To the Director of the U.S. Patent and Tradema Please record the attached original documents	Attorney Docket No. 08350.5216-00000 Attorney Customer Number: 22,852 Mail Stop Assignment Recordation Services			
1. Name of conveying parties: (1) David M. Thaler (2) Richard Crandell	me: CATERPILLAR INC.			
(3) Kevin Daly Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No Int	ernal Address:			
3. Nature of conveyance: St	reet Address: 100 N.E. Adams Street			
✓ Assignment ☐ Merger Ci				
Security Change of Name St Agreement	ate: Illinois Zip Code: 61629-6490			
Other: Execution Date: (1) December 20, 2005	Iditional name(s) & Address(es) attached?			
(2) December 20, 2005 (3) December 19, 2005	☐ Yes			
 4. Application number(s) or patent number(s): If this document is being filed togother. (1) December 20, 2005 (2) December 20, 2005 (3) December 19, 2005 	other with a new application, the execution date of the application:			
B. Patent Application Number(s): C. Patent Number(s):				
Additional numbers attached? ☐ Yes	⊠ No			
Name and address of party to whom correspondence concerning document should be mailed: 6.	Total number of applications and registrations involved: one (1)			
Name: Timothy McAnulty 7.	Total fee (37 CFR 3.41): \$40			
	Enclosed (Please charge deficiency to deposit account)			
	☐ Authorized to be charged to deposit account			
Internal Address: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.				
Street Address: 901 New York Avenue, N.W.				
City: Washington				
State: DC 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 an	any attached copy is a true copy of the original document.			
Timothy McAnulty	January 6, 2006			
Reg. No. 56,939 Signature	Date			
	achments and documents: 7			

01/10/2006 CNGUYEN2 00000010 11326190 04 FC:8021 Page 1 of 1

> **PATENT** REEL: 017444 FRAME: 0537

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350.5216-00000 Client Ref. No. 05-216

ASSIGNMENT

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

THERMAL EXPANSION JOINT

101	willcull and exec	cuteu an app	ilication for C	mileo States	Letters Patent	concurrently	nerewith or file	d an application for	
Uni	ted States Lette	ers Patent on	, 20	(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 to be jointly owned by each:

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 Assignees are 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 Assignees, their 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 Assignees, their 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 Assignees, their 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 Assignees, their successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignees, their 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 Assignees, their successors and assigns.

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

1. FULL NAME OF SOLE OR FIRST ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
David M. Thaler		
ADDRESS		CITIZENSHIP
P.O. Box 301, Mossville, Illinois 61552		U.S.A.

Page 1 of 3

PATENT REEL: 017444 FRAME: 0538

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350.5216-00000 Client Ref. No. 05-216

		_;
1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP
2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP
		
FULL NAME OF SECOND ASSIGNOR Richard A. Crandell	ASSIGNOR'S SIGNATURE	DATE
ADDRESS	1	CITIZENSHIP
1025 Johnson St. Morton Illinois 61550		U.S.A.
		
1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP
2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP
		<u> </u>
3. FULL NAME OF THIRD ASSIGNOR	ASSIGNOR'S SICNATURE	DATE /
Kevin A. Daly	Mi Vale	12/19
ADDRESS		CITIZENSHIP
5426 Ronald Rd, Peoria, Illinois, 61614		U.S.A.

Page 2 of 3

PATENT REEL: 017444 FRAME: 0539

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350.5216-00000 Client Ref. No. 05-216

1. WITNESS NAME	WIFINESS SIGNATURE	DATE 12-19-05
ADDRESS 484 5 Soungetaha Rd A	et #18	CITIZENSHIP U.S.A.
Calesburg, IL 61401		
<u> </u>		7
2. WITNESS NAME CHOCK -	WITNESS SIGNATURE	DATE
	1 m	12-19-05
ADDRESS	7 100	CITIZENSHIP
	700	

SOLE/JOINT	INVE	NOITH
(World	lwide	Rights)
Attorney Docket No. 08350	.5216	5 -0000 0
Client Re-	f No.	05-216

ASSIGNMENT

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

THERMAL EXPANSION JOINT

for which I/We executed an application for United States Letters Patent concurrently herewith or filed an application for United States Letters Patent on ____, 20___ (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 to be jointly owned by each;

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 Assignees are 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 Assignees, their 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 Assignees, their 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 Assignees, their 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 Assignees, their successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignees, their 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 Assignees, their successors and assigns.

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

1. FULL NAME OF SOLE OR FIRST ASSIGNOR	ASSISTOR'S SIGNATURA	DATE
David M. Thaler	Vane / hela	12/20/2005
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Page 1 of 3

1. WITNESS NAME FAIZ KHAN	WITNESS SIGNATURE	DATE 12-20-05
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3. FULL NAME OF THIRD ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
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5426 Ronald Rd, Peoria, Illinois, 61614	-	U.S.A.

1. WITNESS NAME John Wikoff	WITNESS SIGNATURE	DATE /2-20-05
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