

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5712273

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KENNETH WILLIAM KRATSCHMAR	08/28/2019
XIANMING JIMMY LI	08/27/2019
CULLEN HALL	08/28/2019
EDWARD YOUN	08/28/2019
JEFF ALLEN	08/29/2019
<b>RECEIVING PARTY DATA</b>	
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<b>Street Address:</b>	NO. 9, BINHE AVENUE, FUTURE SCIENCE
<b>Internal Address:</b>	CITY, CHANGPING DISTRICT
<b>City:</b>	BEIJING
<b>State/Country:</b>	CHINA
<b>Postal Code:</b>	102211
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16564241
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(703)683-1080
<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>	
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<b>Address Line 4:</b> ALEXANDRIA, VIRGINIA 22314	
<b>ATTORNEY DOCKET NUMBER:</b>	KRAT3002/TJM/TL
<b>NAME OF SUBMITTER:</b>	THOMAS LEE
<b>SIGNATURE:</b>	/Thomas Lee/
<b>DATE SIGNED:</b>	09/11/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).
<b>Total Attachments: 4</b> source=KRAT3002_Dec_Assgnmnt_1#page1.tif source=KRAT3002_Dec_Assgnmnt_1#page2.tif source=KRAT3002_Dec_Assgnmnt_1#page3.tif source=KRAT3002_Dec_Assgnmnt_1#page4.tif	

Attorney Ref:

## DECLARATION AND ASSIGNMENT

### DECLARATION

TITLE OF INVENTION:

As a below named inventor, I hereby declare that:

This declaration is directed to:

- ☒ The accompanying utility or design patent application, or
- ☐ United States application or PCT international application number:  
filed on

1. The above-identified application was made or authorized to be made by me.
2. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
3. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

*By signing this declaration, the inventor(s) confirms that the application, including the claims, has been read and understood and that the inventor is aware of the duty to disclose to the U.S. Patent and Trademark Office all information known to the inventor(s) to be material to patentability as defined in 37 CFR§1.56.*

### ASSIGNMENT

WHEREAS, I (we), the below named inventor, hereinafter referred to as ASSIGNOR, is the or an owner of certain new and useful improvements in the above identified application (hereinafter referred to as the INVENTION).

WHEREAS, CHINA ENERGY INVESTMENT CORPORATION LIMITED and NATIONAL INSTITUTE OF CLEAN-AND-LOW-CARBON ENERGY

whose post office address is/are No. 22, Xibinhe Road, Andingmen, Dongcheng District, Beijing, China, 100011 and No.9, Binhe Avenue, Future Science City, Changping District, Beijing, China, 102211

hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to the INVENTION in the United States;

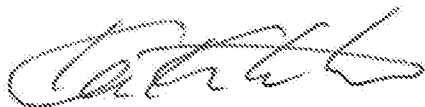
☒ and in any foreign countries.

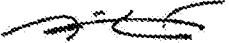
NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, (we), ASSIGNOR, by these presents do sell, assign and transfer unto said ASSIGNEE, the entire right, title, and interest in and to said INVENTION and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application.

ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) in the United States for said INVENTION, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said INVENTION, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the INVENTION that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives.

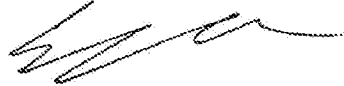
ALSO, ASSIGNOR hereby authorizes and requests the Commissioner of Patents and/or the Director of the United States Patent and Trademark Office (USPTO) to issue any and all Letters Patent referred to above to ASSIGNEE, as the ASSIGNOR of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behoof; and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.

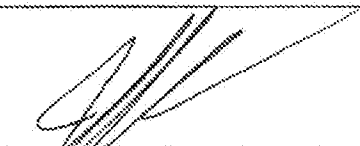
ASSIGNOR authorizes any member of the firm of *Bacon & Thomas, PLLC*, USPTO Customer No. 23364, to insert or complete any information in the assignment portion of this document needed to effect its recordal in the USPTO.

LEGAL NAME OF INVENTOR/ASSIGNOR			
Name:	Kenneth William KRATSCHMAR	Date:	8/28/2019
Signature:			


LEGAL NAME OF ADDITIONAL INVENTOR/ASSIGNOR			
Name:	Xianming Jimmy Li	Date:	8/27/2019
Signature:			

LEGAL NAME OF ADDITIONAL INVENTOR/ASSIGNOR			
Name:	Cullen HALL	Date:	
Signature:			

LEGAL NAME OF ADDITIONAL INVENTOR/ASSIGNOR			
Name:	Edward YOUN	Date:	8/28/2019
Signature:			

LEGAL NAME OF ADDITIONAL INVENTOR/ASSIGNOR			
Name:	Jeff ALLEN	Date:	8/28/2019
Signature:			

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Signature:			

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Signature:			

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Signature:			

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Signature:			

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RECORDED: 09/11/2019

REEL: 050336 FRAME: 0420