

PATENT ASSIGNMENT

Electronic Version v1.1
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| SUBMISSION TYPE: | NEW ASSIGNMENT | | | | | | |
|---|------------------------------------|---------------|----------------|---------------------|------------|-------------------|------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT | | | | | | |
| CONVEYING PARTY DATA | | | | | | | |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Jacob K. Ludeman</td> <td>12/19/2012</td> </tr> <tr> <td>Brian J. DeCaires</td> <td>02/25/2013</td> </tr> </tbody> </table> | | Name | Execution Date | Jacob K. Ludeman | 12/19/2012 | Brian J. DeCaires | 02/25/2013 |
| Name | Execution Date | | | | | | |
| Jacob K. Ludeman | 12/19/2012 | | | | | | |
| Brian J. DeCaires | 02/25/2013 | | | | | | |
| RECEIVING PARTY DATA | | | | | | | |
| Name: | Caterpillar Inc. | | | | | | |
| Street Address: | 100 N.E. Adams Street | | | | | | |
| City: | Peoria | | | | | | |
| State/Country: | ILLINOIS | | | | | | |
| Postal Code: | 61629-6490 | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13727203</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13727203 | | |
| Property Type | Number | | | | | | |
| Application Number: | 13727203 | | | | | | |
| CORRESPONDENCE DATA | | | | | | | |
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| Email: | assignments@leydig.com | | | | | | |
| Correspondent Name: | J. Karl Gross | | | | | | |
| Address Line 1: | Leydig, Voit & Mayer, Ltd. | | | | | | |
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| ATTORNEY DOCKET NUMBER: | 710682 | | | | | | |
| NAME OF SUBMITTER: | J. Karl Gross | | | | | | |
| Total Attachments: 3 source=Executed Assignment#page1.tif source=Executed Assignment#page2.tif source=Executed Assignment#page3.tif | | | | | | | |

CH \$40.00 13727203

ASSIGNMENT

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

EXHAUST GAS AFTERTREATMENT MODULE

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 N.E. Adams Street, Peoria, IL 61629-6490** (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 Assignee or the attorneys/representatives of Assignee to insert here in parentheses the country, application number, and official filing date (U.S. Patent Application No. 13/727,203, filed December 26, 2012).

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

| | | |
|--|--|--------------------|
| 1. FULL NAME OF SOLE OR FIRST ASSIGNOR Jacob K. Ludeman | ASSIGNOR'S SIGNATURE <i>Jacob K Ludeman</i> | DATE 12/19/12 |
| ADDRESS 4908 S. Sir Lionel Ct, Mapleton, IL 61547 | | CITIZENSHIP USA |
| | | |

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| 1. WITNESS NAME <i>Murtis Cheroeweth</i> | WITNESS SIGNATURE <i>Murtis Cheroeweth</i> | DATE 12-19-12 |
| ADDRESS 11029 North Main Gate Road, Ipaava, IL 61441 | | CITIZENSHIP USA |
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| 2. WITNESS NAME <i>Scott Meyer</i> | WITNESS SIGNATURE <i>Scott Meyer</i> | DATE 12-19-2012 |
| ADDRESS 1181 County Road 1000 N Eureka, IL 61530 | | CITIZENSHIP USA |
| | | |

SOLE/JOINT INVENTION
(Worldwide Rights)
Attorney Docket No. 710682
Client Ref. No. 12-0395

| | | |
|--|---|--------------------|
| 1. FULL NAME OF SECOND ASSIGNOR, IF ANY Brian J. DeCaires | ASSIGNOR'S SIGNATURE <i>Brian DeCaires</i> | DATE 2/25/13 |
| ADDRESS 20918 Twisted Leaf Dr., Cypress, TX 77433 | | CITIZENSHIP USA |
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| 1. WITNESS NAME | WITNESS SIGNATURE | DATE |
| ADDRESS | | CITIZENSHIP |
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|-----------------|-------------------|-------------|
| 2. WITNESS NAME | WITNESS SIGNATURE | DATE |
| ADDRESS | | CITIZENSHIP |
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