## 504475908 07/27/2017 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4522610

UBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY DA	ATA			
		Name Exe	cution Date	
WENZHEN LI		07/11	1/2017	
NEEVA BENIPAL	06/15	5/2017		
JI QI			1/2017	
YANG QIU		07/12	2/2017	
RECEIVING PARTY DA	ГА			
Name:	IOWA STATE UNIVERSITY RESEARCH FOUNDATION, INC.			
Street Address:	1805 C	OLLABORATION PLACE		
Internal Address:	SUITE 2	2100		
City:	AMES			
State/Country:	IOWA			
	50010			
	50010			
PROPERTY NUMBERS Property Type	50010 Total: 1	Number 15458202		
PROPERTY NUMBERS Property Type	50010 Total: 1	<b>Number</b> 15458202		
Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE D	50010 Total: 1			
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number:	50010 Total: 1	(585)270-2179		
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be	50010 Total: 1 ATA	15458202	ll be sent	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be	50010 Total: 1 ATA e sent to provided	15458202 (585)270-2179 • <b>the e-mail address first; if that is unsuccessful, it wil</b>	ll be sent	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p	50010 Total: 1 ATA e sent to provided	(585)270-2179 the e-mail address first; if that is unsuccessful, it will ; if that is unsuccessful, it will be sent via US Mail.	ll be sent	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name:	50010 Total: 1 ATA e sent to provided	15458202 (585)270-2179 <b><i>o the e-mail address first; if that is unsuccessful, it wil</i> <i>; if that is unsuccessful, it will be sent via US Mail.</i> 585-270-2122 uspatentsroc@leclairryan.com LECLAIRRYAN</b>	ll be sent	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1:	50010 Total: 1 ATA e sent to provided	(585)270-2179 <i>the e-mail address first; if that is unsuccessful, it will</i> <i>; if that is unsuccessful, it will be sent via US Mail.</i> 585-270-2122 uspatentsroc@leclairryan.com LECLAIRRYAN 70 LINDEN OAKS	ll be sent	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 2:	50010 Total: 1	(585)270-2179 <b>the e-mail address first; if that is unsuccessful, it will</b> <b>if that is unsuccessful, it will be sent via US Mail.</b> 585-270-2122 uspatentsroc@leclairryan.com LECLAIRRYAN 70 LINDEN OAKS SUITE 210	ll be sent	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1:	50010 Total: 1	(585)270-2179 <i>the e-mail address first; if that is unsuccessful, it will</i> <i>; if that is unsuccessful, it will be sent via US Mail.</i> 585-270-2122 uspatentsroc@leclairryan.com LECLAIRRYAN 70 LINDEN OAKS	ll be sent	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	50010 Total: 1	(585)270-2179 the e-mail address first; if that is unsuccessful, it will if that is unsuccessful, it will be sent via US Mail. 585-270-2122 uspatentsroc@leclairryan.com LECLAIRRYAN 70 LINDEN OAKS SUITE 210 ROCHESTER, NEW YORK 14625 29609.0771 (04364)	ll be sent	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	50010 Total: 1	(585)270-2179 the e-mail address first; if that is unsuccessful, it will if that is unsuccessful, it will be sent via US Mail. 585-270-2122 uspatentsroc@leclairryan.com LECLAIRRYAN 70 LINDEN OAKS SUITE 210 ROCHESTER, NEW YORK 14625	ll be sent	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	50010 Total: 1	(585)270-2179 the e-mail address first; if that is unsuccessful, it will if that is unsuccessful, it will be sent via US Mail. 585-270-2122 uspatentsroc@leclairryan.com LECLAIRRYAN 70 LINDEN OAKS SUITE 210 ROCHESTER, NEW YORK 14625 29609.0771 (04364)	ll be sent	

**Total Attachments: 4** 

## ASSIGNMENT

WHEREAS, We, Wenzhen Li, a citizen of the People's Republic of China, residing at 3133 Sycamore Road, Ames, Iowa, USA 50014, Neeva Benipal, a citizen of the United States, residing at 227 Raphael Avenue, Apt 4, Ames, Iowa, USA 50014, Ji Qi, a citizen of the People's Republic of China, residing at Dalian University of Technology, School of Materials Science and Engineering, 2 Linggong Road, Ganjingzi District, Dalian, People's Republic of China 116024, and Yang Qiu, a citizen of the People's Republic of China, residing at #7 building apt 610, 1<sup>st</sup> region of Sanlihe Road, Xicheng District, Beijing, People's Republic of China 100045, have invented certain new and useful improvements in FUEL-CELL SYSTEM AND METHOD OF GENERATING ENERGY FROM CRUDE FUEL for which an application for Letters Patent in the United States was filed as U.S. Serial No. 15/458,202, filed March 14, 2017;

AND WHEREAS, Iowa State University Research Foundation, Inc., with its principal place of business at 1805 Collaboration Place, Suite 2100, Ames, Iowa 50010, desires to acquire the entire right, title and interest of the above inventors in and to the said improvements and the said Application:

NOW, THEREFORE, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said Iowa State University Research Foundation, Inc., its successors, legal representatives and assigns, the entire right, title and interest throughout the world in, to and under the said improvements, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said Iowa State University Research Foundation, Inc., its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we will communicate to the said Iowa State University Research Foundation, Inc., its successors, legal representatives and assigns, any facts known to us respecting said improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said Iowa State University Research Foundation, Inc., its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

 $\frac{1}{2017}$  IN TESTIMONY WHEREOF, I hereunto set my hand and seal this  $\frac{11^{1/2}}{17}$  day of

Witnessed: Name Mohsen Torab; City, State Ames, IA, 50010 Date: 07/11/17 17944522

Vanhen C Wenzhen Li

Witnessed:

Le a City, Stale Ames, 14. 500/0 Date: 07/4/17

PATENT REEL: 043109 FRAME: 0851

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 15 day of , 28 17. MARCE. More Neeva Benipul Witnessed: SUKIN Sim BEMMI Witnessed Josepher Name Sukhpal S. Beniged City, State Rasevine, CA Date: 7-15-3017 Name Napad Jempsi City, State Assessment MA Date: 7-18-17 IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of , 20 31 Q1 Witnessed: Wilnessed: Name Name City, State City, State Date: Date: IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of . 20 . . Yang Qiu Witnessed: Witnessed: Name Name City, State City, State Date: Date: (\*\*\*\*\*)

- 2 -

PATENT REEL: 043109 FRAME: 0852

	OF, I hereunto set my hand and seal this day of
20 <u>.</u>	
	Neeva Benipal
Witnessed:	Witnessed:
Name	Name
City, State	City, State
PETRA A CONTRACTOR AND A CONTRACTOR A	
IN TESTIMONY WHERE $\frac{1}{10}$	OF, I hereunto set my hand and seal this $\frac{11 \text{ th}}{1000 \text{ th}}$ day of
	<u> I; G</u>
(4) C. M. Start, M. Santa, M. Santa, M. Santa, J. Santa, J. Santa, J. Santa, S. Santa, S. Santa, M. Santa, S. Santa, J. Santa, J. Santa, S. Sa Santa, Santa, Santa, S. Santa, Santa, S. Santa, S. Santa, San Santa, Santa, Sant	JiQi
Witnessed:	Witnessed: <u>Ubo Liu</u>
Name <u>D1 MIN</u>	Name <u>LIU, LI BO</u>
City, State Dolian, China Date: 07/18/2017	City, State Dollian China Date: 07/11/2017
$T_{\rm eff} = T_{\rm eff}$ , where $T_{\rm eff}$ ,	
(a) Several Construction (Section 2014) and a section of the se	ne menzinger einen eine eine eine eine eine eine e
IN TESTIMONY WHEREOF, I hereunto s	et my hand and seal this day of
	Yang Qiu
Witnessed;	Witnessed:
Name	Name
City, State Date:	City, State Date:

PATENT REEL: 043109 FRAME: 0853

IN TESTIMONY WI	EREOF, I hereunto set my hand and seal this day of
	Neeva Benipal
	Witnessed:
/itnessed:	
	Name
lame City, State	City, State Date:
Date: consecutive	
IN TESTIMONY V , 20	VHEREOF, I hereunto set my hand and seal this day of
Witnessed: Name City, State Date:	Name City, State Date:
	hereunto set my hand and seal this day of
IN TESTIMONY WHEREOF, I I $J_{1}$ , $J_{1}$ , $J_{2}$ , $J_$	Yang Qiu
July	Yang Qiu Witnessed:
IN TESTIMONY WHEREOF, I I $J_{\mathcal{H}}$ , $20/7$ .	Yang Qiu Witnessed:
Witnessed:	Yang Qiu Witnessed: Name
J-W.J.	Yang Qiu Witnessed: Name City, State

17944527

## PATENT REEL: 043109 FRAME: 0854

RECORDED: 07/27/2017

- 2 -