	03-28-2003		Γ	Pa Att Att	tent and Trade torney Docket torney Custon	No. 8350.2161-0 ner Number:  22,
To the Honorable Commissioner of Please record the attached original docume	102402988		P	ATTN. BOX	ASSIGNMENT	rs
1. Name of conveying party(ies): Jason K. BLOMS Steven J. FUNKE Robert A. KAGY Evan E. JACOBSON	MAR 2 0 26C3 2	2. Name:		ne and addr Caterpillar Ir	ress of receiving	g party(ies):
Additional name(s) of conveying party(ies) atta	No.	Internal	l Addre			e and an analysis and an analy
Nature of conveyance:	RADEMA	Street			N. E. Adams	Ct4
					IN. E. Auams	Street
☐ Assignment ☐ Merger		City:	Peor	ria		
Agreement	of Name	State:	11		Zip Code:	61629-6490
Other:		Addition	nal nar	ne(s) & Add	dress(es) attaci	hed?
Execution Date: March 5, 2003			□Y	es	⊠ No	
Application number(s) or patent number	er(s): If this document is	beina filed t	oaethe	er with a ne		he execution dat
the application:	,,		9			
A. Patent Application Number(s):		В.	Pate	nt Number(	s):	
10/309,317						
Addition	al numbers attached?	l □ Yes		⊠ No		
5. Name and address of party to whom of concerning document should be mailed		6.	Total involv One		applications ar	nd registrations
Name: Christopher P. Isaac		7.	Total	fee (37 CF	R 3.41): \$40	
·			E	Enclosed (F	Please charge o	deficiency to depo
				account) `	0	, , , , , , ,
Internal Address: EINNECAN HENDEDSON	LEADAROM CARRETT			Authorized	to be charged	to deposit accou
Internal Address: FINNEGAN, HENDERSON & DUNNER, L.L.P.		_				
Street Address: 1300 I Street, N.W.						
City: Washington, D.C.						
State: Zip:	20005-3315	8.	Depo	sit Account	t No.: <u>06-0916</u>	
9. Statement and signature.						
To the best of my knowledge and belief, the for	egoing information is true	and correc	t and a	any attache	d copy is a true	e copy of the origi
document.	11	1/1/	-	-		•
Kurt A. Luther, Reg. No. 43,764	(And)	Alato			March 20, 2	003
Nutra, Edition, Neg. No. 45,704	Sign	nature				ate
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otal numbler of pag	es including cover sheet,	attachment	s and a	documents	: 4	

PATENT REEL: 013885 FRAME: 0216

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 8350.2161-01 Client Ref. No. 02-161

## **ASSIGNMENT**

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

## SYSTEM AND METHOD FOR MONITORING ENGINE VALVE ACTUATION

for which We filed an application for United States Letters Patent on December 4, 2002 (Application No. 10/309,317); and

WHEREAS, Caterpillar Inc., a corporation of Delaware whose post office address is 100 N.E. Adams Street, Peoria, Illinois 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, We, as Assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, 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 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, WE HEREBY covenant that We have the full right to convey the interest assigned by this Assignment, and We have not executed and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to 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, We have hereunto set our hands.

1. FULL NAME OF FIRST ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
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Listing of Inventors Continued on Page 2 hereof ■ Yes □ No

Page 1 of 3

PATENT REEL: 013885 FRAME: 0217

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 8350.2161-01 Client Ref. No. 02-161

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2 WITNESS NAME IRENT CLEVELAND	WITNESS SIGNATURE Churcherd	DATE 05HARO3
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FULL NAME OF FOURTH ASSIGNOR  Evan E. Jacobson	ASSIGNOR'S SIGNATURE  S. Jacobs	DATE OSMARO3
	ASSIGNOR'S SIGNATURE	
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Evan E. Jacobson  ADDRESS  1124 W. Orchard Lane, Peoria, Illinois 61615-  1. WITNESS NAME Thomas J. Crowell  ADDRESS	1324  WHINESSIGNATURE Ahomas J. Crowll	OSMARO 3  CITIZENSHIP  United States  DATE 05 - Mar - 2003  CITIZENSHIP
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Page 3 of 3

PATENT REEL: 013885 FRAME: 0219