

MRD 11-09-01

FORM PTO-1619A
Expires 06/30/99
OMB 0651-0027

01-16-2002



101950407

U.S. Department of Commerce
Patent and Trademark Office
PATENT

**RECORDATION FORM COVER SHEET
PATENTS ONLY**

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

New

Resubmission (Non-Recordation)
Document ID#

Correction of PTO Error
Reel # Frame #

Corrective Document
Reel # Frame #

Conveyance Type

Assignment Security Agreement

License Change of Name

Merger Other

U.S. Government
(For Use ONLY by U.S. Government Agencies)

Departmental File Secret File

11036 U.S. PTO
10/03/601
11/09/01

Conveying Party(ies)

Mark if additional names of conveying parties attached

Name (line 1) Execution Date Month Day Year

Name (line 2)

Second Party

Name (line 1) Execution Date Month Day Year

Name (line 2)

Receiving Party

Mark if additional names of receiving parties attached

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)
City State/Country Zip Code

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

FOR OFFICE USE ONLY

01/15/2002 AAHMED1 00000147 031129 10037601
01 FC:581 40.00 CH

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:
Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

PATENT
REEL: 012455 FRAME: 0487

RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) Wayne M. Ferrell

Execution Date
Month Day Year
11/05/2001

Name (line 2)

Name (line 1) Javad (NMI) Hosseini

Execution Date
Month Day Year
10/22/2001

Name (line 2)

Name (line 1) Kenneth P. Liesener

Execution Date
Month Day Year
10/26/2001

Name (line 2)

Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

11/09/01
10/03/01
11056
PTO

RECORDATION FORM COVER SHEET
CONTINUATION
PATENTS ONLY

Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) Sri K. Rangarajan

Execution Date
Month Day Year
10/26/2001

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

10/26/2001
11/09/01

Correspondent Name and Address

Area Code and Telephone Number (314) 849-4079

Name Steve D. Lundquist

Address (line 1) Caterpillar Inc.

Address (line 2) Intellectual Property Department

Address (line 3) 100 N. E. Adams Street

Address (line 4) Peoria, IL 61629-6490

Pages Enter the total number of pages of the attached conveyance document including any attachments. # 10

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

10/037601					

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor. Month Day Year 10/23/2001

Patent Cooperation Treaty (PCT)

Enter PCT application number only if a U.S. Application Number has not been assigned. PCT [] PCT [] PCT []
PCT [] PCT [] PCT []

Number of Properties Enter the total number of properties involved. # 1

Fee Amount Fee Amount for Properties Listed (37 CFR 3.41): \$ 40.00

Method of Payment: Enclosed Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number: # 03-1129

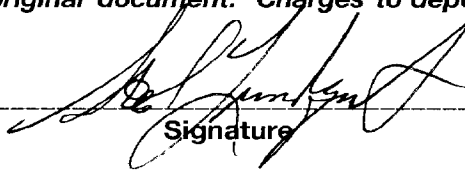
Docket No. 00-226

Authorization to charge additional fees: Yes No

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. Charges to deposit account are authorized, as indicated herein.

Steve D. Lundquist
Name of Person Signing



11/09/2001
Date

ASSIGNMENT

WHEREAS, DOUGLAS A. CARLSON, residing at Morton, Illinois, hereinafter referred to ASSIGNOR has invented together with Todd D. Creger, Wayne M. Ferrell, Javad (NMI) Hosseini, Kenneth P. Liesener and Sri K. Rangarajan a new and useful

METHOD AND APPARATUS FOR DETERMINING TORQUE AT DESIRED LOCATIONS ON A MACHINE

for which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on October 23, 2001; and

WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNOR;

1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do so.

2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.

3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc.

4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.

Douglas A. Carlson
DOUGLAS A. CARLSON

23 Oct 01
Date

IN WITNESS OF the execution hereof by DOUGLAS A. CARLSON we have hereunto set our hands.

Maw-Tz Jenie 23 OCT 01
Witness (1) Date
Address: 606 GREEN ST BOX 325
ROANOKE IL 61561-0325

Walter Pappas 23 Oct 2001
Witness (2) Date
Address: 414 W. Hudson
Peoria, IL 61604-1520

ASSIGNMENT

WHEREAS, TODD D. CREGER, residing at Geneva, Illinois, hereinafter referred to ASSIGNOR has invented together with Douglas A. Carlson, Wayne M. Ferrell, Javad (NMI) Hosseini, Kenneth P. Liesener and Sri K. Rangarajan a new and useful

METHOD AND APPARATUS FOR DETERMINING TORQUE AT DESIRED LOCATIONS ON A MACHINE

for which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on October 17, 2001; and

WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNOR;

1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do so.

2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.

3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc.

4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.

Todd D. Creger
TODD D. CREGER

10/17/01
Date

IN WITNESS OF the execution hereof by TODD D. CREGER we have hereunto set our hands.

Fred Fuf 10/17/01
Witness (1) Date
Address: 13175 HENNING RD
PLANO, IL 60545

J. S. S. 10/17/01
Witness (2) Date
Address: 1643 Timber Trl.
Wheaton, IL 60187

ASSIGNMENT

WHEREAS, WAYNE M. FERRELL, residing at Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with Douglas A. Carlson, Todd D. Creger, Javad (NMI) Hosseini, Kenneth P. Liesener and Sri K. Rangarajan a new and useful

METHOD AND APPARATUS FOR DETERMINING TORQUE AT DESIRED LOCATIONS ON A MACHINE

for which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on November 5, 2001; and

WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNOR;

1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do so.

2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.

3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc.

4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.

Wayne M. Ferrell
WAYNE M. FERRELL

11-5-01
Date

IN WITNESS OF the execution hereof by WAYNE M. FERRELL we have hereunto set our hands.

Nick A Roller 11/5/01
Witness (1) Date
Address: Nick A Roller
7808 W Farmington Rd
Peoria, IL 61604

Sridhar Deivasiganani 11/5/01
Witness (2) Date
Address: SRIDHAR DEIVASIGANANI
2632 W. WILLOW LAKE DR. #31
PEORIA, IL - 61614

ASSIGNMENT

WHEREAS, JAVAD (NMI) HOSSEINI, residing at Edelstein, Illinois, hereinafter referred to ASSIGNOR has invented together with Douglas A. Carlson, Todd D. Creger, Wayne M. Ferrell, Kenneth P. Liesener and Sri K. Rangarajan a new and useful

METHOD AND APPARATUS FOR DETERMINING TORQUE AT DESIRED LOCATIONS ON A MACHINE

for which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on October 22, 2001; and

WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNOR;

1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do so.

2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.

3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc.

4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.

Javad Hosseini
JAVAD (NMI) HOSSEINI

10/22/01
Date

IN WITNESS OF the execution hereof by JAVAD (NMI) HOSSEINI we have hereunto set our hands.

Maybeth Anderson 10/22/01
Witness (1) Date
Address: _____

100 NE Adams St
Peoria IL 61629-9420

Faith Vaughn 10/22/01
Witness (2) Date
Address: _____

100 NE Adams St
Peoria, IL 61629-9510

ASSIGNMENT

WHEREAS, KENNETH P. LIESENER, residing at Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with Douglas A. Carlson, Todd D. Creger, Wayne M. Ferrell, Javad (NMI) Hosseini and Sri K. Rangarajan a new and useful

METHOD AND APPARATUS FOR DETERMINING TORQUE AT DESIRED LOCATIONS ON A MACHINE

for which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on October 26, 2001; and

WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNOR;

1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do so.

2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.

3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc.

4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.

Kenneth P. Liesener
KENNETH P. LIESENER

10/26/01
Date

IN WITNESS OF the execution hereof by KENNETH P. LIESENER we have hereunto set our hands.

Jason Beye 10/26/01
Witness (1) Date

[Signature] 10/26/01
Witness (2) Date

Address: _____
10535 N. Churchill Dr.
Peoria IL 61615

Address: _____
1710 N. Logan St.
Chillicothe, IL 61523

ASSIGNMENT

WHEREAS, SRI K. RANGARAJAN, residing at Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with Douglas A. Carlson, Todd D. Creger, Wayne M. Ferrell, Javad (NMI) Hosseini and Kenneth P. Liesener a new and useful

METHOD AND APPARATUS FOR DETERMINING TORQUE AT DESIRED LOCATIONS ON
A MACHINE

for which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on October 26, 2001; and

WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNOR;

1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do so.

2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.

3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc.

4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.

Sri Kumar Rangarajan
SRI K. RANGARAJAN

10/26/01
Date

IN WITNESS OF the execution hereof by SRI K. RANGARAJAN we have hereunto set our hands.

Paul Seibert 10/26/2001
Witness (1) Date

Address: 516 W. Harvard St.
Peoria, IL 61614

Timothy J. Young 10/26/2001
Witness (2) Date

Address: 3211 N. Indiana St.
Peoria, Ill 61603