

U.S. PTO
11/974240
10/12/2007

10-25-2007



U.S. Department of Commerce
Patent and Trademark Office
Attorney Docket No. 08350.7570-00

To the Director of the U.S. Patent and
Please record the attached original d

103455965

Mail Stop Assignment Recordation Service

1. Name of conveying party(ies):
1. Jonny Ray GREINER
2. Yang LIU
3. Bhavin Jagdishbhai VYAS

2. Name and address of receiving party(ies):

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

☒ Assignment

☐ Merger

City: Peoria

☐ Security Agreement

☐ Change of Name

State:

IL

Zip Code:

61629-6490

☐ Joint Research
Agreement

☐ Government Interest
Assignment

Additional name(s) & Address(es) attached?

☐ Executive Order 9494,
Confirmatory License

☐ Other:

☐ Yes

☐ No

Execution Date: 1. October 10, 2007 (Assignor GREINER)
2. October 7, 2007 (Assignor LIU)
3. October 9, 2007 (Assignor VYAS)

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: October 10, 2007, October 7, 2007, and October 9, 2007, respectively.

A. Patent Application Number(s):

B. Patent Number(s):

Not Yet Assigned

[Text]

10/24/2007 DBYRNE 00000032 060916 11974240

01 FC:8021 40.00 DA

Additional numbers attached?

☐ Yes

☒ No

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

6. Total number of applications and patents involved
1

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

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

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

☐

Enclosed (Please charge deficiency or credit overpayment 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: Zip: 20001-4413

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:

Brad C. Rametta
Reg. No. 54,387

10/12/2007
Date

Total number of pages including cover sheet, attachments and documents: 7

6/2007

PATENT
REEL: 020026 FRAME: 0804

ASSIGNMENT

WHEREAS I/We, the below named inventors [hereinafter referred to as Assignors], have made an invention entitled:

SYSTEMS AND METHODS FOR IMPROVING HAUL ROAD CONDITIONS

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 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 _____, 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 FIRST ASSIGNOR Jonny Ray GREINER	ASSIGNOR'S SIGNATURE <i>Jonny Ray Greiner</i>	DATE 10 Oct 07
ADDRESS 1807 West Cedar Hills Drive, Dunlap, IL 61525		CITIZENSHIP United States

1. WITNESS NAME <i>Richard Douglas</i>	WITNESS SIGNATURE <i>[Signature]</i>	DATE <i>Oct 10 2007</i>
ADDRESS <i>1301 W. ADAMS ST WASHINGTON IL 61571</i>		CITIZENSHIP <i>USA</i>

2. WITNESS NAME <i>William Hankins</i>	WITNESS SIGNATURE <i>[Signature]</i>	DATE <i>10-10-07</i>
ADDRESS <i>230 E. Lakeshore Dr. Edinburg, IL 61526</i>		CITIZENSHIP <i>U.S.</i>

2. FULL NAME OF SECOND ASSIGNOR Yang LIU	ASSIGNOR'S SIGNATURE	DATE
ADDRESS 2331 West Annamere Drive, Dunlap, IL 61525		CITIZENSHIP China

1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

3. FULL NAME OF THIRD ASSIGNOR Bhavin Jagdishbhai VYAS	ASSIGNOR'S SIGNATURE	DATE
ADDRESS 5506 West Barberry Court, Edwards, IL 61528		CITIZENSHIP India

1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

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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 _____, 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 FIRST ASSIGNOR Jonny Ray GREINER	ASSIGNOR'S SIGNATURE	DATE
ADDRESS 1807 West Cedar Hills Drive, Dunlap, IL 61525		CITIZENSHIP United States


1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

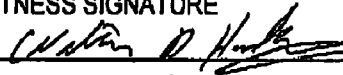
2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP


2. FULL NAME OF SECOND ASSIGNOR Yang LIU	ASSIGNOR'S SIGNATURE <i>Yang Liu</i>	DATE 10/7/07
ADDRESS 2331 West Annamere Drive, Dunlap, IL 61525		CITIZENSHIP China

1. WITNESS NAME <i>William D. Hankins</i>	WITNESS SIGNATURE <i>William D. Hankins</i>	DATE 10-9-07
ADDRESS <i>230 E Lakeshore Dr</i>	<i>Edelstein, IL 61526</i>	CITIZENSHIP U.S.A.

2. WITNESS NAME <i>Richard Douglas</i>	WITNESS SIGNATURE <i>Richard Douglas</i>	DATE Oct 9, 2007
ADDRESS <i>1321 Wm. N. St Washington DC 20571</i>		CITIZENSHIP USA

3. FULL NAME OF THIRD ASSIGNOR Bhavin Jagdishbhai VYAS	ASSIGNOR'S SIGNATURE 	DATE 10/9/07
ADDRESS 5506 West Barberry Court, Edwards, IL 61528		CITIZENSHIP India

1. WITNESS NAME William D. Hawkins	WITNESS SIGNATURE 	DATE 10-9-07
ADDRESS 230 E. Lehigh Ave. Galesburg, IL 61526		CITIZENSHIP U.S.

2. WITNESS NAME Richard Douglas	WITNESS SIGNATURE 	DATE 009-2007
ADDRESS 1301 W. 12th St Washington D.C. 20576		CITIZENSHIP