PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JEFFREY M. SKERKER	01/09/2018
JAY D. KEASLING	01/09/2018
JAMES KIRBY	01/09/2018

RECEIVING PARTY DATA

Name:	The Regents of the University of California
Street Address:	1111 Franklin Street
Internal Address:	12th Floor
City:	Oakland
State/Country:	CALIFORNIA
Postal Code:	94607-5200

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16450824

CORRESPONDENCE DATA

Fax Number: (510)486-7896

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: 510-486-4534

Email: SKReineman@lbl.gov

Correspondent Name: ROBIN CHEN CHIANG / SHARON KAY REINEMAN
Address Line 1: LAWRENCE BERKELEY NATIONAL LABORATORY

Address Line 2: ONE CYCLOTRON ROAD, MS 56A-0120 Address Line 4: BERKELEY, CALIFORNIA 94720-8127

ATTORNEY DOCKET NUMBER:	2015-057-03
NAME OF SUBMITTER:	SHARON KAY REINEMAN
SIGNATURE:	/Sharon Kay Reineman/
DATE SIGNED:	06/25/2019

Total Attachments: 4

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PATENT 505543160 REEL: 049581 FRAME: 0091

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LBNL Case No. 2015-057-02

Application Number PCT/US2017/067737

Co-Owner Docket Nos. NTESS: SD-137666; PNNL: 30882-E WO

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S):

Jeffrey M. Skerker residing at 2146A California Street Berkeley, CA 94703

Jay D. Keasling residing at 828 Contra Costa Avenue Berkeley, CA 94707

James Kirby residing at 2731 Ashby Place, Apt. 1 Berkeley, CA 94705

hereby sell(s), assign(s) and transfer(s) to ASSIGNEE, The Regents of The University of California, a California Corporation, having its statewide administrative offices located at 1111 Franklin Street, 12TH Floor, Oakland, CA 94607-5200 and the successors, assigns and legal representatives of the ASSIGNEE all of its right, title and interest for the United States and its territorial possessions and in all foreign countries in and to, any and all improvements which are disclosed in the invention entitled:

TITLE: Synthesis of bioproducts from lignin-derived aromatics by genetically modified microorganisms

and which is found in U.S. patent application serial no. **PCT/US2017/067737** filed on **December 20, 2017**

and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

ASSIGNOR(S) hereby agrees that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR(S) further agrees that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, post grant review, inter parties review, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. Any attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.

LBNL Case No. 2015-057-02 Application Number PCT/US2017/067737 Co-Owner Docket Nos. NTESS: SD-137666; PNNL: 30882-E WO

ASSIGNMENT

AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to Issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, The Regents of The University of California.

Executed this $\frac{q^{\frac{4}{3}}}{d}$ day of $\frac{\mathbb{J}^{q} \cap \mathbb{J}^{q}}{q}$., 2018	GAGA 71 Mondon — Jeffre y M . Skerker (Signature)
Executed thisday of	, 2018	Jay D. Keasling (Signature)
Executed this day of	_, 2018	James Kirby (Signature)
Hereby Accepted on behalf of		
The Regents of the University of California Signature <u>How Kay Reisiema</u> n		
Name Sharon Kay Reineman		
Legal Analyst, Patent Admin. (LBN	L - IPO)	

LBNL Case No. 2015-057-02 Application Number PCT/US2017/067737 Co-Owner Docket Nos. NTESS: SD-137666; PNNL: 30882-E WO

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Executed this day of	, 2018	 Jeffrey M. Skerker (Signature)
Executed this 4 day of Sanga (4)	, 2018	Jay D. Keasling (Signature)
Executed this day of	, 2018	 James Kirby (Signature)
Hereby Accepted on behalf of The Regents of the University of California		
Signature Man Ky Reisena		
Name Sharon Kay Reineman		
Title Legal Analyst, Patent Admin. (LBNL - I	PO)	
January 10. 2018		

LBNL Case No. 2015-057-02 Application Number PCT/US2017/067737 Co-Owner Docket Nos. NTESS: SD-137666; PNNL: 30882-E WO

ASSIGNMENT

AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, The Regents of The University of California.

Executed this day of, 20°	Jeffrey M. Skerker (Signature)
Executed this day of, 201	I8 Jay D. Keasling (Signature)
Executed this day of <u></u>	8 James Kirby (Signature)

Hereby Accepted on behalf of
The Regents of the University of California
Signature
Name Sharon Kay Reineman
Title Legal Analyst, Patent Admin. (LBNL - IPO)

Date ______January 10, 2018

PATENT REEL: 049581 FRAME: 0096

RECORDED: 06/25/2019