FORM PTO-1619A, Expires 06/30/99 OMB 0651-0027 11-22-2000



U.S. Department of Commerce Patent and Trademark Office PATENT

Docket 0772.1

## 101524211 RECORDATION FURMI COVER SHEET

		PATENTS ON	L Y	()	
TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies)					
Submission '	Type 10-24-00	Conveyance Ty	pe	4	
X New	10 27 00	X Assignment	Security Agreement	180 180	
Resubmiss Document	sion (Non-Recordation)	License	Change of Name	6	
Correction Reel #	of PTO Error Frame #	Merger	Other U.S. Government		
Corrective Real #	Document Frame #		se ONLY by U.S. Government Agenci	os) cret File	
Conveying P	arty(ies)	Mark if additiona	I names of conveying parties attac		
Name (line 1)	Lee, James Weifu			Month Day Year 102300	
Name (line 2)					
Second Party Name (line 1)	Greenbaum, Elias			Execution Date Month Day Year 102300	
Name (line 2)					
Receiving Pa	arty		Mark if additional names of receiving	ng parties attached	
Name (line 1)	UT-Battelle, LLC			if document to be recorded is an assignment and the	
Name (Ilne 2)				receiving party is not domiciled in the United States, an appointment	
Address (line 1)	P. O. Box 2008			of a domestic representative is attached. (Designation must be a	
Address (line 2)	111-B Union Valley F	Road		separate document from Assignment.)	
Address (line 3)	Oak Ridge City	TN State/Country	37831-649	B 09/694978	
Domestic Re	presentative Name and A	ddraaa	for the first Receiving Party only.	/	
Name [					
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Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practics. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to: Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

PATENT

REEL: 011254 FRAME: 0594

FORM PTO- Expires 06/30/99 OMB 0651-0027	1619B	Page 2	Docket 0772.1 U.S. Department of Commerce Patent and Trademark Office PATENT		
Corresponde	ent Name and Address	Area Code and Telephone Number	865.574.4178		
Name [	Joseph A. Marasco				
Address (line 1)	UT-Battelle, LLC				
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Address (line 3)	Oak Ridge, TN 37831				
Address (line 4)					
Pages	Enter the total number of pa including any attachments.	ges of the attached conveyance docum	ent # 3		
• •	Number(s) or Patent Nun		dditional numbers attached		
Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).  Patent Application Number(s)  Patent Number(s)					
Pate	ent Application Number(s)		. Hamber(3)		
<u></u>					
			Month Day Yes		
	being filed together with a <u>new</u> Pate t named executing inventor.	nt Application, enter the date the patent application	Month Day Year  102300		
Patent Coop	eration Treaty (PCT)	PCI DCI	РСТ		
Enter PCT application number					
	<u>if</u> a U.S. Application Number not been assigned.	PCT PCT	PCT		
Number of Properties  Enter the total number of properties involved. # 1					
Fee Amount	Fee Amount	for Properties Listed (37 CFR 3.41): \$	40.00		
Method of Payment: Enclosed Deposit Account X  Deposit Account					
(Enter for payment by deposit account or if additional fees can be charged to the account.)  Deposit Account Number: # 13-1958					
Authorization to charge additional fees: Yes X No					
Statement a	nd Signature				
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.					
	. Marasco	Amont	OCT 23 2000		
Name	of Person Signing	Signature	Date		

PATENT REEL: 011254 FRAME: 0595

## ASSIGNMENT

WHEREAS, WE, the below-named inventors whose residence and post office are as stated below, have invented certain new and useful improvements in a

## Programmable Nanometer-Scale Electrolytic Metal Deposition and Depletion

(hereinafter referred to as "Subject Invention") for which an application for United States Letters Patent was executed by us on even date herewith, and

WHEREAS, UT-BATTELLE, LLC, a limited liability company of the State of Tennessee, having an office at 111-B Union Valley Road, P. O. Box 2008, Oak Ridge, Tennessee 37831-6498, hereinafter referred to as "ASSIGNEE," is desirous of acquiring the entire right, title and interest of the undersigned in the Subject Invention and to any Letters Patent that may be granted therefor in the United States of America and in any and all foreign countries.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign to ASSIGNEE our entire right, title and interest in the Subject Invention to all rights of priority thereto pursuant to the International Convention for the Protection of Industrial Property, and in any Letters Patent on the Subject Invention that may be granted in the United States of America and in any and all foreign countries, including any and all Letters Patent that are divisions, reissues, continuations, substitutions or extensions of any Letters Patent or applications therefor on the Subject Invention.

We hereby authorize and request the Commissioner of the United States Patent and Trademark Office and the officials of any and all foreign countries to issue any and all of said Letters Patent, when granted, to the ASSIGNEE.

Further, we hereby agree to communicate to said ASSIGNEE or its representatives any facts known to us respecting said Subject Invention, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, substitution, renewal and reissue applications, to execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, and to make all rightful oaths and generally do everything possible to aid said ASSIGNEE and its representatives to obtain and enforce proper protection for said Subject Invention in the United States of America and in any and all foreign countries.

We further agree that the terms, covenants and conditions of this assignment shall inure to the benefit of ASSIGNEE, its successors, assigns, and legal representatives, and shall be binding on us, our heirs, legal representatives, and assigns.

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PATENT REEL: 011254 FRAME: 0596

Full name of inventor: James Weifu Lee					
Signature: Ja	mes Weign Lee Date: 10/23/00				
Residence:	Oak Ridge, Tennessee				
Post Office Address:	204 Elmhurst Drive, G-23, Oak Ridge, Tennessee 37830				

State of Tennessee)
County of Roane)

On this 23 day of 0000, before me, a Notary Public in and for the County and State aforesaid, appeared Iames W. Lee to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the day and year last above given.

Notary Public

SEAL

My Commission Expires:

My Commission Expires June 12, 2002.

Full name or	f inventor: Elias Greenbaum	, ,
Signature: _	6 has Naulaum	Date: 10/23/00
Residence:	Oak Ridge, Tennessee	

Post Office Address: 972 West Outer Drive, Oak Ridge, Tennessee 37830

State of Tennessee)
County of Roane )

On this 23 day of OCTOBS, 2000, before me, a Notary Public in and for the County and State aforesaid, appeared Elias Greenbaum to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the day and year last above given.

Totary Public

**SEAL** 

My Commission Expires June 12, 2002.

My Commission Expires:

**RECORDED: 10/24/2000**