To the Director of the U.S. Patent and



U.S. Department of Commerce Patent and Trademark Office Attorney Docket No. 08350.5606-00000 Attorney Customer Number: 22,852

Mail Stop Assignment Recordation Services

To the Director of the U.S. Pate Please record the attached ori	1111411112111	Mail Stop Assignment Recordation Services
Name of conveying par Scott Alan LEMAN Jason Kenneth BLOI Steven James FUNK James Richard WEB	ty(ies): MS Œ	2. Name and address of receiving party(ies): Name: Caterpillar Inc.
Additional name(s) of conveying	party(ies) attached? Tyes No	Internal Intellectual Property Department Address:
3. Nature of conveyance:		Street Address: 100 N.E. Adams Street
	☐ 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
Execution Date: 1) March 21 2) March 29 3) March 27 4) March 27	, 2006 , 2006	
	or patent number(s): If this document in ch 21, 2006; 2) March 29, 2006; 3) March 29, 2006; 3)	is being filed together with a new application, the execution date of larch 27, 2006; 4) March 27, 2006
A. Patent Application Num	nber(s):	B. Patent Number(s):
	Additional numbers attached?	☐ Yes
5. Name and address of p concerning document s	earty to whom correspondence hould be mailed:	Total number of applications and patents involved: One
Name: Denise L. Poy		7. Total fee (37 CFR 1.21(h) and 3.41): \$40
Internal Address: FINNEGAN & DUNNER	, HENDERSON, FARABOW, GARRE , L.L.P.	Enclosed (Please charge deficiency or credit overpayment to deposit account 06-0916)
Street Address: 901 New Yo	ork Avenue, N.W.	Authorized to be charged to deposit account
City: Washington, D.	C.	
State: 2	Zip: 20001-4413	8. Deposit Account No.: 06-0916
9. Statement and signatur		
To the best of my knowledge and document.	d belief, the foregoing information is tr	true and correct and any attached copy is a true copy of the original
Signed:	unjoy	March 31, 2006
	Denice L. Poy, Reg. No. 53	
Total	number of pages including cover shee	eet, attachments and documents: Thirteen
12/2005		

04/04/2006 WABDELR1 00000004 11394121

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ASSIGNMENT

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

METHOD AND APPARATUS FOR CONTROLLING ENGINE VALVE TIMING

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 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 Scott Alan LEMAN	ASSIBNOR'S SIGNATURE	DATE 3-71-06
ADDRESS 730 State Route 117, Eureka, IL 61530		CITIZENSHIP United States

Page 1 of 3

1. WITNESS NAME EDWIN H. LANGEWISCH	Edwin H. Languvisch	21 MARCH 2006
ADDRESS 1428 W. GRANDRIDGE	<u> </u>	CITIZENSHIP USA
DUNLAP, IL 61525		
2. HATTNESS NAME / GARMAN	WITHES SIGNATURE Lannan	DATE 21 MARCH ZOOG
109 CONAGHAN DRIVE		CITIZENSHIP USA
GROVELAND, IL 61535		
•		
2. FULL NAME OF SECOND ASSIGNOR, IF ANY JASON KENNETH BLOMS	ASSIGNOR'S SIGNATURE	DATE
ADDRESS 6230 N. Frostwood Parkway, Peoria, IL 61615		CITIZENSHIP United States
1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP
2, WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

3. FULL NAME OF THIRD ASSIGNOR, IF ANY Steven James FUNKE	ASSIGNOR'S SIGNATURE	DATE
ADDRESS 7514 W. Thornridge Drive, Mapelton, IL 61547		CITIZENSHIP United States
1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP
2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP
4. FULL NAME OF FOURTH ASSIGNOR, IF ANY James Richard WEBER	ASSIGNOR'S SIGNATURE	DATE
ADDRESS 532 State Route 26, Lacon, IL 61540		CITIZENSHIP United States
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1. WITNESS NAME	WITNESS SIGNATURE	DATE
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ADDRESS 730 State Route 117, Eureka, IL 61530		CITIZENSHIP United States

Page 1 of 3

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1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP
		
2. WITNESS NAME	withess signature	DATE
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2. FULL NAME OF SECOND ASSIGNOR, IF ANY Jason Kenneth BLOMS	ASSIGNOR'S SIGNATURE DOWN K. Bloms	3/29/2006
ADDRESS 6230 N. Frostwood Parkway, Peoria, IL 61615		спідененів United States
1. WITNESS NAME SCIVET	WITNESS SIGNATURES A TURNES	2/19/200X
ADDRESS 1605 Oak Ridge	6	CITIZENSHIP
Ti. Noton, New	81571	
7		
2. WITNESS NAME Evan E. Warobson	WITNESS SIGNATURE	DATE 3/29/2006
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1		

3. FULL NAME OF THIRD ASSIGNOR, IF ANY Steven James FUNKE	ASSIGNOR'S SIGNATURE	DATE
ADDRESS 7514 W. Thornridge Drive, Mapelton, IL 61547		CITIZENSHIP United States
1. WITNESS NAMÉ	WITNESS SIGNATURE	DATE
ADORESS		CITIZENSHIP
2, WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS	CITIZENSHIP	
4. FULL NAME OF FOURTH ASSIGNOR, IF ANY James Richard WEBER	ASSIGNOR'S SIGNATURE	DATE
ADDRESS 532 State Route 26, Lacon, IL 61540		CITIZENSHIP United States
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ADDRESS 730 State Route 117, Eureka, IL 61530		CITIZENSHIP United States

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ADORESS 6230 N. Frostwood Parkway, Peoria, IL 61615		CITIZENSHIP United States	
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ADDRESS		CITIZENSHIP	

Page 2 of 3

3. FULL NAME OF THIRD ASSIGNOR, IF ANY Steven James FUNKE	ASSIGNORS, SIGNATURE July	DATE 27 Mer 2006
ADDRESS 7514 W. Thomridge Drive, Mapelton, IL 61547	· /	CITIZENSHIP United States
1. WITNESS NAME MICHAEL PATRICK HARMON	WITHERS SIGNATURES However	DATE 27 MAR 2006
ADDRESS 13547 N. LAKEWOOD DRIVE,	•	CITIZENSHIP US Pt
13341 IV. KILLWOOD		N-11
	Λ	
2. WITNESS NAME RAGE L. Urven Jr.	Regers Unenfr. Colong, Il 61241	DATE 3/27/2006
ADDRESS 813 6th Street	Colona Il 61241	CITIZENSHIP U.S.A
4. FULL NAME OF FOURTH ASSIGNOR, IF ANY James Richard WEBER	ASSIGNOR'S SIGNATURE	DATE
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ADDRESS 532 State Route 26, Lacon, IL 61540		CITIZENSHIP United States
1. WITNESS NAME Thomas J. Crowell	WITNESS SIGNATURE Crowll	3/27/2006
ADDRESS 711 DEVON Drive, Me	tamora Il 61548	CITIZENSHIP
2. WITNESS NAME Christopher R. Gehrke ADDRESS	WITNESS-SIGNATURE R SH	DATE 3/27/2006
	Months, TL 61523	US

Page 3 of 3

PATENT REEL: 017744 FRAME: 0508

RECORDED: 03/31/2006