

10/12/2016

FORM PTO-1595

(Rev. 08/05)

Office OMB No. 0651-0027 (exp. 06/30/2008)



EET

U.S. DEPARTMENT OF COMMERCE

United States Patent and Trademark

103676480

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies):

Silicon Valley Bank
3003 Tasman Drive
Santa Clara, CA 95054Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance/Execution Date(s):

Execution Date: 10/11/2016

- ☐ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☒ Other: RELEASE

2. Name and address of receiving party(ies):

Name: OPX Biotechnologies, Inc.

Internal Address:

Street Address: 2425 55th Street, Suite 100

City: Boulder

State: CO

Country: USA Zip: 94087

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application or patent number(s):

☐ This document is being filed together with a new application.

A. Patent Application No.(s)

B. Patent No.(s)

14067838 14341223 14206462 14215379 62105160

8048624

14040340 12952149 13963858 14215508

8652816

14275752 14006014 14409444 14215626

8809027

14552199 14080519 14212114 62053047

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: CT Lien Solutions

Internal Address: Attn: 14080632

Street Address: 187 Wolf Road, Suite 101

City: Albany

State: NY

Zip: 12205

Phone Number: 1-800-342-3676 X 4065

Fax Number: 1-800-962-7049

Email Address: cls-ud@albany@woterskluwer.com

6. Total number of applications and patents involved: 20

7. Total fee (37 CFR 1.21 (h) & 3.41) \$ 800.00

- ☒ Authorized to be charged by credit card
☐ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers 0974
 Expiration Date 6-17

b. Deposit Account Number

Authorized User Name

9. Signature:

Signature

Joseph D. Borgman

Name of Person Signing

10-12-16

Date

Total number of pages including cover sheet, attachments, and documents:

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
 Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

CH \$800.00 14067838

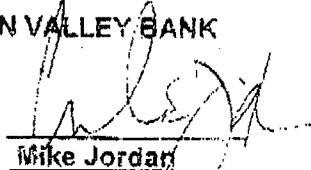
PATENT
 REEL: 040746 FRAME: 0051

RELEASE OF SECURITY AGREEMENT COVERING
INTERESTS IN PATENTS

Silicon Valley Bank ("Secured Party"), hereby releases its security interest in the interests of OPX Biotechnologies, Inc. ("Assignor") in the patented works set forth in that certain Intellectual Property Security Agreement dated 03/31/2015, executed by Assignor in favor of Secured Party recorded with the United States Department of Commerce, Patent and Trademark Office on 04/07/2015, Reel 035350, Frame 0608.

Dated: 10/11/2016

SILICON VALLEY BANK

By: 

Name: Mike Jordan

Title: Senior Operations Manager

EXHIBIT A

Copyrights

Description

Registration Number

Registration Date

108809554 v2

EXHIBIT B

Patents

Ref. No.	Country	Application No.	App. Date	Publication No.	Pub. Date	Patent No.	Patent Date	Title
713.201	US	12/528,588	12/04/08		N/A	8048624	11/01/11	COMPOSITIONS AND METHODS FOR 3-HYDROXYPROPIONATE PRODUCTION FROM BIOMASS
713.301	US	13/284,337	10/28/11	2012-0041232	02/16/12	8652816	02/18/14	COMPOSITIONS AND METHODS FOR 3-HYDROXYPROPIONATE BIO-PRODUCTION FROM BIOMASS
713.302	US	14/067,838	10/30/13	2014-0135526	05/15/14			COMPOSITIONS AND METHODS FOR 3-HYDROXYPROPIONATE BIO-PRODUCTION FROM BIOMASS
721.301	US	14/040,340	09/27/13	2014-0120595	05/01/14			METHODS, COMPOSITIONS AND SYSTEMS FOR BIOSYNTHETIC BIO-PRODUCTION OF 1,4-BUTANEDIOL
721.611	EP	9795143.8	07/08/09	23134191	04/27/11	N/A	N/A	METHODS, COMPOSITIONS AND SYSTEMS FOR BIOSYNTHETIC BIO-PRODUCTION OF 1,4-BUTANEDIOL
721.691	BR	P10915749-2	07/08/09			N/A	N/A	METHODS, COMPOSITIONS AND SYSTEMS FOR BIOSYNTHETIC BIO-PRODUCTION OF 1,4-BUTANEDIOL

108869534 v2

Ref. No.	Country	Application No.	App. Date	Publication No.	Pub. Date	Patent No.	Patent Date	Title
723.303	US	14/275,752	05/12/14					METHODS, SYSTEMS AND COMPOSITIONS RELATED TO REDUCTION OF CONVERSIONS OF MICROBIALY PRODUCED 3-HYDROXYPROPIONIC ACID (3-HP) TO ALDEHYDE METABOLITES
723.612	EP	EP 09813810.0	09/15/09	2326709	06/01/11	N/A	N/A	METHODS AND COMPOSITIONS FOR INCREASED TOLERANCE TO AND BIOLOGICAL PRODUCTION OF 3-HYDROXYPROPIONIC ACID (3-HP) TO ALDEHYDE METABOLITES
723.692	BR	PI0918875-4	07/23/09			N/A	N/A	METHODS AND COMPOSITIONS FOR INCREASED TOLERANCE TO AND BIOLOGICAL PRODUCTION OF 3-HYDROXYPROPIONIC ACID (3-HP)
745.301	US	14/552,199	11/24/14					METHODS, COMPOSITIONS AND SYSTEMS FOR INCREASED MICROBIAL PRODUCTION OF 3-HYDROXYPROPIONIC ACID INVOLVING AN OXALOACETATE AMINOTRANSFERASE

108-889554 v2

Ref. No.	Country	Application No.	App. Date	Publication No.	Pub. Date	Patent No.	Patent Date	Title
746.201	US	12/891,760	09/27/10			8,809,027	08/19/14	METHODS, COMPOSITIONS AND SYSTEMS FOR INCREASED MICROBIAL PRODUCTION OF 3-HYDROXYPROPIONIC ACID INVOLVING AN OXALOACETATE ALPHA-DECARBOXYLASE
746.301	US	14/341,223	07/25/14					METHODS, COMPOSITIONS AND SYSTEMS FOR INCREASED MICROBIAL PRODUCTION OF 3-HYDROXYPROPIONIC ACID INVOLVING AN OXALOACETATE ALPHA-DECARBOXYLASE
750.201	US	12/952,149	11/22/10	11/01/25118	05/26/11			PRODUCTION OF AN ORGANIC ACID AND/OR RELATED CHEMICALS
750.611	EP	EP 10832342.9	11/22/10	2501819	09/26/12			PRODUCTION OF AN ORGANIC ACID AND/OR RELATED CHEMICALS
750.701	Canada	2,781,400	11/22/10					PRODUCTION OF AN ORGANIC ACID AND/OR RELATED CHEMICALS
750.891	HK	13103792.9	11/22/10					PRODUCTION OF AN ORGANIC ACID AND/OR RELATED CHEMICALS
760.611	Europe	EP12759932.2	03/22/12	EP2689020	01/29/14			MICROBIAL BIOSYNTHESIS OF CHEMICAL PRODUCTS VIA MALONYL-COA, AND RELATED METHODS, COMPOSITIONS, AND SYSTEMS

108860554 v2

Ref. No.	Country	Application No.	App. Date	Publication No.	Pub. Date	Patent No.	Patent Date	Title
760.691	Brazil	BR112013024288-4	03/22/12					MICROBIAL BIOSYNTHESIS OF CHEMICAL PRODUCTS VIA MALONYL-COA, AND RELATED METHODS, COMPOSITIONS, AND SYSTEMS
760.701	Canada	2,868,113	03/22/12					MICROBIAL BIOSYNTHESIS OF CHEMICAL PRODUCTS VIA MALONYL-COA, AND RELATED METHODS, COMPOSITIONS, AND SYSTEMS
760.711	China	CN201280024996.9	03/22/12	CN103562398A	02/05/14			MICROBIAL BIOSYNTHESIS OF CHEMICAL PRODUCTS VIA MALONYL-COA, AND RELATED METHODS, COMPOSITIONS, AND SYSTEMS
760.741	India	9042/DELNP/2013	03/22/12					MICROBIAL BIOSYNTHESIS OF CHEMICAL PRODUCTS VIA MALONYL-COA, AND RELATED METHODS, COMPOSITIONS, AND SYSTEMS
760.781	Mexico	MX/e/2013/010481	03/22/12					MICROBIAL BIOSYNTHESIS OF CHEMICAL PRODUCTS VIA MALONYL-COA, AND RELATED METHODS, COMPOSITIONS, AND SYSTEMS
760.831	United States	14/006,014	09/18/13					MICROBIAL BIOSYNTHESIS OF CHEMICAL PRODUCTS VIA MALONYL-COA, AND RELATED METHODS, COMPOSITIONS, AND SYSTEMS

108969554 v2

Ref. No.	Country	Application No.	App. Date	Publication No.	Pub. Date	Patent No.	Patent Date	Title
760.861	Thailand	1301005140	03/22/12					MICROBIAL BIOSYNTHESIS OF CHEMICAL PRODUCTS VIA MALONYL-COA, AND RELATED METHODS, COMPOSITIONS, AND SYSTEMS
760.911	Malaysia	P12013003414	03/22/12					MICROBIAL BIOSYNTHESIS OF CHEMICAL PRODUCTS VIA MALONYL-COA, AND RELATED METHODS, COMPOSITIONS, AND SYSTEMS
760.921	Indonesia	W00201304205	03/22/12					MICROBIAL BIOSYNTHESIS OF CHEMICAL PRODUCTS VIA MALONYL-COA, AND RELATED METHODS, COMPOSITIONS, AND SYSTEMS
763.301	US	14/080,519	11/14/13	14-0121118	05/01/14			METHODS, SYSTEMS AND COMPOSITIONS REGARDING MULTIPLEX CONSTRUCTION PROTEIN AMINO-ACID SUBSTITUTIONS AND IDENTIFICATION OF SEQUENCE-ACTIVITY RELATIONSHIPS, TO PROVIDE GENE REPLACEMENT SUCH AS WITH TAGGED MUTANT GENES, SUCH AS VIA EFFICIENT HOMOLOGOUS RECOMBINATION

102589554 v2

Ref. No.	Country	Application No.	App. Date	Publication No.	Pub. Date	Patent No.	Patent Date	Title
764.301	US	14/206,462	03/12/14	14-0309451	10/16/14			PURIFICATION OF 3-HYDROXYPROPIONIC ACID FROM CRUDE CELL BROTH AND PRODUCTION OF ACRYLAMIDE
764.601	PCT	PCT/US13/46888	06/20/13	2013/192450	12/27/13			PURIFICATION OF 3-HYDROXYPROPIONIC ACID FROM CRUDE CELL BROTH AND PRODUCTION OF ACRYLAMIDE
768.201	US	13/963,858	08/09/13	14-0051136	2/20/2014			MICROORGANISMS AND METHODS FOR THE PRODUCTION OF FATTY ACIDS AND FATTY ACID DERIVED PRODUCTS
768.601	PCT	PCT/US2013/054422	08/09/13	WO14/026162	2/13/2014			MICROORGANISMS AND METHODS FOR THE PRODUCTION OF FATTY ACIDS AND FATTY ACID DERIVED PRODUCTS
775.601	PCT	PCT/US14/030898	03/17/14					PRODUCTION OF CHEMICALS
776.601	PCT	PCT/US13/046889	06/20/13	WO13/192451	12/27/2013			DEHYDRATION OF 3-HYDROXYPROPIONIC ACID TO ACRYLIC ACID
776.602	PCT	PCT/US13/046900	06/20/13	WO13/192453	12/27/2013			PURIFICATION OF 3-HYDROXYPROPIONIC ACID FROM CRUDE CELL BROTH AND DEHYDRATION TO ACRYLIC ACID
776.831	PCT	14/409,444	12/18/14					PURIFICATION OF 3-HYDROXYPROPIONIC ACID FROM CRUDE CELL BROTH AND DEHYDRATION TO ACRYLIC ACID
779.201	US	14/212,114	03/14/14					METHOD OF ENHANCED BIOPRODUCTION

100808554 v2

Ref. No.	Country	Application No.	App. Date	Publication No.	Pub. Date	Patent No.	Patent Date	Title
779.601	PCT	PCT/US2014/039035	03/13/14					METHOD OF ENHANCED BIOPRODUCTION
780.601	PCT	PCT/US2014/047320	07/18/14					MICROORGANISMS AND METHODS FOR THE PRODUCTION OF FATTY ACIDS AND FATTY ACID DERIVED PRODUCTS
786.201	US	14/215,379	03/17/14					ACETYL-COA CARBOXYLASE MUTATIONS
786.601	PCT	PCT/US2014/030074	03/15/14					ACETYL-COA CARBOXYLASE MUTATIONS
787.201	US	14/215,442	03/17/14					MONOFUNCTIONAL MCR + 3-HP DEHYDROGENASE
787.601	PCT	PCT/US2014/030072	03/15/14					MONOFUNCTIONAL MCR + 3-HP DEHYDROGENASE
788.201	US	14/215,508	03/17/14					CONTROL OF GROWTH-INDUCTION-PRODUCTION PHASES
788.601	PCT	PCT/US2014/030085	03/15/14					CONTROL OF GROWTH-INDUCTION-PRODUCTION PHASES
789.201	US	14/215,626	03/17/14					BIOPRODUCTION OF CHEMICALS
789.601	PCT	PCT/US2014/030083	03/15/14					BIOPRODUCTION OF CHEMICALS
790.601	PCT	PCT/US2014/030923	03/17/14					MONOFUNCTIONAL MCR + 3-HP DEHYDROGENASE
OPXINHOUSE000001	US	62/053,047	09/19/14					BIOPRODUCTION OF CHEMICALS
OPXINHOUSE000002	US	62/105/160	01/19/15					MICROORGANISMS AND METHODS FOR THE PRODUCTION OF FATTY ACIDS AND FATTY ACID DERIVED PRODUCTS

108060654 v2

EXHIBIT C

Trademarks

<u>Description</u>	Registration/ Application <u>Number</u>	Registration/ Application <u>Date</u>
OPXBIO GOOD CHEMISTRY	4,508,227	04/01/14
OPXBIO GOOD CHEMISTRY	85/658,563	06/21/12
O	85/658,565	06/21/12
OPXBIO	85/658,557	06/21/12
OPXBIO	4,472,644	01/21/14
O	4,467,939	01/14/14
EDGE	4,411,289	10/01/13

EXHIBIT D

Mask Works

Description

Registration Number

Registration Date

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