	To the Director of the U.S. Pa		02-05-2007 103370075	HEET	Paten Custo Attorr		ark Office	
9	Please record the attached or.1.Name of conveying pair	<u> </u>		2.	Name and addre	ess of receiving	partv(ies):	
5	1. Satish L. KALE 2. Richard G. INGRAM	1		Name:	Caterpillar In	-	S. PTO	
	Additional name(s) of conveying	party(ies	) attached? 🗌 Yes 🛛 No	Internal Address:	· · · · · · · · · · · · · · · · · · ·	<u> </u>	0 20 20	
	3. Nature of conveyance:		······································	Street Ac		.E. Adams Stre	eet 1	
	Assignment		Merger	City:	Peoria			
}	Security Agreement		Change of Name	State:	IL	Zip Code:	61629-6490	
ŀ	Joint Research Agreement		Government Interest Assignment	Additiona	al name(s) & Add	lress(es) attact	L	<u> </u>
	Executive Order 9494, Confirmatory License		Other:		☐ Yes	⊠ No		
	Execution Date: 1. January 2. January							
-	4. Application number(s) of the application: Januar	or patent ry 30, 200	number(s): If this document is be	eing filed to	gether with a new	w application, t	he execution date	e of
	A. Patent Application Num	nber(s):		В.	Patent Number(s	s):		
o / An	/2007 MWDLDGE1 00000063 1170019	4						
	7	)	ditional numbers attached?		🛛 No			
	5. Name and address of p concerning document s	party to wi should be	nom correspondence mailed:		Total number of One (1).	applications ar	nd patents involve	ed:
	Name: Matthew D. Aichele			7.	Total fee (37 CF	R 1.21(h) and	3.41): \$40	
	Internal Address: FINNEGAN & DUNNER		RSON, FARABOW, GARRETT				deficiency or cred count 06-0916)	it
	Street Address: 901 New Yo	• • • • • •	e, N.W.		Authorized	to be charged	to deposit accour	nt
-	City: Washington, D. State:	.C.  Zip:	20001-4413	8.	Deposit Account			. <u>.</u>
-	9. Statement and signatur			0.		. NO <u>00-0910</u>	· · · · · · · · · · · · · · · · · · ·	
-	To the best of my knowledge an document.		he foregoing information is true :	and correct	and any attache	d copy is a true	e copy of the origi	inal
	Signed:	aton D	ture			January 31,	2007	
			Matthew D Aichele Reg. No. 57282	44		Di	ate	
	l otal		f pages including cover sheet, a	ttachments	and documents:	: 3		

PATENT REEL: 018869 FRAME: 0920

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350-6599-00000 Client Ref. No. 06-599

## ASSIGNMENT

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

## SYSTEM FOR AUTOMATED EXCAVATION CONTROL BASED ON PRODUCTIVITY

for which We executed an application for United States Letters Patent concurrently herewith or filed an application for United States Letters Patent on \_\_\_\_\_\_, 2006 (Serial No. \_\_\_\_\_\_); and

WHEREAS, Caterpillar Inc., a corporation of Delaware corporation 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;

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, if any 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, We have hereunto set our hands.

1. FULL NAME OF SOLE OR FIRST ASSIGNOR Satish L. KALE	ASSIGNOR'S SIGNATURE	DATE 30 Jan 2007
ADDRESS 18 Horseshoe Lane, Lemont, Illinois 60	CITIZENSHIP USA	

/30/2007 13:22 FAX 6308596419 U U/ 10:10a Rich and Cathy Ingram	1	630 443 9459	⊠ 003 p.1 <b>⊌2002</b>
	ν	Attomey Docket N	E/JOINT INVENTI (Worldwide Righ o. 08350-6599-000 Lient Ref. No. 06-5
1. WITNESS NAME Alberto Martinez	WITNESS SIGNATURE	h	ATE 01/30/07
ADDRESS 6020 Calward Dr. # 3		C	CSR
Cist II. 60532			
2. WITNESS NAME <u>I.AVANYA KAMISETTY</u> ADDRESS	WITNESS SIGNATURE K.S. Zananya	4	ATE 01130107
4215 OLD OAKS DE #	20		INDIA
LISLE 16 - 60532			
2. FULL NAME OF SECOND ASSIGNCR, IF ANY Richard G. INGRAM	ASSIGNOR'S SIGNATURE		ATE 50 Jan 2007
ADORESS 240 Persimmon Drive, St. Charles,	IL 60174		TIZENSHIP ISA
( WITNESS NAME	WITNESS SIGNATURE		
Alberto Hartinez	ana		01/30/07
ADORESS	+ # 20		USA
	r. <u>4.30</u>		USA
ADORESS <u>6920</u> Oakwood D: LISE, <u>II. 60532</u> 2 WITNESS NAME			
ADDRESS <u>6020</u> <u>Oakwood</u> <u>D</u> : <u>Lisl</u> , <u>TI</u> . <u>60532</u> 2 WITNESS NAME <u>/AVANYA KANISETTY</u> ADDRESS	WITNESS BIGNATURE K.S. Kawanya		
ADORESS <u>6020</u> O <u>akwood</u> <u>D</u> <u>LISE, <u>II</u>. 60532 2. WITNESS NAME</u>	WITNESS BIGNATURE K.S. Kawanya		ате 01/30/07 Піденянір
ADDRESS <u>6020</u> <u>Oakwood</u> <u>D</u> . <u>Lise</u> , <u>II</u> . <u>60532</u> 2 WITNESS NAME <u>/AVANYA</u> <u>KANISETTY</u> ADDRESS <u>4715</u> <u>OLD</u> <u>OAKS</u> <u>DE</u> <u>#20</u>	WITNESS BIGNATURE K.S. Kawanya		ате 01/30/07 Піденянір
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PATENT REEL: 018869 FRAME: 0922

RECORDED: 01/31/2007