

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

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>Douglas Alexander Rebinsky</td> <td>02/21/2012</td> </tr> <tr> <td>Orhan Altin</td> <td>03/06/2012</td> </tr> <tr> <td>Yong Tian</td> <td>02/21/2012</td> </tr> <tr> <td>Ryan A. Dusheke</td> <td>02/13/2012</td> </tr> <tr> <td>Luke W. Zinda</td> <td>02/21/2012</td> </tr> <tr> <td>Maggie R. Burrow</td> <td>03/26/2012</td> </tr> <tr> <td>Jedidah Hastings</td> <td>04/04/2012</td> </tr> </tbody> </table>		Name	Execution Date	Douglas Alexander Rebinsky	02/21/2012	Orhan Altin	03/06/2012	Yong Tian	02/21/2012	Ryan A. Dusheke	02/13/2012	Luke W. Zinda	02/21/2012	Maggie R. Burrow	03/26/2012	Jedidah Hastings	04/04/2012
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<table border="1"> <tr> <td>Name:</td> <td>Caterpillar, Inc.</td> </tr> <tr> <td>Street Address:</td> <td>100 North East Adams</td> </tr> <tr> <td>City:</td> <td>Peoria</td> </tr> <tr> <td>State/Country:</td> <td>ILLINOIS</td> </tr> <tr> <td>Postal Code:</td> <td>61629</td> </tr> </table>		Name:	Caterpillar, Inc.	Street Address:	100 North East Adams	City:	Peoria	State/Country:	ILLINOIS	Postal Code:	61629						
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Application Number:	13354766																
CORRESPONDENCE DATA																	
Fax Number:	(312)977-9959																
Phone:	312-977-9903																
Email:	swallace@millermatthiashull.com																
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>																	
Correspondent Name:	Caterpillar/ Miller, Matthias & Hull LLP																
Address Line 1:	One North Franklin Street																
Address Line 2:	Suite 2350																
Address Line 4:	Chicago, ILLINOIS 60606																

OP \$40.00 13354766

ATTORNEY DOCKET NUMBER:	50100/11-1118
NAME OF SUBMITTER:	Thomas A. Miller
<p>Total Attachments: 8</p> <p>source=11-1118-assign#page1.tif</p> <p>source=11-1118-assign#page2.tif</p> <p>source=11-1118-assign#page3.tif</p> <p>source=11-1118-assign#page4.tif</p> <p>source=11-1118-assign#page5.tif</p> <p>source=11-1118-assign#page6.tif</p> <p>source=11-1118-assign#page7.tif</p> <p>source=11-1118-assign#page8.tif</p>	

## ASSIGNMENT

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

### ZINC OXIDE SULFUR SENSORS AND METHODS OF MANUFACTURE THEREOF

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

WHEREAS, Caterpillar, Inc., a corporation of Delaware whose post office address is 100 North East Adams, Peoria, Illinois 61629 (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;

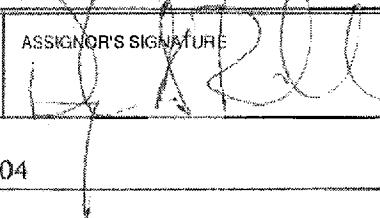
NOW THEREFORE, be it known that for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, We, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my/our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

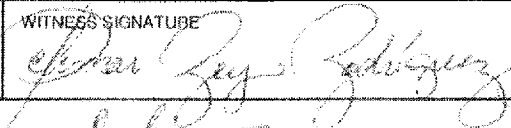
AND, WE HEREBY covenant that We have the full right to convey the interest assigned by this Assignment, and We have not executed and will not execute any agreement in conflict with this Assignment;



AND, I/WE HEREBY further covenant and agree that 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, 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 (US Application No. 13/354,766, filed January 20, 2012).

IN TESTIMONY WHEREOF, We have hereunto set our hands.

1. FULL NAME OF SOLE OR FIRST ASSIGNOR Douglas Alexander Rebinsky	ASSIGNOR'S SIGNATURE 	DATE 2/21/2012
ADDRESS 2621 West Manor Parkway, Peoria, IL 61604		CITIZENSHIP CA

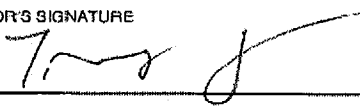
1. WITNESS NAME Solomon Reyes Rodriguez	WITNESS SIGNATURE 	DATE February 21 2012
ADDRESS 5400 W. Monroe Ln. Apt. 1105 Peoria IL 61615		CITIZENSHIP USA

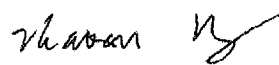
2. WITNESS NAME DAVID E. BLUMIER 	WITNESS SIGNATURE David E. Blumier 	DATE 21 February 2012
ADDRESS 2018 Cloverfield Drive Chillicothe, IL 61523		CITIZENSHIP USA


3. FULL NAME OF THIRD ASSIGNOR, IF ANY Orhan Altin	ASSIGNOR'S SIGNATURE Signed as legal representative of Orhan Altin <i>[Signature]</i>	DATE 03/06/2012
ADDRESS Asagi Mahalle, Huzur Bulvari No: 67 Acipayam, Denizli, Turkey		CITIZENSHIP TK

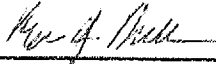
1. WITNESS NAME Andrew D. Sullivan	WITNESS SIGNATURE <i>[Signature]</i>	DATE 3/6/2012
ADDRESS 642 Taylor St Morton, IL 61550		CITIZENSHIP US


2. WITNESS NAME Jeffrey S. Willford	WITNESS SIGNATURE <i>[Signature]</i>	DATE 3-6-2012
ADDRESS 17 Tecumseh Ct. Hopewell IL 61585		CITIZENSHIP US

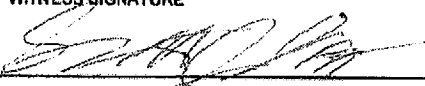
3. FULL NAME OF THIRD ASSIGNOR, IF ANY Yong Tian	ASSIGNOR'S SIGNATURE 	DATE Feb 21, 2012
ADDRESS 1919 W. Forestglen Dr., Peoria, IL 61615		CITIZENSHIP PRC

1. WITNESS NAME ZHAOXU DONG	WITNESS SIGNATURE 	DATE 02/21/2012
ADDRESS 10856 N Glenfield Drive, Dunlap, IL 61525		CITIZENSHIP PRC

2. WITNESS NAME FENG FENG	WITNESS SIGNATURE 	DATE 02/21/2012
ADDRESS 11012 N Stillwater Dr Dunlap, IL 61525		CITIZENSHIP PRC

4. FULL NAME OF FOURTH ASSIGNOR, IF ANY Ryan A. Dusheke	ASSIGNOR'S SIGNATURE 	DATE 13 Feb 2012
ADDRESS 1700 W. Hickory Grove Road, Apt. B202, Dunlap, IL 61525-8716		CITIZENSHIP US

1. WITNESS NAME Laura Ligeti	WITNESS SIGNATURE 	DATE 2/13/2012
ADDRESS 3632 N. Peoria Ave., Peoria, IL 61603		CITIZENSHIP US

2. WITNESS NAME Scott A Johnston	WITNESS SIGNATURE 	DATE 2/13/2012
ADDRESS 1214 Beth Ct, East Peoria, IL 61611		CITIZENSHIP US

5. FULL NAME OF FIFTH ASSIGNOR, IF ANY Luke W. Zinda	ASSIGNOR'S SIGNATURE <i>Luke W. Zinda</i>	DATE 2/21/2012
ADDRESS 4014 W. Hollow Creek Drive, <sup>5 LT</sup> § 11, Peoria, IL 60615		CITIZENSHIP US

1. WITNESS NAME <i>Solimar Reyes Rodriguez</i>	WITNESS SIGNATURE <i>Solimar Reyes Rodriguez</i>	DATE February 21, 2012
ADDRESS 5700 W. Sierra Ln Apt. 1105 Peoria IL 61615		CITIZENSHIP USA

2. WITNESS NAME Nathan J. Madden	WITNESS SIGNATURE <i>Nathan Madden</i>	DATE 2/21/2012
ADDRESS 613 Bluebird Dr. Box Elder, SD, 57719		CITIZENSHIP USA




5. FULL NAME OF FIFTH ASSIGNOR, IF ANY Maggie R. Burrow	ASSIGNOR'S SIGNATURE <i>Maggie Burrow</i>	DATE 3-26-12
ADDRESS 1712 E. Shady Oak Drive, Peoria, IL 61614-7906		CITIZENSHIP US

1. WITNESS NAME CANDICE A. LUNDY	WITNESS SIGNATURE <i>Candice Lundy</i>	DATE 3/26/12
ADDRESS 1025 N. Institute Place Peoria, IL 61606		CITIZENSHIP US

2. WITNESS NAME Jeff Olson	WITNESS SIGNATURE <i>Jeff Olson</i>	DATE 3/26/12
ADDRESS 23411 N. Taylor Rd. Canton, IL 61520		CITIZENSHIP US

JOINT INVENTION  
(Worldwide Rights)  
Attorney Docket No. 50100/11-1118  
Client Ref. No.11-1118

5. FULL NAME OF FIFTH ASSIGNOR, IF ANY Jedidah Hastings	ASSIGNOR'S SIGNATURE 	DATE 04/04/12
ADDRESS 100 North East Adams, Peoria, IL 61629		CITIZENSHIP US

1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP