503503921 09/30/2015 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3550547

SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEY	ANCE:	ASSIGNMENT	
CONVEYING PARTY	DATA		
		Name	Execution Date
MATTHEW MICHAEL	. TINKER		09/29/2015
MATHEW D. GULDA	N		09/30/2015
CHINTAN GOVINDB		રા	09/25/2015
BRADLEY JOHN WIL	L		09/25/2015
TIMOTHY ALAN LOR	ENTZ		09/25/2015
RECEIVING PARTY I	ΟΑΤΑ		
Name:	CATER	PILLAR INC.	
Street Address:	100 N.E	. ADAMS STREET	
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City:	PEORIA	Λ	
State/Country:	ILLINOI	S	
Postal Code:	61629-9	510	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14871438

CORRESPONDENCE DATA

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		e-mail address first; if that is unsuccessful, it will be sent hat is unsuccessful, it will be sent via US Mail.
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ATTORNEY DOCKET NUMBI	ER:	08350.2015-00000
NAME OF SUBMITTER:		VIRGINIA MCNELIS-CLARK
SIGNATURE:		/Virginia McNelis-Clark/
DATE SIGNED:		09/30/2015
Total Attachments: 8		

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SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350.2015-00000 Client Ref. No. 15-1757

ASSIGNMENT

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

TRANSMISSION SYSTEM IMPLEMENTING AUTOMATED DIRECTIONAL SHIFT BRAKING

for which I/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, 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, provisional application Serial No.______, filed ______, 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 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, IWE 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, I/WE HEREBY further covenant and agree that I/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, I/WE HEREBY authorize the attorneys/representatives that I/WE have empowered to prosecute this application to insert here in parentheses the country, application number, and official filing date (_______, filed ______).

IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

1. FULL NAME OF SOLE OR FIRST ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
Matthew Michael TINKER	Mupp Oin Ka	9-29-2015
ADDRESS 3539 West Mary Knoll Court, Peoria, IL 61	515	CITIZENSHIP USA

Page 1 of 4

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350.2016-00000 Client Ref. No. 15-1765

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1. WITNERS NAME	WITNESS SIGNATURE	DATE
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2. WITNESS NAME	WITNESS SIGNATURE	DATE
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1. WITNESS NAME	WITNESS SIGNATURE	DATE
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2. WITNESS NAME	WITNESS SIGNATURE	DATE
	<u> </u>	
ADDRESS		CITIZENSHIP
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SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350.2015-00000 Client Ref. No. 15-1757

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3. FULL NAME OF THIRD ASSIGNOR	AGSIGNOR'S SIGNATURE	DATE
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ADDRESS 2519 W. Sesame S	treet	CITIZENSHIP U.S.
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2. WITNESS NAME	WITNESS SIGNATURE	DATE
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4. FULL NAME OF FOURTH ABSIGNOR	ASSIGNOR'S SIGNATURE	DATE
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1. WITNESS NAME	WITNESS SIGNATURE	DATE
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ADDRESS 2519 W. Sesame SI	reef	CITIZENSHIP U.S.
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2. WITNESS NAME	WITNESS SIGNATURE	DATE
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ADDRESS		CITIZENSHIP
2311 W. Willow Kuelle Dr.	AN 56	U.S.
Peoria IL 61615		

Page 3 of 4

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350,2015-00000 Client Ref. No. 15-1757

5. FULL NAME OF FIFTH ASSIGNOR	ASSISNORS SIGNATURE	DATE
Timothy Alan LORENTZ	CAR -	9-25-15
ADORESE 83 Locust Ridge Court, Morton, IL 615	150 3	CITIZENSHIP USA
	~	
1. WITNESS NAME	WITNESS SIGNATURE	DATE
Jacob Kunowski	1/2/4/1	9-25-2015
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Edwards, IL GI	528	
2. WITNEB8 NAME	WITNESS SIGNATURE	CATE
Codk Buchner	Call Bures	9-25-2015
ADDRESS 1600 W. Blue Sage Dr.		CITIZENSHIP USA
Peoria, IL 61615		

ASSIGNMENT

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TRANSMISSION SYSTEM IMPLEMENTING AUTOMATED DIRECTIONAL SHIFT BRAKING

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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;

AND, I/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, I/WE HEREBY further covenant and agree that I/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, I/WE HEREBY authorize the attorneys/representatives that I/WE have empowered to prosecute this application to insert here in parentheses the country, application number, and official filing date (_______, filed ______).

IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

1. FULL NAME OF SOLE OR FIRST ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
Matthew Michael TINKER		
ADDRESS 3539 West Mary Knoll Court, Peoria, IL 61615		CITIZENSHIP USA

SOLE/JOINT INVENTIÜM (Worldwide Rights) Altomes Docket No. 08350 2015-00000 Client Ref. No. 15-1757

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10017 W C" HWY 150 CDUARDS	USA	
VITNESS NAME	WITNESS SIGNATURE	DATE
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Page 2 of 4

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4. FULL NAME OF FOURTH ASSIGNOR Bradley John WILL	ASSIGNOR'S SIGNATURE	DATE
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PATENT REEL: 036697 FRAME: 0214

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350.2015-00000 Client Ref. No. 15-1757

5. FULL NAME OF FIFTH ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
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PATENT REEL: 036697 FRAME: 0215

RECORDED: 09/30/2015