504133581 12/19/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4189867

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HERMAN HERMAN	12/07/2016
JOSE GONZALEZ-MORA	12/07/2016
MATT LEVINE	12/07/2016
JEAN-PHILIPPE TARDIF	12/05/2016

RECEIVING PARTY DATA

Name:	CARNEGIE MELLON UNIVERSITY
Street Address:	4615 FORBES AVENUE
Internal Address:	SUITE 302
City:	PITTSBURGH
State/Country:	PENNSYLVANIA
Postal Code:	15213

PROPERTY NUMBERS Total: 4

Property Type	Number
Application Number:	15339919
Application Number:	15065125
Application Number:	14243323
Application Number:	61807376

CORRESPONDENCE DATA

Fax Number: (412)456-2864

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: 4124562817

Email:mgm@muslaw.comCorrespondent Name:MICHAEL G. MONYOKAddress Line 1:535 SMITHFIELD STREET

Address Line 2: SUITE 1300

Address Line 4: PITTSBURGH, PENNSYLVANIA 15222

ATTORNEY DOCKET NUMBER:	279430.209_NP
NAME OF SUBMITTER:	MICHAEL G. MONYOK
SIGNATURE:	/Michael G. Monyok/

504133581 PATENT REEL: 040658 FRAME: 0526

DATE SIGNED:	12/19/2016	
Total Attachments: 6		
source=CMU209_Assignment#page1.tif		
source=CMU209_Assignment#page2.tif		
source=CMU209_Assignment#page3.tif		
source=CMU209_Assignment#page4.tif		
source=CMU209_Assignment#page5.tif		
source=CMU209_Assignment#page6.tif		

PATENT REEL: 040658 FRAME: 0527

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:

CONTROL ARRANGEMENT AND METHOD FOR CONTROLLING A POSITION OF A TRANSFER DEVICE OF A HARVESTING MACHINE

for which U.S. Nonprovisional Application No. 15/339,919 was filed on October 31, 2016, which is a continuation-in-part of U.S. Application No. 15/065,125, filed March 9, 2016, which is a divisional of U.S. Application No. 14/243,323, filed April 2, 2014 (now U.S. Patent No. 9,313,951), which claims priority to U.S. Provisional Application Serial No. 61/807,376, filed April 2, 2013 (each application herein collectively referred to as the "Application").

Certain inventors of the above referenced Invention and Application, Zachary T. Bonefas and Alex NyKamp, ("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, Herman Herman, Jose Gonzalez-Mora, Jean-Philippe Tardif and Matt Levine, ("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

PATENT REEL: 040658 FRAME: 0528 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 arid 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.

-2-

In witness whereof, each inventor signed below:

Inventor Signatures for Assignment and Acknowledgement of Assignment:

Date signed: 12/2/16 at 1/2 bender City State of 102 7 County of Polk Sworn to before me this 2 day of December, 2016. SEAL DESORAHA. CAMERON Notary Public Inventor Signatures for Assignment and Acknowledgement of Assignment: Mai	
Sworn to before me this 2 day of December, 2016. SEAL DEBORAN A. CAMERON SEAL Nykamp Date signed: 12/2//6 at Urbande City State of Taka	
Sworn to before me this 2 day of December, 2016. SEAL DEBORAN A. CAMERON SEAL Nykamp Date signed: 12/2//6 at Urbande City State of Taka	
SEAL DEBORAH A. CAMERON Notary Public Notary Public Inventor Signatures for Assignment and Acknowledgement of Assignment: Date signed: 12/2//6 at Urkeylde City State of	
Inventor Signatures for Assignment and Acknowledgement of Assignment: Date signed: 2/2/ 6 at City City City Commission Full Commission Full	
Date signed: 12/2/16 at Univide Alex Nykaphp City State of Towa	7_
Alex Nykaphp City State of Tables	
	······································
Sworn to before me this day of	
SEAL DEBORAH A. CAMERON SEAL Notary Public Notary Public	

Inventor Signatures for Assignment and Acknowledgement of Assignment:

Bury	Date signed: 12/67/16 at PITT SPURGA.
Herman Herman	City
State of PA County of NUECHENY Sworn to before me this 7	
COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL SMAChristine DeCarolis, Notary Public Penn Hills Twp., Allegheny County My Commission Expires Jan. 23, 2017 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES	M. Hrestine Le Caralis. Notary Public
/	ment and Acknowledgement of Assignment: Date signed: 12/0}//6 atPITISBURGH
State of Consylvania	
	day of Josember, 2016.
	M. Christin Blarolic Notary Public
SEAL COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL M. Christine DeCarolls, Notary Public Penn Hills Twp., Allegheny County My Commission Expires Jan. 23, 2017 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTAR	7

Inventor Signatures for Assignment and Acknowledgement of Assignment:

Matt Levine	Date signed: <u>「</u> こ/じ	14 10 at	City
<u>,</u>	***		
State of Kinksylva	Ma		
County of <u>Alleaghes</u>	y n		
Sworn to before me this	1 day of Seemb	, 2016.	
	- M	Christin	e DeCaroli
ROMMONWEALTH OF PENNSYLV	/ANIA	Notary P	
NOTARIAI SEAL	L		
M. Christine DeCarolis, Notary P Penn Hills Twp., Allegheny Cou			
My Commission Expires Jan. 23, MEMBER, PENNSYLVANIA ASSOCIATION OF N			
MEMBER, FEMIOTEN SWITTER			
MEMBER, PERIOTENS			
		droment of Accept	igamont.
		dgement of Ass	signment:
		dgement of Ass	signment:
nventor Signatures for As			·
nventor Signatures for As	ssignment and Acknowle		
nventor Signatures for As Jean-Philippe Tardif	ssignment and Acknowle Date signed:		
Inventor Signatures for Assemble Inventor Signatures for Assemble Inventor State of	ssignment and Acknowle Date signed:		
Inventor Signatures for Assemble Inventor Signatures for Assemble Inventor State of	ssignment and Acknowle Date signed:		
Inventor Signatures for Associate of	ssignment and Acknowle Date signed:	at	
nventor Signatures for As Jean-Philippe Tardif State of County of	ssignment and Acknowle Date signed:	at	·
Inventor Signatures for As	ssignment and Acknowle Date signed:	at	City

Inventor Signatures for Assignment and Acknowledgement of Assignment:

Matt Levine	Date signed:	at	City
State of			
Swarn to before me this	day of	., 2016.	
SEAL		Notary Publi	c
Inventor Signatures for Assign	nment and Acknowledgem	ent of Assign	ment:
Jean-Polipp/Tardif	Date signed: /-//5/20/4	_at _ <i>_//en</i> :	t <u>real</u> City
State of <u>Oucles</u> County of <u>Lanala</u>			
Swarn to before me this	day of <u>Vicenbes</u>	_, 2016.	
SEAL		ACARA S Notary Publi	

-5-

PATENT REEL: 040658 FRAME: 0533

RECORDED: 12/19/2016