

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT2994051

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
PAUL RUSSELL FRIEND	08/21/2014
FRANK ARTHUR WILLIS	08/21/2014
TROY KENNETH BECICKA	08/21/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CATERPILLAR INC.
<b>Street Address:</b>	100 N.E. ADAMS STREET
<b>City:</b>	PEORIA
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	61629-9510
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14466929
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)408-4400
<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>	202-408-4000
<b>Email:</b>	regional-desk@finnegan.com
<b>Correspondent Name:</b>	CATERPILLAR/FINNEGAN, HENDERSON, L.L.P.
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<b>Address Line 4:</b>	WASHINGTON, D.C. 20001-4413
<b>ATTORNEY DOCKET NUMBER:</b>	08350.1349-00000
<b>NAME OF SUBMITTER:</b>	DONNA O. BECKFORD-HARRIS
<b>SIGNATURE:</b>	/Donna O. Beckford-Harris/
<b>DATE SIGNED:</b>	08/22/2014
<b>Total Attachments: 5</b>	
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<b>PATENT</b>	

**ASSIGNMENT**

WHEREAS We, the below named inventors, [hereinafter referred to as Assignors], have made an invention entitled:

**MACHINE POSITIONING SYSTEM HAVING ALIGNMENT ERROR DETECTION**

for which We will or have filed a patent application; and

WHEREAS, CATERPILLAR INC., a corporation of Delaware whose post office address is Intellectual Property Department, 100 N.E. Adams Street, Peoria, IL 61629-9510 (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention, and in and to the patent application for this invention and any and all patents to be issued upon this application throughout the world;

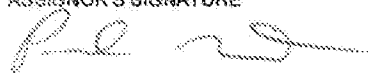
NOW THEREFORE, be it known that for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, We, as Assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention, and this application, and all divisions, and continuations thereof, and all patents which may be granted thereon, and all reissues thereof, as well as all rights to claim priority in any country or jurisdiction or patent office on the basis of this application, and all applications for patents which may hereafter be filed for this invention in any country or jurisdiction or patent office and all patents which may be granted on this invention in any country or jurisdiction or patent office, and all extensions, renewals, and reissues thereof; and We hereby authorize and request any official of any country or jurisdiction or patent office whose duty it is to issue patents on applications as described above, to issue all patents for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY covenant that We have the full right to convey the interest assigned by this Assignment, and We have not executed and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in any country or jurisdiction or patent office, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

AND, WE HEREBY authorize Assignee or the attorneys/representatives of Assignee to insert here in parentheses the country, application number, and official filing date ( \_\_\_\_\_ Application No. \_\_\_\_\_, filed \_\_\_\_\_ ).

IN TESTIMONY WHEREOF, We have hereunto set our hands.

1. FULL NAME OF SOLE OR FIRST ASSIGNOR <b>Paul Russell FRIEND</b>	ASSIGNOR'S SIGNATURE 	DATE <b>8/21/2014</b>
ADDRESS <b>718 N. Oregon Avenue, Morton, Illinois 61550</b>		CITIZENSHIP <b>USA</b>

1. WITNESS NAME <i>Andrew Wooten</i>	WITNESS SIGNATURE <i>[Signature]</i>	DATE 8/2/14
ADDRESS 13375 COLONY SUMMIT, IL 61525		CITIZENSHIP USA
2. WITNESS NAME ANANTH KINI	WITNESS SIGNATURE <i>[Signature]</i>	DATE 07/21/14
ADDRESS 10362 N GLENFIELD DRIVE DOWNER, IL 61525		CITIZENSHIP INDIA

2. FULL NAME OF SOLE OR FIRST ASSIGNOR <b>Frank Arthur WILLIS</b>	ASSIGNOR'S SIGNATURE	DATE
ADDRESS <b>3910 S. Autumn Drive, Mapleton, Illinois 61547</b>		CITIZENSHIP USA
1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP
2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP
3. FULL NAME OF SOLE OR FIRST ASSIGNOR <b>Troy Kenneth BECICKA</b>	ASSIGNOR'S SIGNATURE	DATE
ADDRESS <b>872 E. Ashburn Mountain Drive, Sahuarita, Arizona 85629</b>		CITIZENSHIP USA

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2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

2. FULL NAME OF SOLE OR FIRST ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
<b>Frank Arthur WILLIS</b>	<i>Frank Arthur Willis</i>	8/20/14
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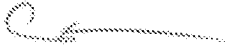

1. WITNESS NAME	WITNESS SIGNATURE	DATE
<i>Angela Kauffman</i>	<i>Angela Kauffman</i>	8/21/14
ADDRESS		CITIZENSHIP
<i>1003 Highland Ct, Germantown Hills, IL 61548</i>		US

2. WITNESS NAME	WITNESS SIGNATURE	DATE
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ADDRESS		CITIZENSHIP
<i>14005 Edgewater Dr. Channahon, IL 61523</i>		USA

3. FULL NAME OF SOLE OR FIRST ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
<b>Troy Kenneth BECICKA</b>		
ADDRESS		CITIZENSHIP
<b>872 E. Ashburn Mountain Drive, Sahuarita, Arizona 85629</b>		USA

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<b>Troy Kenneth BECICKA</b>	<i>Troy K Becicka</i>	<b>8/21/14</b>
ADDRESS		CITIZENSHIP
<b>872 E. Ashburn Mountain Drive, Sahuarita, Arizona 85629</b>		<b>USA</b>

1. WITNESS NAME Carl Lowendorf	WITNESS SIGNATURE 	DATE 8/21/2014
ADDRESS 2529 W. Thomas Chicago, IL 60622		CITIZENSHIP USA
2. WITNESS NAME Matt Railsback	WITNESS SIGNATURE 	DATE 8/21/2014
ADDRESS 4701 W Linda Vista Blvd Apt 4208 Tucson AZ 85742		CITIZENSHIP USA