

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4177753

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
PAUL FRIEND	12/07/2016
QI CHEN	12/07/2016
JEAN-JACQUES CLAR	12/07/2016
RECEIVING PARTY DATA	
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Street Address:	100 NORTH EAST ADAMS
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State/Country:	ILLINOIS
Postal Code:	61629
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15373600
CORRESPONDENCE DATA	
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<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>	
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ATTORNEY DOCKET NUMBER:	50100/16-1998
NAME OF SUBMITTER:	DENNIS G. KAPOLNEK
SIGNATURE:	/Dennis G. Kapolnek/
DATE SIGNED:	12/09/2016
Total Attachments: 4	
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ASSIGNMENT

WHEREAS We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

CONTROL SYSTEMS AND METHODS TO OPTIMIZE MACHINE PLACEMENT FOR ADDITIVE CONSTRUCTION OPERATIONS

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

WHEREAS, **Caterpillar Inc.**, a corporation of Delaware whose post office address is **100 North East Adams, Peoria, Illinois 61629** (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;

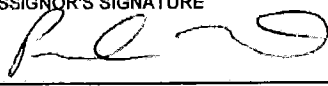
NOW THEREFORE, be it known that for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I/We, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my/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 I/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;

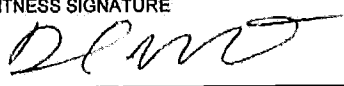
AND, WE HEREBY covenant that I/We have the full right to convey the interest assigned by this Assignment, and I/We have not executed and will not execute any agreement in conflict with this Assignment;

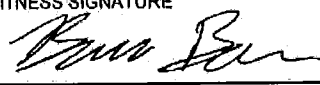
AND, WE HEREBY further covenant and agree that We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to me/us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver 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;

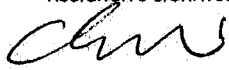
AND, WE HEREBY authorize the attorneys/representatives that we have empowered to prosecute this application filed herewith.

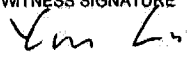
IN TESTIMONY WHEREOF, We have hereunto set our hands:

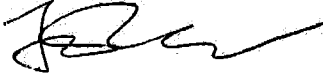
1. FULL NAME OF FIRST ASSIGNOR Paul Friend	ASSIGNOR'S SIGNATURE 	DATE 12/7/2016
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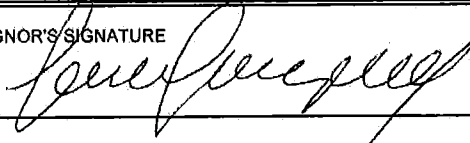
1. WITNESS NAME Daniel Martinez	WITNESS SIGNATURE 	DATE 12/7/2016
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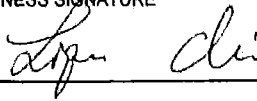
2. WITNESS NAME Bradley Bomer	WITNESS SIGNATURE 	DATE 12-7-2016
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1. WITNESS NAME Yucong Lin	WITNESS SIGNATURE 	DATE 12/8/2016
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1. FULL NAME OF THIRD ASSIGNOR Jean-Jacques Clar	ASSIGNOR'S SIGNATURE 	DATE 12/7/2016
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