Mail Stop Assignment Recordation Service Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314

MAY 18 2012

RECORDATION FO

Atty. Docket No.: 16060-000010/US Page 1 of 1

05/22/2012

To the Honorable Commission Please record the attached origin	4000010	
Name of conveying party(ies):	2. Name and address of receiving party(i-s)	
Long WU	Name: Deere & Company	
Yue ZHAO	Street Address: One John Deere Place City: Moline, IL	
Wei QIAO	Country: U.S.A. Postal Code: () 1265	
Additional name(s) of conveying party(ies) attached?	Name: The Board of Regents of the University of Nebraska	
3. Nature of conveyance:	Street Address: Varner Hall	
Assignment	3835 Holdrege City: Lincoln, NE	
☐ Change of Name ☐ Other:	Country: U.S.A. Postal Code: (8583	
Execution Date: April 9, 2012, April 13, 2012 and April 13, 2012, respectively	Additional name(s) & address(es) attached?   1E8   NO	
<ol> <li>Application number(s) or patent number(s):</li> <li>If this document is being filed-together with a new app</li> <li>A. Patent Application No(s).</li> </ol>	lication, the execution date of the application is:  B. Patent No.(s).	
13/410,792	'	
Additional numbers attached?   YES NO		
<ol> <li>Name and address of party to whom correspondence concerning document should be mailed:</li> <li>Name: HARNESS, DICKEY &amp; PIERCE, P.L.C.</li> <li>Street Address: P.O. BOX 8910</li> <li>City: RESTON State: VA ZIP: 20195</li> <li>Country: USA</li> </ol>	<ul> <li>6. Total No. of applications/patents involved: One (1)</li> <li>7. Total fee (37 C.F.R. § 3.41): \$40.00</li> <li>☑ Enclosed</li> <li>☑ Authorized to be charged to deposit account, if no fee attached.</li> <li>8. Deposit account number: 08-0750</li> <li>(Attach triplicate copy of this page if paying by deposit account)</li> </ul>	
DO NOT USE	THIS SPACE	
9. Statement and signature.		
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.    Donald J. Daley/34,313		
; •		

D. D/BMH:pw

Attorney Docket No.: 16060-000010/US

Page 1 of 1

703 668 8200

## ASSIGNMENT

The below named inventor(s) own(s) the entire right title and interest to the invention ("the invention") which is the subject of a United States patent application ("the Application") entitled:

## DRIVE SYSTEMS INCLUDING SLIDING MODE OBSERVERS AND METHODS OF CONTROLLING THE SAME

Serial No.: 13/410,792

HDP

Filing Date: March 2, 2012

which each inventor has executed on the date indicated below next to each inventor's name.

Pursuant to an agreement between each inventor and Deere & Company, a Delaware corporation having its principal office at Moline, Illinois, as well as other good and valuable considerations paid to each inventor, each inventor agrees to assign, and hereby does assign to Deere & Company the entire right, title and interest which sald inventor has or may have to the invention.

The assigned rights include all rights to file US and foreign patent applications for the invention described in the name of each inventor or Deere & Company, 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 or extensions thereof. These assigned rights are to be held and enjoyed by Deere & Company, its successors or assigns, as fully and entirely as the same would have been held and onloyed by each invontor had this assignment not been made.

Each inventor agrees to execute all papers which Deere & Company, its successors or assigns deem expedient in connection with the Application and any continuing, divisional, reissue, reexamination or foreign applications concerning the Invention, and to cooporate with Deere & Company, 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 hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any letters patent based on the assigned rights to Doere & Company,

In witness whereof, each inventor has signed below:

State of / 1/2/

Sworn to before me this

SEAL

**PATENT** 

REEL: 028406 FRAME: 0938

P.003

Attorney Docket No. 16060-000010/US

## ASSIGNMENT

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

DRIVE SYSTEMS INCLUDING SLIDING MODE OBSERVERS AND METHODS OF CONTROLLING THE SAME for which Assignor is about to make or has made United States or International application for patent (a) , executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney): (b) executed on ... Ø (c) filed on March 2, 2012, and assigned Serial No. 13/410,792 or PCT

WHEREAS, The Board of Regents of the University of Nebraska, Vamer Hall, 3835 Holdrege, Lincoln, NE 68583, hereinafter referred to as Assignee, is desirous of acquiring all right, title, and interest therein:

International Application No. \_\_\_\_; and

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor hereby confirms any prior assignment to Assignee, and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell. assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof. for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee.

The undersigned hereby grant(s) the law firm of Harness, Dickey & Pierce, P.L.C. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document,

Attorney Docket No.	16060-000010/US
---------------------	-----------------

•	Attorney Docket No. 16060-000010/L
Yue Zhao	
State of Nopreska } ss.	
On this	executed the foregoing instrument and who the same of his/her own free will for the purposes
GENERAL NOTARY - State of Nebraska MARLENE A. FOCHER My Comm. Exp. Oct. 15, 2014	Waller a Forker Notary Public,
(seal)	Acting in the County Of
	State Of
	My Commission Expires
Wei QIAO	
State of <u>Nebraska</u> ) ss.  County of <u>Lancaster</u> ) ss.	
On this 13 day of Ahromappeared the foregoing individual, who acknowledged to me that he/she executed therein set forth.	executed the foregoing instrument and who he same of his/her own free will for the purposes
GENERAL NOTARY - State of Nebraska MARLENE A. FOCHER My Comm. Exp. Oct. 16, 2014	Walleve a. Forther Notary Public,
(seal)	Acting in the County Of
	State Of
1436677,1	My Commission Expires
	•

Page 2 of 2

**PATENT REEL: 028406 FRAME: 0940**