## PATENT ASSIGNMENT

Electronic Version v1.1  
Stylesheet Version v1.1

### CONVEYING PARTY DATA

<table>
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<th>Execution Date</th>
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<td>John L. Margrave</td>
<td>10/09/2000</td>
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<tr>
<td>Edward T. Mickelson</td>
<td>10/06/2000</td>
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<tr>
<td>Chad B. Huffman</td>
<td>09/14/2000</td>
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<tr>
<td>Richard E. Smalley</td>
<td>09/14/2000</td>
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<tr>
<td>Ken Smith</td>
<td>09/14/2000</td>
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<tr>
<td>Jie Liu</td>
<td>10/18/2000</td>
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<td>Robert Hauge</td>
<td>09/18/2000</td>
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<tr>
<td>Peter Boul</td>
<td>09/14/2000</td>
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<tr>
<td>Daniel T. Colbert</td>
<td>09/14/2000</td>
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### RECEIVING PARTY DATA

- **Name:** William Marsh Rice University  
- **Street Address:** 6100 South Main Street  
- **City:** Houston  
- **State/Country:** TEXAS  
- **Postal Code:** 77005

### PROPERTY NUMBERS Total: 11

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**CORRESPONDENCE DATA**

Fax Number: (214)745-5390  
*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.*

Phone: 512.370.2870  
Email: docket@winstead.com

Correspondent Name: Winstead Sechrest & Minick P.C.  
Address Line 1: P.O. Box 50784
Address Line 2: Ross Spencer Garsson  
Address Line 4: Dallas, TEXAS 75201

**ATTORNEY DOCKET NUMBER:** 471-11321-P013D2D1

**NAME OF SUBMITTER:** Ross Spencer Garsson

Total Attachments: 5  
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ASSIGNMENT

WHEREAS, the undersigned inventor(s), hereinafter called the "Assignor", has invented a new and useful invention entitled:

CHEMICAL DERIVATIZATION OF SINGLE-WALL CARBON NANOTUBES TO FACILITATE SOLVATION THEREOF; AND USE OF DERIVATIZED NANOTUBES TO FORM CATALYST-CONTAINING SEED MATERIALS FOR MAKING CARBON FIBERS


WHEREAS, William Marsh Rice University, a corporation having a principal office and place of business at 6100 South Main Street, Houston, Texas, 77005, hereinafter called the "Assignee", is desirous of acquiring the entire right, title and interest in and to said invention, the application above identified, and in, to and under Letters Patent which may be obtained for said invention, as hereinafter more fully set forth;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for valuable and legally sufficient consideration, the receipt of which by the Assignor from the Assignee is hereby acknowledged, the Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto the Assignee, its successors and assigns, the entire right, title and interest in and to the invention and the application herein above identified, and all Letters Patents that may issue for the said invention, and all divisions, reissues, substitutions, continuations, and extensions thereof, to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns to the full end of the term for which any and all of said Letters Patents for the said invention may issue.

FURTHER, be it known that the Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto the Assignee, its successors and assigns, the entire foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agrees to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.
And the Assignor does hereby covenant and agree, for himself and his legal representatives, that they will assist the Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the Assignee may elect to make covering the invention herein identified, as herein before set forth, including any application for reissue, application for reexamination, application for foreign patent rights, or any proceeding in the United States Patent and Trademark Office affecting the invention, investing in the Assignee exclusive title in and to all such other applications and Letters Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Letters Patents herein contemplated ed; that they will promptly execute and deliver to the Assignee any and all additional papers and make all lawful oaths which may be requested by the Assignee to fully carry out the terms of this assignment; and further that they will communicate to Assignee, or to its successors, assigns, and legal representatives, any facts known respecting said invention, and at the expense of the Assignee, testify in any legal proceedings, and generally do everything possible to aid the Assignee, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent to the Assignee in accordance with the terms of the assignment.

IN TESTIMONY WHEREOF, the Assignor has hereunto set his hands on the date indicated below.

NAME OF INVENTOR       MARGRAVE, John L.
RESIDENCE  4511 Verone, Bellaire, TX 77401  CITIZENSHIP  US
SIGNATURE OF INVENTOR  
DATE  10/9/00

NAME OF INVENTOR       MICKELSON, Edward T.
RESIDENCE  3214 Worthington Dr., Pearland, TX 77584  CITIZENSHIP  US
SIGNATURE OF INVENTOR  
DATE  10/6/00

NAME OF INVENTOR       HAU GE, Robert
RESIDENCE  4031 Turnberry Circle, Houston, TX 77025  CITIZENSHIP  US
SIGNATURE OF INVENTOR  
DATE  7/18/00
NAME OF INVENTOR  BOUL, Peter
RESIDENCE  2828 Bellefontaine No. 202, Houston, TX 77025 CITIZENSHIP US
SIGNATURE OF INVENTOR  [Signature] DATE 7/14/00

NAME OF INVENTOR  HUFFMAN, Chad B.
RESIDENCE  1515 Bissonnet Unit 169, Apt. 123A, Houston, TX 77005 CITIZENSHIP US
SIGNATURE OF INVENTOR  [Signature] DATE 9/14/00

NAME OF INVENTOR  SMALLEY, Richard E.
RESIDENCE  1815 Bolsver Street, Houston, TX 77005 CITIZENSHIP US
SIGNATURE OF INVENTOR  [Signature] DATE 9/14/00

NAME OF INVENTOR  SMITH, Ken
RESIDENCE  17431 Fairway Oaks, Spring, TX 77379 CITIZENSHIP US
SIGNATURE OF INVENTOR  [Signature] DATE 14 SEP'T 00

NAME OF INVENTOR  COLBERT, Daniel T.
RESIDENCE  1911 Milford Street, Houston, TX 77098 CITIZENSHIP US
SIGNATURE OF INVENTOR  [Signature] DATE 9-14-00
ASSIGNMENT

WHEREAS, the undersigned inventor(s), hereinafter called the "Assignor", has invented a new and useful invention entitled:

CHEMICAL DERIVATIZATION OF SINGLE-WALL CARBON NANOTUBES TO FACILITATE SOLVATION THEREOF;
AND USE OF DERIVATIZED NANOTUBES TO FORM CATALYST-CONTAINING SEED MATERIALS FOR MAKING CARBON FIBERS


WHEREAS, William Marsh Rice University, a corporation having a principal office and place of business at 6100 South Main Street, Houston, Texas, 77005, hereinafter called the "Assignee", is desirous of acquiring the entire right, title and interest in and to said invention, the application above identified, and in, to and under Letters Patent which may be obtained for said invention, as hereinafter more fully set forth;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for valuable and legally sufficient consideration, the receipt of which by the Assignor from the Assignee is hereby acknowledged, the Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto the Assignee, its successors and assigns, the entire right, title and interest in and to the invention and the application herein above identified, and all Letters Patents that may issue for the said invention, and all divisions, reissues, substitutions, continuations, and extensions thereof, to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns to the full end of the term for which any and all of said Letters Patents for the said invention may issue.

FURTHER, be it known that the Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto the Assignee, its successors and assigns, the entire foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agrees to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.
And the Assignor does hereby covenant and agree, for himself and his legal representatives, that they will assist the Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the Assignee may elect to make covering the invention herein identified, as herein before set forth, including any application for reissue, application for reexamination, application for foreign patent rights, or any proceeding in the United States Patent and Trademark Office affecting the invention, investing in the Assignee exclusive title in and to all such other applications and Letters Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Letters Patents herein contemplated-ed; that they will promptly execute and deliver to the Assignee any and all additional papers and make all lawful oaths which may be requested by the Assignee to fully carry out the terms of this assignment; and further that they will communicate to Assignee, or to its successors, assigns, and legal representa-tives, any facts known respecting said invention, and at the expense of the Assignee, testify in any legal proceedings, and generally do everything possible to aid the Assignee, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent to the Assignee in accordance with the terms of the assignment.

IN TESTIMONY WHEREOF, the Assignor has hereunto set his hands on the date indicated below.

NAME OF INVENTOR    LIU, Jie
RESIDENCE          502 Westminster Drive, Chapel Hill, NC 27514
CITIZENSHIP        P.R.China
SIGNATURE OF INVENTOR     
DATE 10/18/2000