

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5641587

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CURTIS J GRAHAM	09/22/2016
DANIEL CAVANAUGH	09/22/2016
KEVIN P. REARDON	09/22/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CATERPILLAR INC.
<b>Street Address:</b>	510 LAKE COOK ROAD, SUITE 100
<b>City:</b>	DEERFIELD
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	60015
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16525151
<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>	jyates@bscattorneys.com
<b>Correspondent Name:</b>	CATERPILLAR INC./BRANNON SOWERS & CRACRA
<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>	16-1502-73361.01
<b>NAME OF SUBMITTER:</b>	JONATHAN F. YATES
<b>SIGNATURE:</b>	/Jonathan F. Yates/
<b>DATE SIGNED:</b>	07/29/2019
<b>Total Attachments: 6</b>	
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### ASSIGNMENT

WHEREAS we, the below named inventors, (hereinafter referred to as Assignors), have made an invention entitled:

#### PRE-CHAMBER ASSEMBLY FOR FUEL INJECTOR

for which we will or have filed a patent application; 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 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;

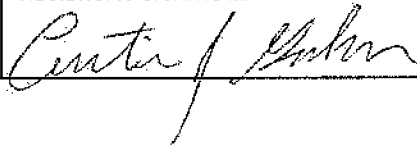
NOW THEREFORE, be it known that for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, we, as Assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, our 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 the attorneys/representatives that we have empowered to prosecute this application to insert here in parentheses the country, application number, and official filing date ( United States Application No. 16/525,151, filed July 29, 2019 ).

IN TESTIMONY WHEREOF, we have hereunto set our hands.

1. FULL NAME OF FIRST ASSIGNOR Curtis J. Graham	ASSIGNOR'S SIGNATURE 	DATE 09/22/2016
ADDRESS 4813 N Fairview Place, Peoria, IL 61614, US		CITIZENSHIP US

1. WITNESS NAME Ryan Cotright	WITNESS SIGNATURE <i>Ryan Cotright</i>	DATE 9-22-16
ADDRESS 108 Justice Dr East Peoria IL 61611		CITIZENSHIP US

2. WITNESS NAME Deid Waldschmitt	WITNESS SIGNATURE <i>Deid Waldschmitt</i>	DATE 9-22-16
ADDRESS 1402 E. Hendry Ln Peoria IL 61615		CITIZENSHIP US

### ASSIGNMENT

WHEREAS we, the below named inventors, (hereinafter referred to as Assignors), have made an invention entitled:

#### PRE-CHAMBER ASSEMBLY FOR FUEL INJECTOR

for which we will or have filed a patent application; 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 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;

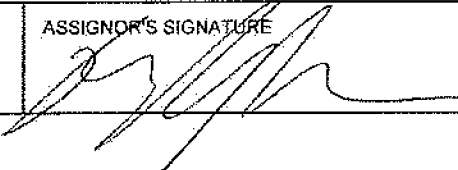
NOW THEREFORE, be it known that for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, we, as Assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, our 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;

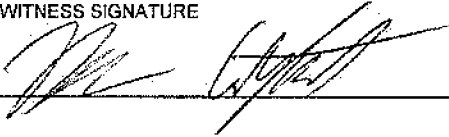
AND, WE HEREBY covenant that we have the full right to convey the interest assigned by this Assignment, and we have not executed and will not execute any agreement in conflict with this Assignment;

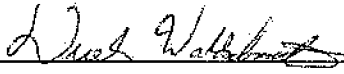
AND, WE HEREBY further covenant and agree that we will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any 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 the attorneys/representatives that 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, we have hereunto set our hands.

2. FULL NAME OF SECOND ASSIGNOR Daniel Cavanaugh	ASSIGNOR'S SIGNATURE 	DATE 9/22/2016
ADDRESS 15939 N Logan Ct., Chillicothe, IL 61523, US		CITIZENSHIP US

1. WITNESS NAME Ryan Cotright	WITNESS SIGNATURE 	DATE 9-22-16
ADDRESS 108 Justice Dr		CITIZENSHIP US
East Peoria IL 61611		

2. WITNESS NAME Derek Waldbrunn	WITNESS SIGNATURE 	DATE 9-22-16
ADDRESS 1402 E Hendry Ln		CITIZENSHIP US
Peoria IL 61615		

### ASSIGNMENT

WHEREAS we, the below named inventors, (hereinafter referred to as Assignors), have made an invention entitled:

#### PRE-CHAMBER ASSEMBLY FOR FUEL INJECTOR

for which we will or have filed a patent application; 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 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;

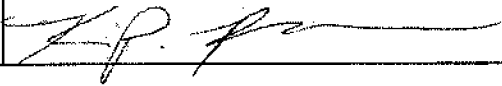
NOW THEREFORE, be it known that for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, we, as Assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, our 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;

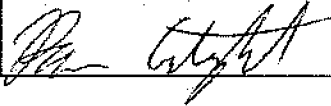
AND, WE HEREBY covenant that we have the full right to convey the interest assigned by this Assignment, and we have not executed and will not execute any agreement in conflict with this Assignment;

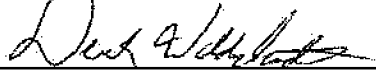
AND, WE HEREBY further covenant and agree that we will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any 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 the attorneys/representatives that 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, we have hereunto set our hands.

3. FULL NAME OF THIRD ASSIGNOR Kevin P. Reardon	ASSIGNOR'S SIGNATURE 	DATE 9/22/2016
ADDRESS 6344 N Syler St., Peoria, IL 61615, US		CITIZENSHIP US

1. WITNESS NAME Ryan Cotright	WITNESS SIGNATURE 	DATE 9-22-16
ADDRESS 108 Justice Dr East Peoria IL 61611		CITIZENSHIP US

2. WITNESS NAME Derek Wadschmidt	WITNESS SIGNATURE 	DATE 9-22-16
ADDRESS 1702 E. Hendryx Ln Peoria IL 61615		CITIZENSHIP US