RECORDATION FORM CO PATENTS ONLY			
To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.	Mail Stop Assignment Recordation Services		
Name of conveying party(les): (a) Wade J. Robel (b) James Joshua Driscoll (c) Gerald N. Coleman	Name and address of receiving party(les): Name: Caterpillar Inc.		
Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No	Internal Address:		
3. Nature of conveyance:	Street Address: 100 N.E. Adams Street		
□ Merger	City: Peoria		
Security Change of Name Agreement	State: IL Zip Code: 61629-6490		
Other.	Additional name(s) & Address(es) attached? ☐ Yes ☑ No		
Execution Date: (a) November 14, 2005 (b) November 14, 2005 (c) November 3, 2005			
	being filed together with a new application, the execution date of		
A. Patent Application Number(s):	B. Patent Number(s):		
11/216,359			
Additional numbers attached?	☐ Yes		
Name and address of party to whom correspondence concerning document should be mailed:	Total number of applications and registrations involved; 1		
Name:	7. Total fee (37 CFR 1.21(h) and 3.41): \$40		
Internal Address: FINNEGAN, HENDERSON, FARABOW, GARRET & DUNNER, L.L.P.	Enclosed (Please charge deficiency to deposit account 06-0916)		
Street Address: 901 New York Avenue, N.W.	Authorized to be charged to deposit account		
City: Washington, D.C.			
State: D.C. Zip: 20001-4413	8. Deposit Account No.: <u>06-0916</u>		
Statement and signature.			
To the best of my knowledge and belief, the foregoing information is true document.	e and correct and any attached copy is a true copy of the original		
Tram Anh Nouven			
Tram Anh Nguyen Sig Reg. No. 47,257	nature Date		
Total number of pages including cover sheet, attachments and documents: 4			
01/2005			

PATENT REEL: 017026 FRAME: 0522 %/6=X 500:€6%d

ID: LINNEGUN HENDEKSON

SOLEJOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350.4592 Client Ref. No. 04-592

ASSIGNMENT

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

EXHAUST PURIFICATION WITH ON-BOARD AMMONIA PRODUCTION

for which I/We executed an application for United States Letters Potent concurrently herewith or filed an application for United States Letters Patent on August 31, 2008 (Scrial No.11/216.359); and

WHEREAS, Caterplilar Inc., a corporation of Dalaware whose post office address is 199 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 in all countries throughout the world, and in and to the application for United States Letters Potent on this invention and the Letters Patent to be issued upon this application:

NOW THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) in hand paid and other good and valuable consideration the receight 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 ____ (if any), and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of the above provisional application (if any), as well as 🎳 rights to claim priority on the basis of this application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and releases thereof; and I/We hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, IWE HEREBY covenant that IWe 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 mown to me/us respecting this invention, and testify in any legal proceeding, sign all lewful 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 paths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assigned, its successors and assigns.

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

1. FULL NAME OF SOLE OR FIRST ARBIGINGS. Wade J. Robel	Water Care	DATE 11/14/2005
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Lighting of Inventors Continued on Page 2 hereof.

I Yea □ No

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.F.

June 2004

Page 1 of 3

PATENT ONE MYTTREELD: 017026 FRAME: 0523

11/14/2-005

6174521666 To:RightFax MON-11-5002 05:406W Erow: 2002-41-AON x26=8 500:960d ID: EINNEGUN HENDEBRON SOUE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350,4592 Client Ref. No. 04-592 1. WITNESS NAME WITNESS SIGNATURE DATE PRAYEEN CHAMAMAYAR ADDRESS CITIZENSHIP 109. DUNLAP, W HICKORY GROVE RD. NDIAN WITNESS SIGNATURE حديث 2. WITNESS NAME F Meister 14 NOV 05 5tever CITIZENEHIP ADDRESS 20407 US

2. FULL NAME OF SECOND ASSIGNOR, IF ANY DATE James Joshua Driscott ADDRESS United States 1700 W. Hickory Grove Rg., #1-\$69, Ounlap. (L 81525

withess signature p 1. WO'NEDD NAME Davannavar. DATE 11/14/2-005 PRAVERN CHA-YAN WAY AR ADDRESS CITIZENSHIP 1100 WHICKORY GROVE PD, #-A-109 DUNLAP, IL 61525 MAIGH

DATE 2. WITNESS NAME 5-teven Meister 14 NON U 5. CITIZENSHIP ADDRESS U5

Limiting of Inventors Continues on Page 3 hereof.

⊠ Yes □ No

PINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, I.L.P.

June 2004

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350 4592 Cilient Ref. No. 04-592

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appropries 43 Business (2014)		CITIZENSHUP UK
AF D INCHES OF PROPERTY	······································	

Listing of Inventors Continued on Prope 3 Junear

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FINNEGAN, HENDERSON, PARABOW, GARRETT & DUPMER, L.L.P.

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