Form <b>PTO-1595</b> (Rev. 07/05)	07.40.0		U.S. DEPARTMENT OF COMMERCE		
OMB No. 0651-0027 (exp. 6/30/2008)	07-18-2	007	United States Patent and Trademark Office		
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1 11	1034280	100			
To the Director of the U.S. Pater.	1004200		ed documents or the new address(es) below.		
1. Name of conveying party(ies)			address of receiving party(ies)		
Brian Mintah Bassam J. Alshaer		Name: Caterpili			
John J. Krone Jeffrey K. Berry		Internal Addre	ss:		
Additional name(s) of conveying party(ies) attac	hed? Yes 🗹 No	<del></del>			
3. Nature of conveyance/Execution I	• •	Street Address: 100 NE Adams Street			
Execution Date(s) 06/20/07; 06/13/07; 06/1			77		
Assignment Me	erger	(it is a section of the section of t			
Security Agreement L Ch	ange of Name	City: <u>Peoria</u>			
Joint Research Agreement		State: Illinois			
Government Interest Assignment		Country: US	Zip: 61629		
Executive Order 9424, Confirmato	ry License	Country. co			
Other		Additional name	e(s) & address(es) attached? Yes Vo		
	dditional numbers at	ached? TYes	□No		
5. Name and address to whom corrections on the concerning document should be made and the concerning document should be added and the c	•	6. Total numb	per of applications and patents		
Name: Michael B. McNeil		7 Total fee (3	37 CFR 1.21(h) & 3.41) \$ 40.00		
Internal Address:			ed to be charged by credit card		
		l	ed to be charged to deposit account		
Street Address: 511 S. Madison Street		Enclosed	· ·		
P.O. Box 2417		None req	uired (government interest not affecting title)		
		8. Payment I	nformation		
City: Bloomington State: Indiana Zip: 47	402	a. Credit C	ard Last 4 Numbers		
Phone Number: 812-333-5355		h Danasia	· —		
Fax Number: 812-333-3173		•	Account Number 500226		
Email Address:		Authoriz	zed User Name <u>Jonathan F. Yates</u>		
9. Signature:	1. 1.4	_	3-10-04		
- Xamen T	Signature		Date		

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

07/17/2007 DBYRNE 01 FC:8021 00000099 11827026 40.00 0P

Jonathan F. Yates

Name of Person Signing

5

Total number of pages including cover

sheet, attachments, and documents:

WHEREAS, Brian Mintah, residing at Washington, Illinois, hereinafter referred to as ASSIGNOR has invented together with Bassam J. Alshaer, John J. Krone, and Jeffrey K. Berry a new and useful

# CONTROL SYSTEM AND METHOD FOR CAPTURING PARTIAL BUCKET LOADS IN AUTOMATED LOADING CYCLE

for which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on \_; and

WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNOR;

- 1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do so.
- 2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.
- 3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc.
- 4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.

BRIAN MINTAH

Date

IN WITNESS OF the execution hereof by BRIAN MINTAH we have hereunto set our hands.

Witness (1) Date 06/20/200 Witness (2) Browle (1) Date 0/20/07

Address: Maguned Gabibulayer Address: Boad Edler

2110 IN Miners Dr. (07/6 C. Rd

Dunlap IL 6/525 Waterless, IL 6/298

05-750

PATENT REEL: 019591 FRAME: 0280

WHEREAS, Bassam J. Alshaer, residing at Dunlap, Illinois, hereinafter referred to as ASSIGNOR has invented together with John J. Krone, Jeffrey K. Berry and Brian Mintah a new and useful

# CONTROL SYSTEM AND METHOD FOR CAPTURING PARTIAL BUCKET LOADS IN AUTOMATED LOADING CYCLE

for which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on \_; and

WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNOR;

- 1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do so.
- 2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.
- 3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc.
- 4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.

Bassam J. Direct Date

IN WITNESS OF the execution hereof by BASSAM J. ALSHAPR we have hereunto set our hands.

Mitness (1) Mahamed OmarDate Hand Witness (2) Muthal Alsaleh Date

Address: 2413 W. Judicke In Address: 1700 W Hickory Grove RJ 9-104

Dunlap, TL, 61525

USA

USA

05-750

WHEREAS, John J. Krone, residing at Peoria, Illinois, hereinafter referred to as ASSIGNOR has invented together with Jeffrey K. Berry, Brian Mintah and Bassam J. Alshaer a new and useful

## CONTROL SYSTEM AND METHOD FOR CAPTURING PARTIAL BUCKET LOADS IN AUTOMATED LOADING CYCLE

WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNOR;

- 1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do so.
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- 3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc.
- 4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHI	ereof, assigi	NOR has ex	secuted this in $9/07$	nstrument.		
JOHN J. KRONE		Date	7			
IN WITNESS OF the execution						20,144
Witness (1)	Date	Witness (	2) _ ኒውገርዓ	ر. د	Date Q\ LL	- 011
Address: 10172 BORKONE		Address:				
PEKIN IL	61554		chillic	.the	ICE	1253

05-750

WHEREAS, Jeffrey K. Berry, residing at Yorkville, Illinois, hereinafter referred to as ASSIGNOR has invented together with Brian Mintah, Bassam J. Alshaer and John J. Krone a new and useful

### CONTROL SYSTEM AND METHOD FOR CAPTURING PARTIAL BUCKET LOADS IN AUTOMATED LOADING CYCLE

for which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on 6-20-07; and

WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNOR;

- 1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do so.
- 2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.
- 3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc.
- 4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHEREOF, ASSIGN	NOR has executed this instrument.
Jefrey Berry	6-20-07
JEFFREY K. BERRY	Date
IN WITNESS OF the execution hereof by JEFF  Witness (1)  Date	FREYK. BERRY we have hereunto set our hands  Man Wey G/2007  Witness (2) Date
Address: 1543 London Ct.	Address: 280 Trudy Gurt Butwie TI 60570

05-750

RECORDED: 07/10/2007

PATENT REEL: 019591 FRAME: 0283