number:	15105080

**CORRESPONDENCE DATA**

**Fax Number:** (650)739-3900  
*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.*

**Phone:** (650)739-3939  
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**Correspondent Name:** JONES DAY  
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**Address Line 4:** NEW YORK, NEW YORK 10281-1047

<b>ATTORNEY DOCKET NUMBER:</b>	958279-600036
<b>NAME OF SUBMITTER:</b>	DEBBIE WU
<b>SIGNATURE:</b>	/Debbie Wu/
<b>DATE SIGNED:</b>	02/02/2018

**Total Attachments: 8**  
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PATENT SECURITY AGREEMENT

This Patent Security Agreement, dated as of December 19, 2017 (this "Patent Security Agreement"), is made by each signatory hereto listed under "Pledgors" (each a "Pledgor" and collectively, the "Pledgors"), in favor of Bank of Montreal, in its capacity as administrative agent for the secured parties (in such capacity, together with its successors and permitted assigns, the "Administrative Agent") pursuant to that certain Credit Agreement, dated as of December 19, 2017 (as amended, restated, amended and restated, supplemented, extended, waived, renewed, replaced, refinanced or otherwise modified from time to time, the "Credit Agreement"), by and among, among others, Alpha MergerSub, Inc., a Nevada corporation ("MergerSub"), as an initial Borrower thereunder, whose rights and obligations therein will be deemed to have been automatically assigned to and assumed by Omega Protein Corporation, a Nevada corporation ("Omega"), immediately following the consummation of the Closing Date Acquisition, the other Borrowers from time to time party thereto, the lenders from time to time party thereto and the several agents party thereto, including the Administrative Agent.

W I T N E S E T H:

WHEREAS, the Pledgors are party to a Guarantee and Security Agreement of even date with the Credit Agreement (as amended, restated, amended and restated, supplemented, waived, renewed, replaced or otherwise modified from time to time, the "Security Agreement") in favor of the Administrative Agent pursuant to which the Pledgors are required to execute and deliver this Patent Security Agreement.

NOW, THEREFORE, in consideration of the premises and to induce the Administrative Agent, for the benefit of the Secured Parties, to enter into the Credit Agreement, each Pledgor hereby agrees with the Administrative Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement, or if not defined therein, in the Credit Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. Each Pledgor hereby pledges and grants to the Administrative Agent for the benefit of the Secured Parties a Lien on and security interest in all of the right, title and interest of such Pledgor in, to and under all the following Pledged Collateral, in each case excluding Excluded Property (collectively, the "Patent Collateral"):

(a) all Patents, including, without limitation, the United States patents and patent applications listed on Schedule 1 attached hereto, together with any and all (i) rights and privileges arising under applicable Law with respect to the use or ownership of any of the foregoing, (ii) inventions, discoveries, designs and improvements described and claimed therein, and (iii) reissues, reexaminations, divisions, divisionals, renewals, extensions, continuations and continuations in part thereof and amendments thereto; and

(b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Administrative Agent pursuant to the Security Agreement, and the Pledgors hereby acknowledge and affirm that the rights and remedies of the Administrative Agent with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control.

SECTION 4. Recordation. Each Pledgor authorizes and requests that the Commissioner for Patents and any other applicable government officer record this Patent Security Agreement in the United States Patent and Trademark Office, the Canadian Intellectual Property Security Office and any other applicable governmental office.

SECTION 5. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts. Delivery of an executed counterpart of this Patent Security Agreement by facsimile or other electronic means shall be effective as delivery of a manually executed counterpart of this Patent Security Agreement.


SECTION 6. Governing Law. This Patent Security Agreement shall be construed in accordance with and governed by the law of the State of New York. The terms of Section 10.14 and Section 10.15 of the Credit Agreement are incorporated herein *mutatis mutandis*.

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IN WITNESS WHEREOF, each Pledgor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

PLEDGORS:


**OMEGA PROTEIN CORPORATION**

By:   
Name: Peter Buck  
Title: Secretary

**CYVEX NUTRITION, INC.**

By:   
Name: Peter Buck  
Title: Secretary

**BIORIGINAL FOOD & SCIENCE  
CORP.**


By:   
Name: Peter Buck  
Title: Secretary

*[Signature page to Patent Security Agreement]*

Accepted and Agreed:

**BANK OF MONTREAL,**  
as Administrative Agent

By:



Name: Craig Thistlethwaite  
Title: Managing Director

SCHEDULE 1  
to  
PATENT SECURITY AGREEMENT

UNITED STATES PATENTS AND PATENT APPLICATIONS

United States Patents:

<b>OWNER</b>	<b>TITLE</b>	<b>PATENT NO.</b>
Omega Protein Corporation	PHOSPHOLIPID COMPOSITIONS ENRICHED FOR PALMITOLEIC, MYRISTOLEIC OR LAUROLEIC ACID, THEIR PREPARATION AND THEIR USE IN TREATING METABOLIC AND CARDIOVASCULAR DISEASE	9,758,536 B2
Cyvex Technologies, Inc. (n/k/a CYVEX NUTRITION, INC.)	FOOD PRODUCTS AND DIETARY SUPPLEMENTS CONTAINING PHENOLATED PROTEINS AND PROCESS FOR PREPARING THE SAME	6,753,312
Cyvex Technologies, Inc. (n/k/a CYVEX NUTRITION, INC.)	FOOD PRODUCTS AND DIETARY SUPPLEMENTS CONTAINING PHENOLATED PROTEINS AND PROCESS FOR PREPARING THE SAME	7,226,626
Bioriginal Food & Science Corp.	FAT CONTAINING COMPOSITION	9,145,534 B2
Bioriginal Food & Science Corp.	FAD4, FAD5, FAD5-2 AND FAD6, NOVEL FATTY ACID DESATURASE FAMILY MEMBERS AND USES THEREOF	7087432
Bioriginal Food & Science Corp.	FLAX (LINUM USITATISSIMUM L.) FATTY ACID DESATURASE	7193134
Bioriginal Food & Science Corp.	FAD4, FAD5, FAD5-2, AND FAD6, NOVEL FATTY ACID DESATURASE FAMILY MEMBERS AND USES THEREOF	7671252
Bioriginal Food & Science Corp.	FLAX (LINUM USITATISSIMUM I.) SEED-SPECIFIC PROMOTERS	7473820
Bioriginal Food & Science Corp.	FATTY ACID DESATURASES AND USES THEREOF	8003853
Bioriginal Food & Science Corp.	NOVEL OMEGA-3 FATTY ACID DESATURASE FAMILY MEMBERS AND USES THEREOF	8088978
Bioriginal Food & Science Corp.	FLAX (LINUM USITATISSIMUM L.) SEED-SPECIFIC PROMOTORS	8841512

<b>OWNER</b>	<b>TITLE</b>	<b>PATENT NO.</b>
Bioriginal Food & Science Corp.	FAD4, FAD5, FAD5-2, AND FAD6, NOVEL FATTY ACID DESATURASE FAMILY MEMBERS AND USES THEREOF	7977469
Bioriginal Food & Science Corp.	ELONGASES AND METHODS FOR PRODUCING POLYUNSATURATED FATTY ACIDS IN TRANSGENIC ORGANISMS	8318914
Bioriginal Food & Science Corp.	FAD4, FAD5, FAD5-2, AND FAD6, NOVEL FATTY ACID DESATURASE FAMILY MEMBERS AND USES THEREOF	8088906

United States Patent Applications:

<b>OWNER</b>	<b>TITLE</b>	<b>APPLICATION NO.</b>
Bioriginal Food & Science Corp.	FATTY ACID DEHYDRATASES AND USES THEREOF	13/485,765
Bioriginal Food & Science Corp.	FATTY ACID DEHYDRATASES AND USES THEREOF	13/339,428
Bioriginal Food & Science Corp.	FATTY ACID DEHYDRATASES AND USES THEREOF	12/438,373
Bioriginal Food & Science Corp.	FATTY ACID DEHYDRATASES AND USES THEREOF	12/747,670
Bioriginal Food & Science Corp. and BASF Plant Science GMBH jointly own an equal, undivided share of the application	FATTY ACID DEHYDRATASES AND USES THEREOF	12/995,733



Bioriginal Food & Science Corp. and BASF Plant Science GMBH jointly own an equal, undivided share of the application	NUCLEIC ACIDS ENCODING DESATURASES AND MODIFIED PLANT OIL	13/060,458
Omega Protein Corporation	PURIFICATION OF DPA ENRICHED OIL	14/532,893
Omega Protein Corporation	PURIFICATION OF DPA ENRICHED OIL	14/532,900
Omega Protein Corporation	PURIFICATION OF DPA ENRICHED OIL	PCT/US 14/63930
Omega Protein Corporation	ENRICHMENT OF PALMITOLEIC ACID AND PALMITOLEIC ACID DERIVATIVES BY DRY AND SOLVENT-AIDED WINTERIZATION	62/022,120
Omega Protein Corporation	ENRICHMENT OF PALMITOLEIC ACID AND PALMITOLEIC ACID DERIVATIVES BY DRY AND SOLVENT-AIDED WINTERIZATION	14/794,673
Omega Protein Corporation	ENRICHMENT OF PALMITOLEIC ACID AND PALMITOLEIC ACID DERIVATIVES BY DRY AND SOLVENT-AIDED WINTERIZATION	PCT/US2015/39607
Bioriginal Food & Science Corp.	COMPETITIVE INHIBITORS OF PROOXIDANTS IN EDIBLE LONG CHAIN POLYUNSATURATED TRIGLYCERIDE AND ETHYL ESTER OILS	13/485,765
Bioriginal Food & Science Corp.	IMIDAZOLINONE HERBICIDE RESISTANT BORAGE	15/098,191
Bioriginal Food & Science Corp.	ISOLATION AND CHARACTERIZATION OF A NOVEL PYTHIUM OMEGA 3 DESATURASE WITH SPECIFICITY TO ALL OMEGA 6 FATTY ACIDS LONGER THAN 18 CARBON CHAINS	14/684,682
Bioriginal Food & Science Corp.	FAD4, FAD5, FAD5-2, AND FAD6, NOVEL FATTY ACID DESATURASE FAMILY MEMBERS AND USES THEREOF	15/173,799
Bioriginal Food & Science Corp.; BASF Plant Science GMBH	METHODS FOR CONVERSION OF THE SUBSTRATE SPECIFICITY OF DESATURASES	15/105,080

NON-UNITED STATES PATENT APPLICATIONS

Non-United States Patent Applications:

<b>OWNER</b>	<b>TITLE</b>	<b>APPLICATION NO.</b>	<b>COUNTRY</b>
Omega Protein Corporation	PURIFICATION OF DPA ENRICHED OIL	2,929,954	Canada
Omega Protein Corporation	PURIFICATION OF DPA ENRICHED OIL	14859588.7	EU