PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE

CONVEYING PARTY DATA

Name	Execution Date
UNIVERSITY OF CALIF-LAWRENC BERKELEY LAB	08/21/2018

RECEIVING PARTY DATA

Name:	UNITED STATES DEPARTMENT OF ENERGY	
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City:	WASHINGTON	
State/Country:	D.C.	
Postal Code:	20585	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16022113

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ATTORNEY DOCKET NUMBER:	16-022113 CAR
NAME OF SUBMITTER:	CYNTHIA RIDGE
SIGNATURE:	/CYNTHIA RIDGE/
DATE SIGNED:	04/03/2019

Total Attachments: 1

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PATENT 505409539 REEL: 048789 FRAME: 0180

CONFIRMATORY LICENSE

Title:

SIMULATING THE METABOLIC PATHWAY DYNAMICS OF AN

ORGANISM

Contractor:

The Regents of the University of California

Contract No:

DE-AC02-05CH11231

LBNL Docket No:

2017-049-02

DOE Docket No.: S-145,843

Inventor(s): Zachary Costello and

Hector Garcia Martin

US Patent App No.: 16/022,113

Filing Date:

June 28, 2018

U.S. Patent No.:

Issue Date:

Foreign patent applications filed or intended to be filed at contractor's expense in (countries): (NONE)

The Contractor certifies that a true copy of the provisions which govern patent rights in "subject inventions" under the above-identified contract is herewith submitted or has been submitted to the U.S. Department of Energy by certification dated October 29, 1996.

WHEREAS, the above-identified contract provides the Contractor with the right to elect to retain title in certain inventions and the Contractor has reported the above-identified invention as a subject invention under the contract, has elected to retain title therein, and has agreed to file a domestic patent application thereon, if not previously filed.

ACCORDINGLY, the Contractor hereby confirms that under the provisions of the above-identified contract governing patent rights, it has granted to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world. This license applies to the above-identified invention, the above-identified patent application(s), and any and all divisions or continuations thereof and any resulting patent or reissue patent which may be granted thereon.

The Government reserves for itself, and is hereby granted by the Contractor, the irrevocable power to inspect and make copies of the file wrapper(s) of the above-identified U.S. patent application and of any related or continuation patent application(s), whether domestic or foreign, for the above-identified invention.

It is understood and agreed that this instrument does not preclude the Government from asserting rights under the provisions of the above-identified contract or any other agreement between the Government and the Contractor, or any other rights of the Government with respect to the above-identified invention,

Signed on behalf of: The Regents of the University of California, Lawrence Berkeley National Laboratory

(Contractor)

(Contractor Official's Signature

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PATENT

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