#### 504603405 10/20/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4650117

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
ZHEN XU	10/17/2017
LIANG DONG	10/17/2017
RATNESH KUMAR	10/17/2017

## **RECEIVING PARTY DATA**

Name:	IOWA STATE UNIVERSITY RESEARCH FOUNDATION, INC.
Street Address:	1805 COLLABORATION PLACE
Internal Address:	SUITE 2100
City:	AMES
State/Country:	IOWA
Postal Code:	50010

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15789033

## **CORRESPONDENCE DATA**

Fax Number: (515)288-1338

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.

Phone: 5152883667

Email: patatty@ipmvs.com

MCKEE, VOORHEES & SEASE, P.L.C. **Correspondent Name:** 

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Address Line 2: **SUITE 3200** 

Address Line 4: DES MOINES, IOWA 50309-2721

ATTORNEY DOCKET NUMBER:	P12006US01
NAME OF SUBMITTER:	MARK D. HANSING
SIGNATURE:	/MARK D. HANSING/
DATE SIGNED:	10/20/2017

# **Total Attachments: 4**

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**PATENT REEL: 043910 FRAME: 0972** 504603405

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PATENT REEL: 043910 FRAME: 0973

### ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to **IOWA STATE UNIVERSITY RESEARCH FOUNDATION, INC.**, an Iowa corporation, having an address of 1805 Collaboration Place,
Suite 2100, Ames, Iowa 50010, its successors and assigns the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, **Serial No.** 15/789,033 filed in the United States Patent and Trademark
Office on the 20th of October, 2017 entitled **ELECTROPHORETIC SOIL NUTRIENT SENSOR FOR AGRICULTURE,** and in said application and any and all other applications for United States Letters Patent, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent, applications, and in any reissue or extension thereof.

The undersigned hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said **Iowa State University Research Foundation, Inc.** 

For said considerations the undersigned hereby agree, upon the request, and at the expense of said assignee, its successors and assigns, to execute any and all divisional continuation and substitute applications for said invention or improvements, and any necessary oath or affidavit relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application, and for the said considerations the undersigned further agree upon the request of said assignee, its successors or assigns, 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 with said assignee, its successors or assigns in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof, the undersigned hereby agreeing to perform, upon request, any and all affirmative acts to obtain said Letters Patent of the United States and vest all rights therein hereby conveying in the said assignee, its successors and assigns whereby said Letters Patent will

PATENT REEL: 043910 FRAME: 0974 be held and enjoyed by the said assignee, its successors and assigns to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment and sale had not been made.

And for said considerations the undersigned hereby assign to said assignee, its successors and assigns, the entire right, title and interest in said invention or improvements for any and all foreign countries and agree upon the request of assignee, its successors and assigns to execute any and all documents that undersigned shall be requested to execute in connection with any and all applications for foreign Letters Patent therefor, including the prosecution thereof, and to execute any and all documents necessary to vest title in said foreign applications and patents in assignee.

Zhen Xu, appeared 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.	
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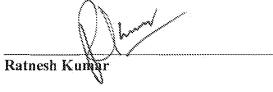
Signature: 142 Date 10/17/201

Name Printed: Yan cong Chen



Liang Dong, appeared 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. Signature:	Date 10/17/17
Name Printed 5 80 80 21 21 E	
Signature: Chiliano	Date
Name Printed: Log Williams	



Ratnesh Kumar, appeared 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: Signature:	Date (0/17/17_
Name Printed: JAY 672612	
Signature: ) La William	Date [ D-17-17
Name Printed: Kay Williams	