

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4176804

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
VICKRAM MURUGESAN	12/01/2016
HONGLIU DU	12/01/2016
LONNIE JAMES DRIVER	12/02/2016
FRANK BREIER	12/01/2016
MANDI HENDERSON	12/02/2016
MATTHEW JAMES BESCHORNER	12/01/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CATERPILLAR INC.
<b>Street Address:</b>	100 NE ADAMS STREET
<b>Internal Address:</b>	AH9510
<b>City:</b>	PEORIA
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	61629
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15373074
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(309)675-1236
<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>	3096362223
<b>Email:</b>	US_Docket_Clerk@cat.com
<b>Correspondent Name:</b>	CATERPILLAR INC. INTELLECTUAL PROPERTY D
<b>Address Line 1:</b>	100 N.E. ADAMS STREET
<b>Address Line 2:</b>	AH 9510
<b>Address Line 4:</b>	PEORIA, ILLINOIS 61629-9510
<b>ATTORNEY DOCKET NUMBER:</b>	16-1808
<b>NAME OF SUBMITTER:</b>	AMANDA M. RODRIGUEZ
<b>SIGNATURE:</b>	/Amanda M. Rodriguez/
<b>DATE SIGNED:</b>	12/08/2016

PATENT

**Total Attachments: 12**

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source=16-1808-US-Assignment#page12.tif

**ASSIGNMENT**

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

**ACTIVE DAMPING RIDE CONTROL SYSTEM FOR ATTENUATING OSCILLATIONS IN A HYDRAULIC ACTAUTOR OF A MACHINE**

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

WHEREAS, Caterpillar Inc., a corporation of Delaware, whose post office address is 100 NE Adams Street, Peoria, IL 61629, USA (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, 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 ( \_\_\_\_\_ Application No. \_\_\_\_\_, filed \_\_\_\_\_ ).

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

1. FULL NAME OF FIRST ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
Vickram Murugesan		1/DEC/16
ADDRESS :		CITIZENSHIP INDIA
1212 Bluejay Ln, Plainfield IL60586		IN

1. WITNESS NAME Frank Breier	WITNESS SIGNATURE <i>Frank Breier</i>	DATE 1/DEC/16
ADDRESS 706 Hunter Dr. Shoreland, IL 60404		CITIZENSHIP USA

2. WITNESS NAME DARSHAN PATEL	WITNESS SIGNATURE <i>Darshan Patel</i>	DATE 01/12/2016
ADDRESS 9342 HAWLEY AVE, DES PLAINES, IL 60016		CITIZENSHIP USA

### ASSIGNMENT

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

#### ACTIVE DAMPING RIDE CONTROL SYSTEM FOR ATTENUATING OSCILLATIONS IN A HYDRAULIC ACTUATOR OF A MACHINE

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

WHEREAS, Caterpillar Inc., a corporation of Delaware, whose post office address is 100 NE Adams Street, Peoria, IL 61629, USA (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;

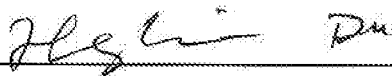
NOW THEREFORE, be it known that for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I/We, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, 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, 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 ( \_\_\_\_\_ Application No. \_\_\_\_\_, filed \_\_\_\_\_ ).

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

2. FULL NAME OF SECOND ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
Hongliu Du		12/1/2016
ADDRESS :		CITIZENSHIP
3604 Kestral Dr. Naperville, IL 60564		US

1. WITNESS NAME Mark A. Day	WITNESS SIGNATURE 	DATE 1 Dec 2016
ADDRESS 25201 W. McMillin Dr. Channahon, IL 60410		CITIZENSHIP US

2. WITNESS NAME Joseph DeMarchi	WITNESS SIGNATURE 	DATE 12-1-16
ADDRESS 227 S. Maple St. Frankfort, IL 60423		CITIZENSHIP US

**ASSIGNMENT**

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

**ACTIVE DAMPING RIDE CONTROL SYSTEM FOR ATTENUATING OSCILLATIONS IN A HYDRAULIC ACTUATOR OF A MACHINE**

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WHEREAS, Caterpillar Inc., a corporation of Delaware, whose post office address is 100 NE Adams Street, Peoria, IL 61629, USA (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, 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;

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

3. FULL NAME OF THIRD ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
Lonnie James Devier	<i>Lonnie Devier</i>	2 Dec 2016
ADDRESS :		CITIZENSHIP
26228 Prairie Court, Channahon, Illinois 60410		US

1. WITNESS NAME Darren Blum	WITNESS SIGNATURE <i>Darren Blum</i>	DATE 12/12/2016
ADDRESS: 5015 Corning Ct Plainfield IL 60586		CITIZENSHIP: US

2. WITNESS NAME Pengfei Ma	WITNESS SIGNATURE <i>Pengfei Ma</i>	DATE 12/12/2016
ADDRESS: 1744 Cornell St Naperville, IL 60565		CITIZENSHIP: US



**ASSIGNMENT**

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**ACTIVE DAMPING RIDE CONTROL SYSTEM FOR ATTENUATING OSCILLATIONS IN A HYDRAULIC ACTUATOR OF A MACHINE**

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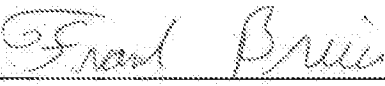
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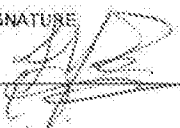
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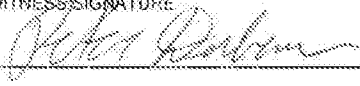
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4. FULL NAME OF FOURTH ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
Frank Breier		1/DEC/16
ADDRESS :		CITIZENSHIP
1706 Hunter Dr. Shorewood, IL 60404		US

1. WITNESS NAME VICKRAM MURUGESAN	WITNESS SIGNATURE 	DATE 12/02/16
ADDRESS 1212 BLOEJAY LN PLAINFIELD		CITIZENSHIP INDIA

2. WITNESS NAME Peter Dubenno	WITNESS SIGNATURE 	DATE 12/1/16
ADDRESS 1779 N Sheffield Ave Apt 1A Chicago IL 60614		CITIZENSHIP US

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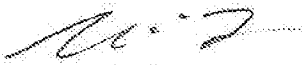
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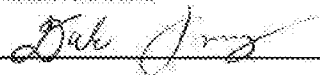
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IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

5. FULL NAME OF FIFTH ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
Mandi Henderson		2-Dec-2016
ADDRESS	CITIZENSHIP	
3812 Junebreeze Lane, Naperville, IL, 60564	CA	

1. WITNESS NAME DARSHAN PATEL	WITNESS SIGNATURE 	DATE 12/02/2016
ADDRESS 9362 HAMLIN AVE, DES PLAINES, IL-60016		CITIZENSHIP USA

2. WITNESS NAME Dale Jarosz	WITNESS SIGNATURE 	DATE 12/02/2016
ADDRESS 1350 Larkspur LN, Palatine IL 60074		CITIZENSHIP USA

**ASSIGNMENT**

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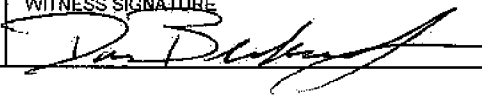
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IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

6. FULL NAME OF SIXTH ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
Matthew James Beschorner		12/1/16
ADDRESS :		CITIZENSHIP
5751 Lake Pointe Drive Plainfield, IL 60586		US

1. WITNESS NAME Corey L. Gorman	WITNESS SIGNATURE 	DATE 12/1/2016
ADDRESS 6016 TRAILS END Peoria, IL, 61614	CITIZENSHIP USA	

2. WITNESS NAME Don Bendkendorf	WITNESS SIGNATURE 	DATE 12/1/2016
ADDRESS 633 Grimm Rd Eureka, IL 61530	CITIZENSHIP USA	