OMB No. 0651-0027	(exp. 6/30/2008)	Ų	U.S. DEPARTMENT OF CON Inited States Patent and Trade	
CAR		ORM COVER SHEET	S-135,672	
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)		2. Name and address of receiving party(les)		
The Regents of the University of California		Name: <u>United States Department of Energy</u> Internal Address:		
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3. Nature of conveyance/Execution Date(s): Execution Date(s) February 16, 2017		Street Address: 1000 Independence Ave. S.W		
Assignment Merger Security Agreement Change of Name		City: Washington		
Joint Research Agreement		State: D.C.		
Government Interest Assignment Executive Order 9424, Confirmatory License		Country: <u>USA</u>	JSAZip:20585	
Other		Additional name(s) & add	dress(es) attached? 🔲 Ye	s 🗹 No
A. Patent Applica Serial No. 15/	tion No.(s) 104,161	B. Patent No.(s)	together with a new app	- ाक्यांचा वर्षी वि
5. Name and address to whom correspondence concerning document should be malled:		6. Total number of applications and patents Involved: 1		
_{Name:} Michael	J. DODDS	7. Total fee (37 CFR	1.21(h) & 3.41) \$	
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Street Address: 9800 S. Cass Ave		Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)		
City: Argonne		8. Payment Informat	tion	*** ******
State: <u> L</u>			st 4 Numbers piration Date	
Phone Number: 630-252-2164		b. Deposit Account Number		
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Email Address: Confirmatory.License@science.dea.gov				
9. Signature:	Signature		_ <i>3/27 201</i> Date	
	Timothy Harney #38,174 Name of Person Signing		nber of pages including cover ttachments, and documents:	2

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PATENT

CONFIRMATORY LICENSE

Title:

Hydrogen/Bromine Flow Battery in which Hydrogen is Freely

Exchanged between Two Cell Compartments

Contractor:

The Regents of the University of California

Contract No:

DE-AR0000137 DOE Energy Advanced Research Projects

LBNL Docket No:

2014-034-03

DOE Docket No.: S-135,672

Inventor(s): Paul Albertus, Edward Knudsen,

Michael C. Tucker, Kyu Taek Cho

and Adam Weber

US Patent App No.: 15/104,161

Filing Date:

June 13, 2016

U.S. Patent No.: Issue Date:

Foreign patent applications filed or intended to be filed at contractor's expense in (countries); (PCT)

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)

By: Dhud Chin 2-16-17
(Contractor Official's Signature) (Date)

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Berkeley, CA 94720-8127

PATENT

REEL: 042115 FRAME: 0287

RECORDED: 03/27/2017