

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
CONVEYING PARTY DATA									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Paul A. Menchhofer</td> <td>10/04/2012</td> </tr> <tr> <td>Jane Y. Howe</td> <td>10/08/2012</td> </tr> <tr> <td>Wei Wang</td> <td>10/04/2012</td> </tr> </tbody> </table>		Name	Execution Date	Paul A. Menchhofer	10/04/2012	Jane Y. Howe	10/08/2012	Wei Wang	10/04/2012
Name	Execution Date								
Paul A. Menchhofer	10/04/2012								
Jane Y. Howe	10/08/2012								
Wei Wang	10/04/2012								
RECEIVING PARTY DATA									
Name:	UT-Battelle, LLC								
Street Address:	One Bethel Valley Road								
Internal Address:	4500N, MS-6258								
City:	Oak Ridge								
State/Country:	TENNESSEE								
Postal Code:	37831-6258								
PROPERTY NUMBERS Total: 1									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12704564</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12704564				
Property Type	Number								
Application Number:	12704564								
CORRESPONDENCE DATA									
Fax Number:	8655740381								
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
Phone:	(865) 574-4178								
Email:	warfielde@ornl.gov								
Correspondent Name:	Joseph A. Marasco								
Address Line 1:	One Bethel Valley Road								
Address Line 2:	4500N, MS-6258								
Address Line 4:	Oak Ridge, TENNESSEE 37831-6258								
ATTORNEY DOCKET NUMBER:	1510.1								
NAME OF SUBMITTER:	Elizabeth Warfield								
Total Attachments: 5									

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# RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

### 1. Name of conveying party(ies)

Paul A. Menchhofer  
Jane Y. Howe  
Wei Wang

Additional name(s) of conveying party(ies) attached?  Yes  No

### 2. Name and address of receiving party(ies)

Name: UT-Battelle, LLC

Internal Address: 4500N, MS-6258

Street Address: One Bethel Valley Road

City: Oak Ridge

State: TN

Country: USA Zip: 37831-6258

Additional name(s) & address(es) attached?  Yes  No

### 3. Nature of conveyance/Execution Date(s):

Execution Date(s) 10/8/2012

- Assignment  Merger
- Security Agreement  Change of Name
- Joint Research Agreement
- Government Interest Assignment
- Executive Order 9424, Confirmatory License
- Other \_\_\_\_\_

### 4. Application or patent number(s):

This document is being filed together with a new application.

A. Patent Application No.(s)  
12/704,564

B. Patent No.(s)

Additional numbers attached?  Yes  No

### 5. Name and address to whom correspondence concerning document should be mailed:

Name: Joseph A. Marasco

Internal Address: UT-Battelle, LLC

Street Address: One Bethel Valley Road

4500N, MS-6258

City: Oak Ridge

State: TN Zip: 37831-6258

Phone Number: (865) 574-4178

Fax Number: (865) 574-0381

Email Address: marascoja@ornl.gov

### 6. Total number of applications and patents involved: 1

### 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- Authorized to be charged by credit card
- Authorized to be charged to deposit account
- Enclosed
- None required (government interest not affecting title)

### 8. Payment Information

a. Credit Card Last 4 Numbers \_\_\_\_\_  
Expiration Date \_\_\_\_\_

b. Deposit Account Number 13-1958

Authorized User Name Elizabeth Warfield

### 9. Signature:

/Joseph A. Marasco/

10/8/2012

Signature

Date

Joseph A. Marasco, Reg. No. 32,798

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

5

## ASSIGNMENT

WHEREAS, we the below-named inventors whose residences are as stated below, have an interest in an invention entitled:

### **Composite Materials Formed with Anchored Nanostructures**

(hereinafter referred to as "Subject Invention") for which are described in United States Patent Application No. 12/704,564 filed on February 12, 2010, and

WHEREAS, UT-BATTELLE, LLC, a limited liability company of the State of Tennessee, having an office at One Bethel Valley Road, P. O. Box 2008, Oak Ridge, Tennessee 37831-6258, hereinafter referred to as "ASSIGNEE," is desirous of acquiring our entire right, title and interest of the undersigned in the same;

NOW, THEREFORE, in accordance with the terms of our employment agreement with ASSIGNEE and for good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to ASSIGNEE and its successors in interest 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 patent 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.

Full Name of First Inventor: Paul A. Menchhofer

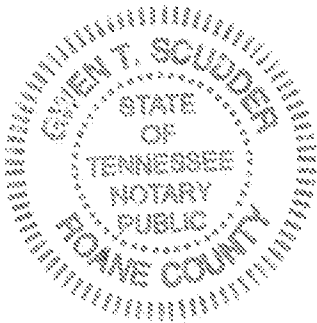
Signature: Paul A. Menchhofer Date: 10.4.2012

Residence: 525 Carroll Hollow Road, Clinton, Tennessee 37716

State of Tennessee )  
County of ROANE )

On this 4 day of October, 2012, before me, a Notary Public in and for the County and State aforesaid, appeared **PAUL A. MENCHHOFER** 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.



Owen T. Scudder  
Notary Public

SEAL

My Commission Expires: September 12, 2016

Full Name of First Inventor: Jane Y. Howe

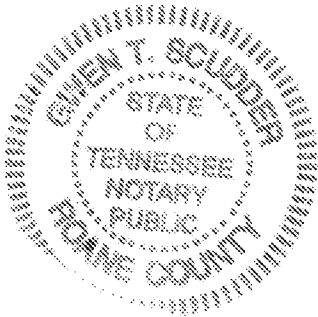
Signature: [Handwritten Signature] Date: Oct. 8, 2012

Residence: 154 Hendrix Drive, Oak Ridge, Tennessee 37830

State of Tennessee )  
County of Rockwell )

On this 8 day of October, 2012, before me, a Notary Public in and for the County and State aforesaid, appeared Jane Y. Howe 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.



[Handwritten Signature]  
Notary Public

SEAL

My Commission Expires: September 12, 2016

Full Name of First Inventor: Wei Wang

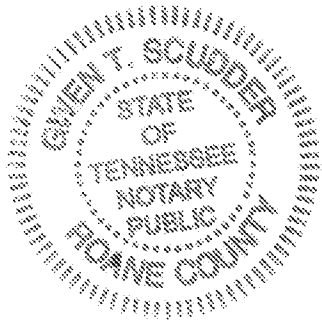
Signature: *Wei Wang* Date: 10/4/2012

Residence: 112 Chestnut Hill Road, Oak Ridge, Tennessee 37830-7112

State of Tennessee )  
County of ROANE )

On this 4 day of October, 2012, before me, a Notary Public in and for the County and State aforesaid, appeared Wei Wang 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.



*Owen T. Scudder*  
Notary Public

SEAL

My Commission Expires: September 12, 2016