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Name (line 1) KAUFMAN, David Y.				08/15/2005			
Name (line 2)				Execution Date Month Day Year			
Name (line 1) SAHA, Sanjib				08/03/2005			
Name (line 2)							
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Name (line 1) United States Department of Energy				if document to be recorded is an assignment and the receiving party is not domicited in the United			
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Address (line 1) GC-62, MS 6F-067 (FORSTL)				(Designation must be a separate document from Assignment.)			
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FORM PTO-1619B Expires 06/30/99 OMB 0651-0027	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT
Correspondent Name and Address	Area Code and Telephone Number	202-586-2810
Name Betty Winchester		
Address (line 1) United States Department of Energy		
Address (line 2) GC-62, MS 6F-067 (FORSTL)		
Address (line 3) 1000 Independence Avenue, S.W.		
Address (line 4) Washington, D.C. 20585-0162		
Pages Enter the total number of page Including any attachments.	ges of the attached conveyance docume	
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	I number of properties involved.	1
Fee Amount Fee Amoun	at for Properties Listed (37 CFR 3.41):	40.00
Method of Payment: Encl	osed Deposit Account	
Deposit Account (Enter for payment by deposit account or if a	dditional fees can be charged to the	
(Effet for paymant by doposis 2000	Deposit Account Number:	#01-2752
	Authorization to charge additional fees:	Yes No No
Statement and Signature		
To the best of my knowledge and b	pellef, the foregoing Information is true	and correct and any
attached copy is a true copy of the indicated herein.	original document. Charges to deposi	I ACCOUNT AIR AUDIONIZED, RA
	ILA BALL.	SEP 3 0 2005
Katherine Baldwin Name of Person Signing	Signature	Date
Maine of Letton ordania	-	

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U.S. Department of Energy

11/145220

PATENT ASSIGNMENT FORM

(Citizen of India)

WHEREAS, the Government of the United States desires to acquire the entire right, title, and interest in and to said invention and in and to any Letters Patent wherever they may be issued thereon;

NOW. THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar to us in hand paid by the Government of the United States, and for other good and valuable consideration, the receipt of which is hereby acknowledged, we by these presents do sell, assign, and transfer unto the said Government of the United States, as represented by the united States Department of Energy, and/or its assigns, the entire right, title, and interest in and to the said invention and in and to any and all Letters Patent wherever they may be granted thereon as well as reissues and extensions of said Letters Patent are or may be granted, reissued, or extended, as fully and entirely as the same would have been held or enjoyed by us had this assignment not been made.

We agree to make, execute, and deliver unto the Government of the United States, or to the United States Department of Energy, any and all papers, documents, affidavits, renewal, divisional and reissue applications, statements, or other instruments in such usual or other forms, terms and contents as may be required by the United States Department of Energy, or its duly authorized representative, in or incident to the prosecution or conduct of any and all applications, before as well as after the issuance of any Letters thereon, or in the adjustment or settlement of any interferences or other actions or proceedings that said applications may encounter or in which they may become involved and we agree that we will encounter or in which they may become involved and we agree that we will aid the Government of the United States in every way in protecting the inventions as may be requested by the United States Department of Energy or its assigns, except that any expenses arising through extending such assistance will be paid for by proper arrangement with the Government of the United States.

PATENT REEL: 016847 FRAME: 0990 - 2 **-**

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WITNESS:

INVENTORS:

ATTEST:

Approved and consented to this 16 day of August. 2005

By

Renee K. Carder, Ph.D. Assistant Vice President for Strategic Research Initiatives Office of the Vice President for Research

Accepted for the Benefit of the Government of the United States.

WITNESS:

UNITED STATES DEPARTMENT OF ENERGY

Counsel for Patents

RECORDED: 09/30/2005

PATENT REEL: 016847 FRAME: 0991