

11-19-2007

U.S. PTO  
11/979408  
11/02/2007



103461791

U.S. Department of Commerce  
Patent and Trademark Office  
Attorney Docket No. 08350.7820

To the Director of the U.S. Patent and Trademark Office:  
Please record the attached original documents or copy thereof.

Mail Stop Assignment Recordation Service

1. Name of conveying parties: Anthony J. GRICHNIK (assignor 1) James MASON (assignor 2) Timothy J. FELTY (assignor 3)	2. Name and address of receiving party: Name: Caterpillar Inc.
--	---

Additional name of conveying party attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Internal Address: Intellectual Property Department
--	--

3. Nature of conveyance:	Street Address: 100 N.E. Adams Street
--------------------------	---------------------------------------

<input checked="" type="checkbox"/> Assignment	<input type="checkbox"/> Merger	City: Peoria
--	---------------------------------	--------------

<input type="checkbox"/> Security Agreement	<input type="checkbox"/> Change of Name	State: IL	Zip Code: 61629
---	---	-----------	-----------------

<input type="checkbox"/> Joint Research Agreement	<input type="checkbox"/> Government Interest Assignment	Additional name(s) & Address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
---	---	---

<input type="checkbox"/> Executive Order 9494, Confirmatory License	<input type="checkbox"/> Other:
---	---------------------------------

Execution Date: November 1, 2007 (assignor 1)  
November 1, 2007 (assignor 2)  
November 1, 2007 (assignor 3)

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: November 1, 2007 (assignor 1), November 1, 2007 (assignor 2), and November 1, 2007 (assignor 3).

A. Patent Application Number(s):  
*11/979408*  
Additional numbers attached?  Yes  No

B. Patent Number(s):  
 Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Christopher P. Isaac (202) 408-4000

Internal Address: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Street Address: 901 New York Avenue, N.W.

City: Washington, D.C.

State: Zip: 20001-4413

6. Total number of applications and patents involved  
1

7. Total fee (37 CFR 1.21(h) and 3.41): \$40

Enclosed (Please charge deficiency or credit overpayment to deposit account 06-0916)

Authorized to be charged to deposit account

8. 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.

Signed: Wenye Tan, Reg. 55,662

November 2, 2007  
11/05/2007 CNGUYEN2 00000002 11/979408  
Date  
06 FC:8021  
48.00 DP

Total number of pages including cover sheet, attachments and documents: 4

6/2007

PATENT  
REEL: 020148 FRAME: 0181

**ASSIGNMENT**

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

**VIRTUAL SENSOR NETWORK (VSN) SYSTEM AND METHOD**

for which I/We executed an application for United States Letters Patent concurrently herewith or filed an application for United States Letters Patent on \_\_\_\_\_ (Serial No. \_\_\_\_\_); and

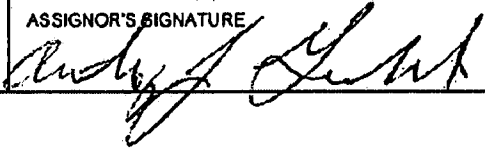
WHEREAS, Caterpillar Inc., a corporation of Delaware whose post office address is Intellectual Property Department, 100 N.E. Adams Street, Peoria, IL 61629-6490 (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

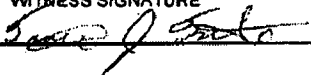
NOW THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) in hand paid and other good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I/We, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my/our entire right, title, and interest in and to this invention, 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 all 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 reissues 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;

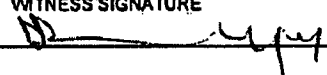
AND, I/WE HEREBY covenant that I/We have the full right to convey the interest assigned by this Assignment, and I/We have not executed and will not execute any agreement in conflict with this Assignment;

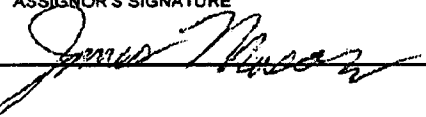
AND, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to me/us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver 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 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 Assignee, its successors and assigns.


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

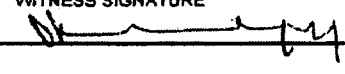
1. FULL NAME OF SOLE OR FIRST ASSIGNOR Anthony J. GRICHNIK	ASSIGNOR'S SIGNATURE 	DATE 1 Nov 07
ADDRESS 3221 N. Sheridan Road, Peoria, IL 61604		CITIZENSHIP United States

1. WITNESS NAME Timothy J. Felty	WITNESS SIGNATURE 	DATE 1-Nov-07
ADDRESS 6515 N. Terra Vista Drive #504		CITIZENSHIP USA
Peoria IL 61614		

2. WITNESS NAME DEEP BANDYOPADHYAY	WITNESS SIGNATURE 	DATE 1-Nov-07
ADDRESS 100 WOODVIEW LANE, EAST PEORIA IL 61611		CITIZENSHIP INDIA.

3. FULL NAME OF SECOND ASSIGNOR, IF ANY James MASON	ASSIGNOR'S SIGNATURE 	DATE 1-Nov-07
ADDRESS 3400 N Knoxville Ave. Apt A5, Peoria, IL 61603		CITIZENSHIP United States

1. WITNESS NAME Timothy J. Felty	WITNESS SIGNATURE 	DATE 1-Nov-07
ADDRESS 6815 N. Terra Vista Dr #504		CITIZENSHIP USA
Peoria IL 61614		

2. WITNESS NAME DEEP BANDYOPADHYAY	WITNESS SIGNATURE 	DATE 1-Nov-07
ADDRESS 100 WOODVIEW LANE, EAST PEORIA IL 61611		CITIZENSHIP INDIA.

4. FULL NAME OF SECOND ASSIGNOR, IF ANY Tim FELTY	ASSIGNOR'S SIGNATURE <i>[Signature]</i>	DATE 1-Nov-07
ADDRESS 6815 N. Terra Vista #504, Peoria IL 61614		CITIZENSHIP United States

1. WITNESS NAME AS [Signature]	WITNESS SIGNATURE <i>[Signature]</i>	DATE 1 NOV 07
ADDRESS 3221 N Sheridan Rd. Peoria, IL 61604		CITIZENSHIP USA

2. WITNESS NAME <i>[Signature]</i> James Mason	WITNESS SIGNATURE <i>[Signature]</i> James Mason	DATE 1-Nov-07
ADDRESS 3400 N. Knoxville Ave. Apt 45 Peoria IL 61603		CITIZENSHIP USA