

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT3121882

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
DAVID KRAMER	11/20/2014
JEFFREY CRUZ	11/20/2014
CHRISTOPHER HALL	11/20/2014
WILLIAM KENT KOVAC	11/19/2014
ROBERT ZEGARAC	11/20/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	BOARD OF TRUSTEES OF MICHIGAN STATE UNIVERSITY
<b>Street Address:</b>	450 ADMINISTRATION BUILDING
<b>City:</b>	EAST LANSING
<b>State/Country:</b>	MICHIGAN
<b>Postal Code:</b>	48824-1046
<b>PROPERTY NUMBERS Total: 2</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	61653274
<b>PCT Number:</b>	US1343426
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<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>	
<b>Phone:</b>	5152333865
<b>Email:</b>	cfritz@cpaglobal.com
<b>Correspondent Name:</b>	BARBARA J. CLARK
<b>Address Line 1:</b>	1631 CRESTWOOD CIRCLE
<b>Address Line 4:</b>	AMES, IOWA 50010
<b>ATTORNEY DOCKET NUMBER:</b>	3000.074WO1
<b>NAME OF SUBMITTER:</b>	CATHERINE FRITZ
<b>SIGNATURE:</b>	/Catherine Fritz/
<b>DATE SIGNED:</b>	11/25/2014
<b>Total Attachments: 7</b>	
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PATENT

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## ASSIGNMENT

WHEREAS, we, David Kramer, residing at 2673 Elderberry Drive, Okemos, Michigan 48864; Jeffrey Cruz, residing at 323 Sebewaing Road, Okemos, Michigan 48864; Christopher Hall, residing at 5461 Wild Oak Drive, East Lansing, Michigan 48823; William Kent Kovac, residing at 703 N Francis Ave, Lansing, Michigan 48912; and Robert Zegarac, residing at 2370 Graystone Drive, Okemos, Michigan 48864, made certain new and useful inventions and improvements which are described in a U.S. Provisional Application filed on May 30, 2012, which application was assigned U.S. Patent Application Serial Number 61/653,274, and is entitled PLANT PHENOMETRICS SYSTEMS AND METHODS AND DEVICES RELATED THERETO, and in an International Patent Application filed on May 30, 2013, which application was assigned International Application Number PCT/US2013/043426, and is entitled PLANT PHENOMETRICS SYSTEMS AND METHODS AND DEVICES RELATED THERETO;

WHEREAS, We are governed by Michigan State University (hereinafter "MSU") Patent Policy ([www.hr.msu.edu/documents/facacadhandbooks/facultyhandbook/patents.htm](http://www.hr.msu.edu/documents/facacadhandbooks/facultyhandbook/patents.htm)), and therefore understand that, in exchange for GOOD AND VALUABLE CONSIDERATION provided by MSU, the receipt, sufficiency and adequacy of which are hereby acknowledged, the aforementioned new and useful inventions and improvements are considered "University Inventions." As such, the undersigned does hereby:

SELL, ASSIGN AND TRANSFER to Board of Trustees of Michigan State University (the "Assignee"), a corporation of the State of Michigan, having a place of business at 450 Administration Building, East Lansing, MI 48824-1046, the entire right, title and interest for the United States and all foreign countries in and to: any and all inventions and improvements which are disclosed in the identified application for U.S. Letters Patent, and which may be further identified below; such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States (including all provisional and non-provisional applications), and in all foreign countries on any of such inventions and/or improvements (including any applications for utility models); all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such inventions and/or improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and to claim priority based on the identified application;

AUTHORIZE AND REQUEST that any attorney associated with U.S. PTO Customer No. 102038 may (directly or through his/her designee) delete, insert, or alter any information identifying this application, or any related application, below, after execution of this Assignment;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and/or property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

**ASSIGNMENT**

Docket Nos: 3000.074PRV/3000.074WO1

Client Ref. Nos. TEC2012-0117-01Prov/TEC2012-0117-01PCT

Assignors: David Kramer, Jeffery Cruz, Christopher Hall, William Kent Kovac, Robert Zegarac

US Application No. 61/653,274 and International Application No. PCT/US2013/043426

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COVENANT, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the undersigned will (1) execute all provisional, non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers; (3) communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; (4) cooperate with the Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the applications or patents for such improvements; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such improvements in the Assignee, or for securing, maintaining and enforcing proper patent protection for such improvements;

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned, and is to extend to the benefit of the successors, assigns and nominees of the Assignee.

AGREED as of the date of my signature below:

ASSIGNMENT

Client Ref. Nos. TEC2012-0117-01Prov/TEC2012-0117-01PCT

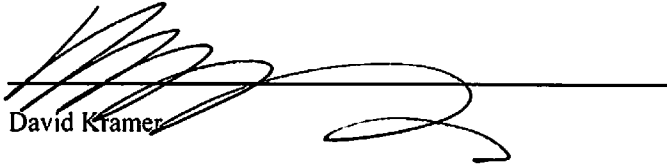
Assignors: David Kramer, Jeffery Cruz, Christopher Hall, William Kent Kovac, Robert Zegarac

US Application No. 61/653,274 and International Application No. PCT/US2013/043426

Docket Nos: 3000.074PRV/3000.074WOI

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 20 day of November, 2014.

  
David Kramer

CERTIFICATE OF ACKNOWLEDGMENT

STATE OF Michigan )  
COUNTY OF Ingham ) SS.

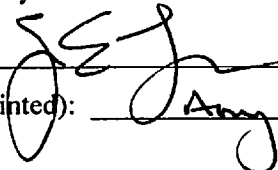
On this \_\_\_\_\_ day of \_\_\_\_\_, 2014, before me, the undersigned, a notary public for the State of \_\_\_\_\_, personally appeared DAVID KRAMER personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to this Assignment, and acknowledged that he/she executed the same for the purposes therein contained.

WITNESS my hand and official seal.

\_\_\_\_\_  
Notary Public

(SEAL)

Witnessed by:

  
Name (printed): Amy E. Luch

Date: 11/20/14

**ASSIGNMENT**

Client Ref. Nos. TEC2012-0117-01Prov/TEC2012-0117-01PCT

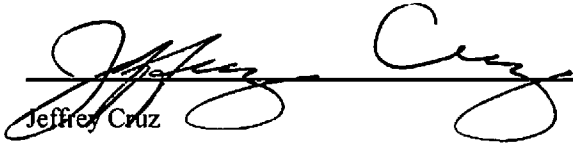
Assignors: David Kramer, Jeffery Cruz, Christopher Hall, William Kent Kovac, Robert Zegarac

US Application No. 61/653,274 and International Application No. PCT/US2013/043426

Docket Nos: 3000.074PRV/3000.074WO1

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 20 day of NOVEMBER, 2014.

  
Jeffrey Cruz

**CERTIFICATE OF ACKNOWLEDGMENT**

STATE OF MICHIGAN )  
 ) SS.  
COUNTY OF INGHAM )

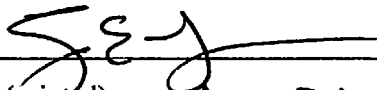
On this \_\_\_\_ day of \_\_\_\_\_, 2014, before me, the undersigned, a notary public for the State of \_\_\_\_\_, personally appeared **JEFFREY CRUZ** personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to this Assignment, and acknowledged that he/she executed the same for the purposes therein contained.

WITNESS my hand and official seal.

\_\_\_\_\_  
Notary Public

(SEAL)

Witnessed by:

  
Name (printed): Amy E. Locken

Date: 11/20/14

**ASSIGNMENT**

Docket Nos: 3000.074PRV/3000.074WO1

Client Ref. Nos. TEC2012-0117-01Prov/TEC2012-0117-01PCT

Assignors: David Kramer, Jeffery Cruz, Christopher Hall, William Kent Kovac, Robert Zegarac

US Application No. 61/653,274 and International Application No. PCT/US2013/043426

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 20 day of November, 2014.

Christopher C Hall

Christopher Hall

**CERTIFICATE OF ACKNOWLEDGMENT**

STATE OF Michigan )  
 ) SS.  
COUNTY OF Ingham )

On this \_\_\_\_\_ day of \_\_\_\_\_, 2014, before me, the undersigned, a notary public for the State of \_\_\_\_\_, personally appeared **CHRISTOPHER HALL** personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to this Assignment, and acknowledged that he/she executed the same for the purposes therein contained.

WITNESS my hand and official seal.

\_\_\_\_\_  
Notary Public

(SEAL)

Witnessed by:

[Signature]  
Name (printed): Amy E. Wicken

Date: 11/20/14

ASSIGNMENT

Client Ref. Nos. TEC2012-0117-01Prov/TEC2012-0117-01PCT

Assignors: David Kramer, Jeffery Cruz, Christopher Hall, William Kent Kovac, Robert Zegarac

US Application No. 61/653,274 and International Application No. PCT/US2013/043426

Docket Nos: 3090,074PRV/3000,074WO1

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 19<sup>th</sup> day of November, 2014.

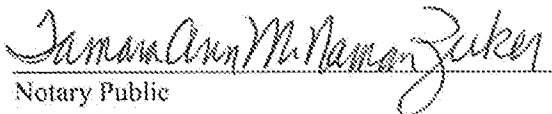
  
William Kent Kovac

CERTIFICATE OF ACKNOWLEDGMENT

STATE OF Michigan )  
COUNTY OF Ingham ) SS.

On this 19 day of November, 2014, before me, the undersigned, a notary public for the State of Michigan, personally appeared WILLIAM KENT KOVAC personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to this Assignment, and acknowledged that he/she executed the same for the purposes therein contained.

WITNESS my hand and official seal.

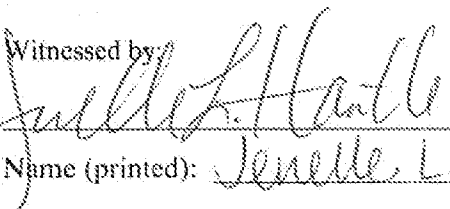
  
Notary Public

TAMARA ANN McNAMARA ZUKER  
NOTARY PUBLIC - STATE OF MICHIGAN  
COUNTY OF CLINTON  
My Commission Expires July 26, 2015  
Acting in the County of Ingham

(SEAL)

Witnessed by:

Name (printed):

  
Jenelle L. Hantle

Date:

11/19/2014



ASSIGNMENT

Client Ref. Nos. TEC2012-0117-01Prov/TEC2012-0117-01PCT


Assignors: David Kramer, Jeffery Cruz, Christopher Hall, William Kent Kovac, Robert Zegarac

US Application No. 61/653,274 and International Application No. PCT/US2013/043426

Docket Nos: 3000.074PRV/3000.074WO1

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 20th day of November, 2014.

  
\_\_\_\_\_  
Robert Zegarac

CERTIFICATE OF ACKNOWLEDGMENT

STATE OF MICHIGAN )  
COUNTY OF INGHAM ) SS.

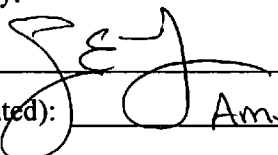
On this \_\_\_\_\_ day of \_\_\_\_\_, 2014, before me, the undersigned, a notary public for the State of \_\_\_\_\_, personally appeared **ROBERT ZEGARAC** personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to this Assignment, and acknowledged that he/she executed the same for the purposes therein contained.

WITNESS my hand and official seal.

\_\_\_\_\_  
Notary Public

(SEAL)

Witnessed by:

  
\_\_\_\_\_  
Name (printed): Amy E. Lucken

Date: 11/20/14