

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT3619277

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
RAN YI	09/25/2015
FANG DAI	11/10/2015
JIANTAO ZAI	10/07/2015
RECEIVING PARTY DATA	
Name:	THE PENN STATE RESEARCH FOUNDATION
Street Address:	304 OLD MAIN
City:	UNIVERSITY PARK
State/Country:	PENNSYLVANIA
Postal Code:	16802
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	14328136
PCT Number:	US2014046145
CORRESPONDENCE DATA	
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<i>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.</i>	
Phone:	412-562-1622
Email:	joan.bice@bipc.com
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ATTORNEY DOCKET NUMBER:	0073605-000190
NAME OF SUBMITTER:	DUANE A. STEWART III
SIGNATURE:	/Duane A. Stewart III/
DATE SIGNED:	11/17/2015
Total Attachments: 6	
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ASSIGNMENT

WHEREAS, we, Donghai Wang, residing at 2344 Autumnwood Drive, State College, Pennsylvania 16801; Fang Dai, residing at 210 E. Hamilton Avenue, Apt. 32, State College, Pennsylvania 16801; Ran Yi, residing at 425 Waupelani Drive, Apt. 125, State College, Pennsylvania 16801, and Jiantao Zai, residing at 841 Southgate Drive, Apt. B14, State College Pennsylvania 16801; respectively, have invented certain new and useful apparatus, methods, inventions, discoveries and/or improvements disclosed in a U.S. Utility Patent Application No. 14/328,136, filed July 10, 2014 and PCT Patent Application No. PCT/US2014/046145 filed July 10, 2014 entitled "MESOPOROUS SILICON SYNTHESIS AND APPLICATIONS IN LI-ION BATTERIES AND SOLAR HYDROGEN FUEL CELLS" claiming priority to U.S. Provisional Patent Application Serial No. 61/844,634 filed July 10, 2013, hereinafter the "applications"; and

AND WHEREAS, The Penn State Research Foundation, The Pennsylvania State University, 304 Old Main, University Park, Pennsylvania 16802-1504 (hereinafter the "Assignee"), is desirous of acquiring the entire right, title and interest in and to said application(s) and the apparatus, inventions, discoveries, methods, and improvements therein disclosed;

NOW THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration paid to us by said Assignee, receipt whereof we hereby acknowledge, we do hereby assign, sell, transfer, and set over unto said Assignee the entire right, title, and interest in and to said application(s) and the apparatus, inventions, discoveries and improvements therein disclosed for the United States of America and its territories and all foreign countries and any Letters Patent which may issue therefor in the United States and its territories and all foreign countries and all divisions, reissues, continuations, continuations-in-part, renewals, and/or extensions thereof, including the right to apply for Letters Patents in each foreign country and the United States of America and its territories, in its own name and to claim any and all priority rights under the International Convention, other conventions, treaties, or otherwise associated therewith for each country and the United States of America and its territories, said Assignee to have and to hold the interests herein assigned to the full ends of the terms of said Letters Patent and any and all divisions, reissues, continuations, continuations-in-part, renewals, and/or extensions thereof, respectively, as fully and entirely as the same would have been held and enjoyed by us had this Assignment not been made.

The Commissioner of Patents and Trademarks is requested to issue such Letters Patent in accordance herewith. We covenant that we are the lawful owners of the said application(s), apparatus, inventions, discoveries and improvements, that the same are unencumbered, that no

license has been granted to make, use, or vend the said apparatus, inventions, discoveries or improvements or any of them, and that we have the full right to make this Assignment.

And for said consideration, we agree individually that we will communicate to said Assignee or the representatives thereof any facts known to me respecting said apparatus, inventions, discoveries and improvements, and will, upon request, but without expense to me, testify in any legal proceedings, sign all lawful papers, execute all divisional, reissue, continuation, continuation-in-part, renewal, and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts, deemed necessary or expedient by said Assignee or by counsel for said Assignee, to assist or enable said Assignee to obtain and enforce full benefits from the rights and interests herein assigned, and, in the event of any application or Letters Patent assigned herein becoming involved in Interference, to cooperate to the best of the ability of the undersigned in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof. This Assignment shall be binding upon our heirs, executors, administrators, and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors, and/or assigns, as the case may be, of said Assignee.

And for said consideration, the undersigned hereby agrees to execute, at the request of said Assignee, all documents in connection with any application for foreign letters patent therefor.

Executed: _____

Donghai Wang

Executed: _____

Fang Dai

Executed: 09/25/15



Ran Yi

Executed: _____

Jiantao Zai

Commonwealth of Pennsylvania

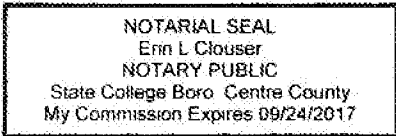
County of Centre

ss:

Before me, a Notary Public in and for the said County and State, personally appeared Ran Yi, who acknowledged that he/she is the person who executed the foregoing Assignment and acknowledged it to be his/her free and voluntary act and deed.

Witness my hand and notarial seal this 25 day of September, 2015.

(Notarial Seal)



Errn L Clouser
Notary Public

Commonwealth of Pennsylvania

County of _____

ss:

Before me, a Notary Public in and for the said County and State, personally appeared Jiantao Zai, who acknowledged that he/she is the person who executed the foregoing Assignment and acknowledged it to be his/her free and voluntary act and deed.

Witness my hand and notarial seal this _____ day of _____, 2015.

(Notarial Seal)

Notary Public

ASSIGNMENT

FOR VALUE RECEIVED, and pursuant to my obligations under my employment agreements / appointments with THE PENNSYLVANIA STATE UNIVERSITY ("University"), We, Fang Dai and Jiantao Zai, hereby sell, assign and transfer unto the University's designee, **THE PENN STATE RESEARCH FOUNDATION**, as assignee, and its successors, assigns and legal representatives, the entire right, title and interest in and to all subject matter invented by me and disclosed or claimed in an application for Letters Patent of the United States of America, entitled:

"Mesoporous Silicon Synthesis and Applications in Li-Ion Batteries and Solar Hydrogen Fuel Cells"

signed by us on the date set forth below; and in and to any and all continuations, continuations-in-part, divisions, reissues, renewals, extensions, substitutions, additions or reexaminations of such application and any U.S. patents issuing thereon; and in and to any and all corresponding international and foreign applications for Letters Patent and any foreign patents issuing thereon; and all Convention and Treaty Rights of any kind, in all countries throughout the world, for all such subject matter; together with all claims for damages by reason of future, present and past infringement, with the right to sue for and collect the same for assignee's use and on behalf of assignee's successors, assigns and legal representative.

We request that any and all patents for said inventions be issued to said assignee, its successors, assigns and legal representatives, or to such nominees as it may designate.

We agree that, when requested, we will, without charge to said assignee but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing, maintaining and enforcing patents for said inventions in any and all countries and for vesting title thereto in said assignee, its successors, assigns and legal representatives or nominees.

We authorize and empower the said assignee, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from us.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of said assignee or nominee to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

We covenant with said assignee, its successors, assigns and legal representatives, that the rights and property herein conveyed are free and clear of any encumbrance, and that we have full right to convey the same as herein expressed.

Signed this 10 day of November, 2015.

Witness: Chen Zhen

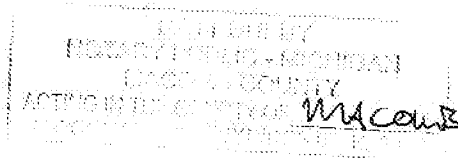
Signed: [Signature]
Fang Dai

STATE OF MICHIGAN :
 : ss:
COUNTY OF MACOMB

On this 10 day of NOVEMBER, 2015, before me, a Notary Public in and for the county and State aforesaid, appeared Fang Dai, to me personally known to be the person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act for the uses and purposes therein expressed.

Witness my hand and seal the day and year last above given.

[Signature]
Notary Public



Signed this Seventh day of October, 2015.

Witness: Shoushuang Huang 黄寿双 Signed: Jiantao Zai 詹陶哉
Shoushuang Huang Jiantao Zai