

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5030228

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
TARIK LOUKILI	06/28/2018
JOHN M. HAGEMAN	12/21/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	DEERE & COMPANY
<b>Street Address:</b>	ONE JOHN DEERE PLACE
<b>Internal Address:</b>	WORLD HEADQUARTERS
<b>City:</b>	MOLINE
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	61265
<b>PROPERTY NUMBERS Total: 2</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15253641
<b>Application Number:</b>	62245615
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(412)456-2864
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<b>Email:</b>	mgm@muslaw.com
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<b>ATTORNEY DOCKET NUMBER:</b>	279430.190_NP
<b>NAME OF SUBMITTER:</b>	MICHAEL G. MONYOK
<b>SIGNATURE:</b>	/Michael G. Monyok/
<b>DATE SIGNED:</b>	06/29/2018
<b>Total Attachments: 5</b>	
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**ASSIGNMENT AND ACKNOWLEDGEMENT OF ASSIGNMENT**

The below named inventors have invented the subject matter ("Invention") set forth in the following applications for a U.S. patent for a:

**SYSTEM FOR EVALUATING AGRICULTURAL MATERIAL**

for which U.S. provisional application serial number 62/245,615 filed on October 23, 2015, and for which U.S. nonprovisional application serial number 15/253,641 was filed on August 31, 2016, claiming the benefit of U.S. provisional application serial number 62/245,615 (each application herein collectively referred to as the "Application").

Certain inventors of the above referenced Invention and Application, Tarik Loukili, and John M. Hageman, ("Deere-affiliated Inventors", collectively and separately) were or are employed by Deere & Company and are obligated, by operation of law or contract, to assign all of their title, right and interest in the Invention and Application to Deere & Company. For good and valuable consideration, the receipt of which is acknowledged, the Deere-affiliated inventors agree to assign, and hereby do assign to Deere & Company ("First Assignee") all their entire right, title and interest which each said inventor has or had to the Invention and the Application.

Other certain inventors of the above referenced Invention and Application, Zachary Abraham Pezzementi ("CMU-affiliated Inventors", collectively and separately) were or are employed by Carnegie Mellon University and are obligated, by operation of law or contract, to assign all of their title, right and interest in the Invention and Application to Carnegie Mellon University. For good and valuable consideration, the receipt of which is acknowledged, the CMU-affiliated inventors agree to assign, and hereby does assign to Carnegie Mellon University ("Second Assignee") all their entire right, title and interest which each said inventor has or had to the Invention and the Application.

Under a separate Development Agreement between Deere & Company and Carnegie Mellon University, dated January 1, 2008, ("Development Agreement"), Deere & Company and Carnegie Mellon University agree that the above Invention and Application shall be jointly owned as Joint Intellectual Property under the Development Agreement because the contents of the Application relate to the Development Agreement. Any U.S., foreign or other applications or patents that claim priority based on the above Invention and Application, shall be jointly owned as Joint Intellectual Property under the Development Agreement to the extent that the claims of such applications or patents have patentable contributions from both the Deere-affiliated Inventors and the CMU-affiliated inventor(s). However, if the claims of any U.S., foreign or other applications or patents do not include patentable contributions from both the Deere-affiliated Inventors and CMU-affiliated inventor(s), the above Deere-affiliated Inventors authorize Deere & Company to claim priority based on the above application and to file any U.S., foreign, or other applications that claim priority based on the above Invention or Application; the above Carnegie-Mellon affiliated

Inventors authorize Carnegie Mellon University to claim priority based on the above application and to file any U.S., foreign or other applications that claim priority based on the above Invention or Application. To the full extent applicable, each such U.S. application that claims priority based on the above Invention or Application shall reference the Development Agreement as a joint research agreement that was in effect on or before the claimed invention was made, that the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement, and that the application for patent for the claimed invention discloses or is amended to disclose the names of the parties, Deere & Company and Carnegie Mellon University, to the joint research agreement, consistent with 35 U.S.C. §103(c), or its equivalent replacement.

Consistent with the foregoing, for any jointly owned patent rights that are assigned under this Agreement, the assigned rights to the assignee(s) include all rights to file U.S. and foreign patent applications for the Invention described in the name of each inventor or in the names of the above First Assignee and Second Assignee, collectively, as well as any right of priority to any letters patent of the United States or any other country that may be granted for the Invention, and any continuations, divisions, reissues, reexaminations, or extensions thereof, or any applications or other applications that claim priority based on the above Invention or Application. These assigned rights are to be held and enjoyed by the First Assignee and Second Assignee, collectively, and the successors or assigns of any of the First Assignee, the Second Assignee, or both. Similarly, if the claims of any U.S., foreign or other applications or patents do not include patentable contributions from both the Deere-affiliated Inventors and CMU-affiliated inventor(s), the above Deere-affiliated Inventors authorize Deere & Company to file any U.S., foreign, or other applications, and any continuations, divisions, extensions, reissues, reexaminations or extensions thereof; the above Carnegie-Mellon affiliated Inventors authorize Carnegie Mellon University to claim priority based on the above application and to file any U.S., foreign, or other applications, and any continuations, divisions, extensions, reissues, reexaminations or extensions thereof.

Each inventor and each assignee agrees to execute all papers which the authorized assignee(s) hereunder, its or their successors or assigns deem expedient in connection with the Application and any continuing, divisional, reissue, reexamination or foreign applications concerning the Invention, and to cooperate with the other assignee, its successors or assigns in every proper way possible to obtain patent(s) based on the Application and any continuing, divisional, reissue, reexamination or foreign applications concerning the Invention.

Each inventor and each assignee hereby authorize and assent to the Commissioner of Patents and Trademarks to issue any patent based on the above assigned rights.

In witness whereof, each inventor signed below:

**Inventor Signatures for Assignment and Acknowledgement of Assignment:**

Tarik Loukili Date signed: 06/28/18 at Urbandale City

State of IOWA  
County of POLK

Sworn to before me this 28th day of June, 2018.

SEAL 

Deborah A. Cameron  
Notary Public

**Inventor Signatures for Assignment and Acknowledgement of Assignment:**

John M. Hageman Date signed: \_\_\_\_\_ at \_\_\_\_\_ City

State of \_\_\_\_\_  
County of \_\_\_\_\_

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

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

In witness whereof, each inventor signed below:

**Inventor Signatures for Assignment and Acknowledgement of Assignment:**

\_\_\_\_\_ Date signed: \_\_\_\_\_ at \_\_\_\_\_  
Tarik Loukili City

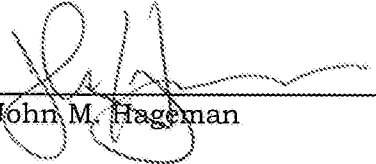
State of \_\_\_\_\_  
County of \_\_\_\_\_

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

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

SEAL

**Inventor Signatures for Assignment and Acknowledgement of Assignment:**

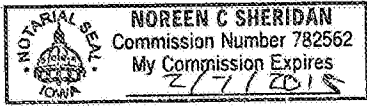
 \_\_\_\_\_ Date signed: 12/21/17 at Dubuque, IA  
John M. Hageman City

State of IOWA  
County of Dubuque

Sworn to before me this 21st day of December, 2017.

  
Notary Public

SEAL



**Inventor Signatures for Assignment and Acknowledgement of Assignment:**

Zachary Abraham Pezzementi Date signed: 1/4/2018 at Pittsburgh  
City

State of Pennsylvania  
County of Allegheny

Sworn to before me this 4 day of January, ~~2018~~ <sup>at</sup> 2018

M. Christine DeCarolis  
Notary Public

SEAL

