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U.S. Department of Commerce **Patent and Trademark Office** Attorney Docket No. 08350.4567-00000 Attorney Customer Number: 58,982

		itached original (its or copy thereof.			Wall St	ob wasigni	Herit Kec	ordation Services
Name of conveying parties: (1) Brian D. Hoff (2) Sivaprasad Akasam				Name and address of receiving party:						
	(2)	owapiasaa Aka	yanı			Name:	Caterpillar	r inc.		
Additional	name(s) of	conveying party(i	es) attac	hed? 🗌 Yes 🗵 No		Internal Add	iress:	Intellectua	Property	Department
3.	Nature of c	onveyance:				Street Addre	ess:	100 N.E. A	dams Str	eet
	Assignm	ent 🔲	Merg	er		City: P	eoria			
	Security Agreeme		Char	nge of Name		State:	Illinois	Zip	Code:	61629-6490
	Other:					Additional name(s) & Address(es) attached?				
Execution	Date:			ember 18, 2007 ember 17, 2007] Yes	1	10	
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A. I	Patent Application Number(s):				B. Patent Number(s):					
				Additional numbers atta	ached? 🔲 `	 Yes	⊠ No			
	Name and address of party to whom correspondence concerning document should be mailed:			ing	Total number of applications and registrations involved: one (1)					
Name:	Timothy M	1cAnulty				7. To	otal fee (37 0	CFR 3.41):	\$40	
						⊠	Enclosed account)		harge defi	ciency to deposit
							Authoriz	ed to be ch	narged to d	deposit account
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9. \$	Statement a	and signature.				<u> </u>		· · · · · · · · · · · · · · · · · · ·		
To the best	t of my kno	wledge and belief	, the fore	going information is true	and correct	and any atta	ched copy is	s a true cop	y of the o	riginal document.
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SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350.4567-00000 Client Ref. No. 04-567 Customer No. 58,892

ASSIGNMENT

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

SYSTEM FOR CONTROLLING A HYBRID ENERGY SYSTEM

for which We executed an application for United States Letters Patent concurrently herewith; 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 to be jointly owned by each:

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 Assignees, their 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 Assignees, their successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful caths 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. We have hereunto set our hands.

1. FULL NAME OF SOLE OR FIRST ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
Brian D. Hoff	Benw DOF	18 Dec 2007
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219 Justice Drive, East Peoria, Illinois 6	USA	

Page 1 of 2

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 08350.4567-00000 Client Ref. No. 04-567 Customer No. 58,892

1. WITNESS NAME Kasemsak Uthajchana	WITNESS SIGNATURE	DATE 12-18-07
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2. WITNESS NAME KEVIN J Carew	WITNESS SIGNATURE /	DATE 18 Dec 2007
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Sivaprasad Akasam		
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1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP
2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

REEL: 020373 FRAME: 0182

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AND. WE HEREBY further covenant and agree that We will, without further consideration, communicate with Assignees, their 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 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, We have hereunto set our hands.

CITIZENSHIP
USA

Page 1 of 2

PATENT REEL: 020373 FRAME: 0183

SOLE/JOINT INVENTION
(Worldwide Rights)
Attorney Docket No. 08350 4567-00000
Client Ref. No. 04-567
Customer No. 58,892

1. WITNESS NAME	WITNESS SIGNATURE:	DATE
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2. FULL NAME OF SECOND ASSIGNOR	ASSIGNORS SIGNATURE	DATE
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Ya. t.		
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REEL: 020373 FRAME: 0184