05-18-2001



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

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

RECORDATION FORM COVER SHEET

PATENTS ONLY		
	ks: Please record the attached original document(s) or copy(ies).	
Submission Type	Conveyance Type	
x New 55/01	Assignment Security Agreement	
Resubmission (Non-Recordation) Document ID#	License Change of Name	
Correction of PTO Error Reel # Frame #	Merger Other U.S. Government	
Corrective Document	(For Use ONLY by U.S. Government Agencies)	
Reel # Frame #	Departmental File Secret File	
Conveying Party(ies)	Mark if additional names of conveying parties attached Execution Date Month Day Year	
Name (line 1) Xiao Chen	04/20/2001	
Name (line 2)	Execution Date	
Second Party	Month Day Year	
Name (line 1) Yi Dong	04/20/2001	
Name (line 2)	5785	
Receiving Party	Mark if additional names of receiving parties attached	
Name (line 1) Caterpillar Inc.	If document to be recorded is an assignment and the receiving party is not domiciled in the United	
Name (line 2) Intellectual Property Dep		
Address (line 1) 100 N.E. Adams Street	(Designation must be a separate document from Assignment.)	
Address (line 2)		
Address (line 3) Peoria City	Illinois 61629-6490 Zip Code	
Domestic Representative Name and Ad	ddress Enter for the first Receiving Party only.	
Name		
Address (line 1)		
Address (line 2)		
Address (line 3)		
Address (line 4)		
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	Cover Sheet to be recorded, including time for reviewing the document and	

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

RECORDATION FORM COVER SHEET FORM PTO-1619C U.S. Department of Commerce CONTINUATION Patent and Trademark Office OMB 0651-0027 **PATENT** PATENTS ONLY Conveying Party(ies) Mark if additional names of conveying parties attached Enter additional Conveying Parties **Execution Date** Month Day Name (line 1) Edward T. Martin 04/24/2001 Name (line 2) **Execution Date** Month Day Name (line 1) Wayne Tanner 04/23/2001 Name (line 2) **Execution Date** Month Day Name (line 1) Zhishang Yang 04/20/2001 Name (line 2)

Receiving Party(ies)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

Name (line 1)

Name (line 2)

Address (line 1)

Enter additional Receiving Party(ies)

Assignment.) Address (line 2) Address (line 3) Zip Code State/Country City 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 Number(s) Patent Application Number(s)

State/Country

Mark if additional names of receiving parties attached

Year

Year

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.)

If document to be recorded

States, an appointment of a domestic representative is attached. (Designation must

be a separate document from

is an assignment and the receiving party is not domiciled in the United

Zip Code

FORM	PTO-1619B
Expires 06/	30/99
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U.S. Department of Commerce Patent and Trademark Office PATENT

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. # 5
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)
If this document is being filed together with a new Patent Application, enter the date the patent application was Month Day Year
signed by the first named executing inventor.
Patent Cooperation Treaty (PCT)
Enter PCT application number
only if a U.S. Application Number 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 X
Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the account.) **Deposit Account Number** # 03-1129
Deposit Account Number.
Docket No. 01-162 Authorization to charge additional fees: Yes X No 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 descent
indicated herein.
Steve D. Lundquist 05/09/2001 Date
Name of Person Signing /Signature

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

RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

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

Conveying Party(ies)	Mark if additiona	al names of conveying parties a	attached
Enter additional Conveying Parties			Execution Date Month Day Year
Name (line 1) Edward T. Martin		<u>o</u>	04/24/2001
		مرم	
Name (line 2)		<u>*</u>	Execution Date
	Carlo Marian and American	- Sig	Month Day Year
Name (line 1) Wayne Tanner	···	090	04/23/2001
Name (line 2)		- 3	
			Execution Date Month Day Year
Name (line 1) Zhishang Yang			04/20/2001
Name (line 2)			
Receiving Party(ies)	Ma	ark if additional names of receiv	ving 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
Name (line 2)			States, an appointment of a domestic representative
Address (line 1)			is attached. (Designation must be a separate
			document from Assignment.)
Address (line 2)			
A Library (I)			Zip Code
Address (line 3) City	y	State/Country	
Name (line 1)			If document to be recorded is an assignment and the
Name (line 1)			receiving party is not
Name (line 2)			States, an appointment of a
Address (line 1)			attached. (Designation must be a separate document from
Address (line 1)			Assignment.)
Address (line 2)			
			Zip Code
Address (line 3) City		State/Country Mark if additional numbers	
Application Number(s) or Pa	atent Number(S)	OO NOT ENTER BOTH number	s for the same property).
Enter either the Patent Application No	umber or the Patent Number (2	Pate	ent Number(s)
Patent Application	Number(s)		
] [
	'		

WHEREAS, XIAO CHEN, residing at Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with Yi Dong, Edward T. Martin, Wayne Tanner and Zhishang Yang a new and useful

METHOD FOR DESIGNING A WELD FIXTURE BASED ON PREDICTED STRESSES AND DISTORTIONS

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 <u>April 20, 2001</u>; 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 JESTIMONY WHEREOF, ASSIGNO	OR has executed this instrument.
Musein _	04-20-2001
CIAO CHEN	Date
N WITNESS OF the execution hereof by XIAO	CHEN we have hereunto set our hands.
Di por 04/20/01	Witness (2) Date Date
Witness (1) Date Address: 7217 N. University St.	Address: 1121 GRADDVIEW CIR.
Address: 121 / 10. 24	EUREKA, IL 61530
Apt. #D29 Peoria, IL 61614-1228	

WHEREAS, WAYNE TANNER, residing at Chicago, Illinois, hereinafter referred to ASSIGNOR has invented together with Xiao Chen, Yi Dong, Edward T. Martin and Zhishang Yang a new and useful

METHOD FOR DESIGNING A WELD FIXTURE BASED ON PREDICTED STRESSES AND DISTORTIONS

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 <u>April 23, 2001</u>; 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 TESTIMON	Y, WHEREOF, ASSI	GNOR has executed this instru	ument.
WAYNE TANNER	me	9/27/01 Date	
Witness (1) Address:	Recution hereof by W Alegor Date	AYNE TANNER we have her Witness (2) Address:	reunto set our hands. Date

WHEREAS, ZHISHANG YANG, residing at Dunlap, Illinois, hereinafter referred to ASSIGNOR has invented together with Xiao Chen, Yi Dong, Edward T. Martin and Wayne Tanner a new and useful

METHOD FOR DESIGNING A WELD FIXTURE BASED ON PREDICTED STRESSES AND DISTORTIONS

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 April 20, 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.

This Hang yang 04/20/01

ZHISHANG YANG

Date IN WITNESS OF the execution hereof by ZHISHANG YANG we have hereunto set our hands. | Christy | Date | Witness (1) | Date | Witness (2) | Date | Address: | 112A GRANDVIEW CIR. | Address: | 7217 N. University 5*. |

| EUREKA, TL 61530 | Peoria, 7L 61614 |

<u>ASSIGNMENT</u>

WHEREAS, YI DONG, residing at Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with Xiao Chen, Edward T. Martin, Wayne Tanner and Zhishang Yang a new and useful

METHOD FOR DESIGNING A WELD FIXTURE BASED ON PREDICTED STRESSES AND DISTORTIONS

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 April 20, 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.

4/20/2001

IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.

/I DONG			Dute		
n witness o	F the execution	hereof by YI Do	ONG we have hereunto	set our ha	ands.
Witness (1) Address: 7217	i pri	Date 51+y St.	Witness (2) Address: 112A G	ELL.	4/20/2001

WHEREAS, EDWARD T. MARTIN, residing at Decatur, Illinois, hereinafter referred to ASSIGNOR has invented together with Xiao Chen, Yi Dong, Wayne Tanner and Zhishang Yang a new and useful

METHOD FOR DESIGNING A WELD FIXTURE BASED ON PREDICTED STRESSES AND DISTORTIONS

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 <u>April 24, 2001</u>; 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, ASSIG	NOR has executed this instrument.
EDWARD T. MARTIN	4-24-01 Date
IN WITNESS OF the execution hereof by EDV Witness (X) Date	WARD T. MARTIN we have hereunto set our hands. Witness (2) Address:
Address:	5283 WHITE OAK CT. OREANA, ILL 62554

PATENT
RECORDED: 05/09/2001 REEL: 011800 FRAME: 0732