03-06-2006

U.S. Department of Commerce Patent and Trademark Office Attorney Docket No. 08350.5757-00000 Attorney Customer Number: 22,852

Mail Stop Assignment Recordation Services To the Director of the U.S. Patent and 103190339 Please record the attached original documents 2. Name and address of receiving party: Name of conveying parties: Mohamed I. Daoud Name: Caterpillar Inc. Additional name(s) of conveying party(ies) attached?

Yes

No Internal Address: Nature of conveyance: Street Address: 100 N.E. Adams Street \boxtimes Assignment Merger City: Peoria Change of Name State: IL Zip Code: 61629-6490 Security Agreement Other: Additional name(s) & Address(es) attached? **Execution Dates:** February 20, 2006 ☐ Yes ☑ No 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application: February 20, 2006 A. Patent Application Number(s): Patent Number(s): ☐ Yes ⊠ No Additional numbers attached? Total number of applications and registrations 5. Name and address of party to whom correspondence 6. involved: One (1) concerning document should be mailed: 7. Total fee (37 CFR 1.21(h) and 3.41): \$40 Christopher P. Isaac Name: \boxtimes FINNEGAN, HENDERSON, FARABOW, GARRETT Enclosed (Please charge deficiency to deposit Internal Address: account no. 06-0916) & DUNNER, L.L.P. Street Address: 901 New York Avenue, N.W. Authorized to be charged to deposit account City: Washington, D.C. 8. State: Zip: 20001-4413 Deposit Account No.: 06-0916 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Roland McAndrews February 28, 2006 Reg. No. 41,450 Signature Date Total number of pages including cover sheet, attachments and documents: 3

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PATENT REEL: 017628 FRAME: 0627

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350,5757-00000 Client Ref. No. 05-757

ASSIGNMENT

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

SYSTEM AND METHOD FOR MONITORING A FILTER

for which I/We executed an application for United United States Letters Patent on, 20 (Series)		ed an application for
WHEREAS, Caterpillar Inc., a corporation Peorla, IL 61629-6490 (hereinafter referred to as and to this invention in all countries throughout the this invention and the Letters Patent to be issued	e world, and in and to the application for United S	t, title, and Interest in
NOW THEREFORE, be it known that for other good and valuable consideration the receip have sold, assigned, transferred, and set over, ar lawful successors and assigns, my/our entire right No, filed (if any), and this application, are United States which may be granted thereon, and above provisional application (if any), as well as a applications for Letters Patent which may hereaft which may be granted on this invention in any for I/We hereby authorize and request the Commissionary foreign country whose duty it is to issue pate invention to Assignee, its successors and assigns.	nd do hereby sell, assign, transfer, and set over unit, title, and interest in and to this invention, provising all divisions, and continuations thereof, and all dill reissues thereof, and all rights to claim priority all rights to claim priority on the basis of this applicate be filed for this invention in any foreign country reign country, and all extensions, renewals, and relations of Patents and Trademarks of the United Stants on applications as described above, to issue	d, I/We, as Assignor(s), into the Assignee, its sional application Serial Letters Patent of the lay on the basis of the cation, and all and all Letters Patent elssues thereof; and all Letters Patent at letters Patent for this
AND, I/WE HEREBY covenant that I/We and I/We have not executed and will not execute	have the full right to convey the interest assigned any agreement in conflict with this Assignment;	I by this Assignment,
Assignee, its successors and assigns, any facts if proceeding, sign all lawful papers when called up necessary or desirable to perfect the title to this indivisional, continuation, and reissue applications, Assignee, its successors and assigns, to obtain a and any foreign country, it being understood that the Assignee, its successors and assigns.	oon to do so, execute and deliver any and all paper invention in said Assignee, its successors or assignee, its successors or assignate, make all rightful oaths and generally do everythicand enforce proper patent protection for this inversing any expense incident to the execution of such page 1.	itify in any legal ers that may be gns, execute all ng possible to aid ntion in the United States
IN TESTIMONY WHEREOF, I/We have I	hereunto set our hands.	
1 FULL NAME OF SOLE OR FIRST ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
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Listing of Inventors Continued on Page 2 hereof ☐ Yea ☐ No

Page 1 of 2

PATENT REEL: 017628 FRAME: 0628

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350.5757-00000 Client Ref. No. 05-757

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PATENT

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