

Form PTO-1595 (Rev. 06/04)  
OMB No. 0651-0027 (exp. 6/30/2005)

U.S. DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

## 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)/Execution Date(s):**  
Brent M. Segal; Thomas Rueckes;  
Bernhard Vogeli; Darren Brock;  
Venkatachalam C. Jaiprakash;  
Claude L. Bertin 9/14/04; 9/16/04; 9/16/04;  
Execution Date(s) 10/8/04; 9/14/04; 11/22/04  
Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

**2. Name and address of receiving party(ies)**  
Name: Nantero, Inc.  
Internal Address: \_\_\_\_\_  
Street Address: 25-D Olympia Avenue  
City: Woburn  
State: Massachusetts  
Country: USA Zip: 01801  
Additional name(s) & address(es) attached? ☐ Yes ☒ No

**3. Nature of conveyance:**  
☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ 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)  
10/844,913  
B. Patent No.(s)  
Additional numbers attached? ☐ Yes ☒ No

**5. Name and address to whom correspondence concerning document should be mailed:**  
Name: Wilmer Cutler Pickering Hale and Dorr LLP  
Internal Address: Peter M. Dichiaro  
Street Address: 60 State Street  
City: Boston  
State: MA Zip: 02109  
Phone Number: 617-526-6466  
Fax Number: 617-526-5000  
Email Address: \_\_\_\_\_

**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 08-0219  
Authorized User Name Peter M. Dichiaro

**9. Signature:** Peter M. Dichiaro 2-17-05  
Signature Date  
Peter M. Dichiaro  
Name of Person Signing  
Total number of pages including cover sheet, attachments, and documents: 12

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5955, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the

CH \$40.00 080219 10844913

700155094

PATENT  
REEL: 015730 FRAME: 0412

Atty. Docket No. 112020-154 US2 (NAN-29)

**ASSIGNMENT**

WHEREAS, we, **Brent M. Segal**, being a citizen of the United States, residing at 8 Prospect Avenue #1, Woburn, Massachusetts 01801; **Thomas Rueckes**, being a citizen of Germany, residing at 8 West Hill Place, Boston, Massachusetts 02114; **Bernhard Vogeli**, being a citizen of Switzerland, residing at 76 West Cedar Street #4R, Boston, Massachusetts 02114; **Darren Brock**, being a citizen of the United States, residing at 94 Nob Hill Drive, Elmsford, New York 10523; **Venkatachalam C. Jaiprakash**, being a citizen of India, residing at 3184 Ingersoll Place, Fremont, California 94538; and **Claude L. Bertin**, being a citizen of the United States, residing at 33 Pheasant Way, South Burlington, Vermont 05403, are the inventors of certain new and useful inventions and discoveries, for which we have made an application for Letters Patent entitled **Sensor Platform Using a Horizontally Oriented Nanotube Element**, the specification of which was filed on **May 12, 2004** with the United States Patent and Trademark Office and assigned Serial No. **10/844,913**; and

WHEREAS, Nantero, Inc. a corporation of Delaware, whose address is 25-D Olympia Avenue, Woburn, MA 01801, and which, together with its successors and assigns is hereinafter called "ASSIGNEE," is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited;

NOW, THEREFORE, for and in consideration of good and valuable consideration furnished by ASSIGNEE to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservations:

1. Assign, transfer, and convey to ASSIGNEE the entire right, title, and interest in and to said inventions and discoveries, said application for Letters Patent, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-in-part, and convention applications based in whole, or in part, upon said inventions or discoveries, or upon said applications, and any and all Letters Patents, reissues, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon, or arise from, said inventions, said discoveries, said applications, and said Letters Patent;

Atty. Docket No. 112020.154 US2 (NAN-29)

2. Authorize ASSIGNEE to file patent applications in any or all countries on any or all of said inventions and discoveries in our names or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable, under International Conventions or otherwise;

3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments throughout the world to issue or transfer all said Letters Patents to ASSIGNEE, as assignee of the entire right, title, and interest therein or otherwise as ASSIGNEE may direct;

4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications, or patents, or any license to use the same, or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to ASSIGNEE without encumbrance;

5. Bind our heirs, legal representatives, and assigns, as well as ourselves, to do, upon ASSIGNEE's request and at ASSIGNEE's expense, but without additional consideration to us or them, all acts reasonably serving to assure that said inventions and discoveries, said patent applications, and said Letters Patents shall be held and enjoyed by ASSIGNEE as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives, and assigns if this Assignment had not been made; and particularly to execute and deliver to ASSIGNEE all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by ASSIGNEE; and to communicate to ASSIGNEE all facts known to us relating to said inventions and discoveries or the history thereof, and to testify as to the same in any court or proceeding; and to furnish ASSIGNEE any and all documents, photographs, models, samples, and other physical exhibits in our control or in the control of our heirs, legal representatives, or assigns which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.

Atty. Docket No. 112020.154 US2 (NAN-29)

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

9/14/04

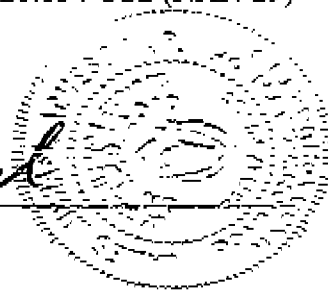
Date

State of Massachusetts )

County of Essex )

Brent M. Segal

Brent M. Segal



On this 14<sup>th</sup> day of September, 2004, before me, the undersigned notary public, personally appeared **Brent M. Segal**, proved to me through satisfactory evidence of identification, which were N/A pers. known to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

James Acheson, Notary Public  
My Commission Expires: 1-29-2010

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

09/16/04

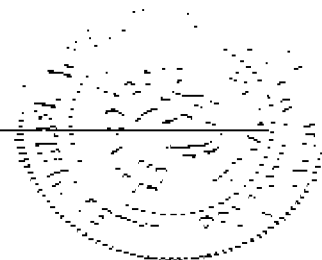
Date

State of Massachusetts )

County of Essex )

Thomas Rueckes

Thomas Rueckes



On this 16<sup>th</sup> day of September, 2004, before me, the undersigned notary public, personally appeared **Thomas Rueckes**, proved to me through satisfactory evidence of identification, which were N/A personally known, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

James Acheson, Notary Public  
My Commission Expires: 1-29-2010

Atty. Docket No. 112020.154 US2 (NAN-29)

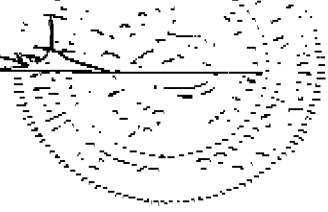
IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

\_\_\_\_\_  
Date  
State of Massachusetts )  
County of Essex )  
**Bernhard Vogeli** (on other form)


On this \_\_\_\_\_ day of \_\_\_\_\_, 2004, before me, the undersigned notary public, personally appeared **Bernhard Vogeli**, proved to me through satisfactory evidence of identification, which were N/A personally known, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

\_\_\_\_\_, Notary Public  
My Commission Expires: 1-29-2010

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

10/8/04  
\_\_\_\_\_  
Date  
State of Massachusetts )  
County of Essex )  
**Darren Brock** 

On this 8<sup>th</sup> day of October, 2004, before me, the undersigned notary public, personally appeared **Darren Brock**, proved to me through satisfactory evidence of identification, which were N/A personally known, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

  
**James Acheam**, Notary Public  
My Commission Expires: 1-29-2010

Atty. Docket No. 112020.154 US2 (NAN-29)

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

09-14-04

Date

State of Massachusetts )

County of Essex )

Venkatachalam C. Jaiprakash

On this 14<sup>th</sup> day of September, 2004, before me, the undersigned notary public, personally appeared Venkatachalam C. Jaiprakash, proved to me through satisfactory evidence of identification, which were N/A personally known, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

James Acheson, Notary Public  
My Commission Expires: 1-29-2010

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

22 Nov. 2004

Date

State of Massachusetts )

County of Essex )

Claude L. Bertin

On this 22<sup>nd</sup> day of November, 2004, before me, the undersigned notary public, personally appeared Claude L. Bertin, proved to me through satisfactory evidence of identification, which were N/A personally known, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

James Acheson, Notary Public  
My Commission Expires: 1-29-2010

Atty. Docket No. 112020.153 US2 (NAN-29)

**ASSIGNMENT**

WHEREAS, we, **Brent M. Segal**, being a citizen of the United States, residing at 8 Prospect Avenue #1, Woburn, Massachusetts 01801; **Thomas Rueckes**, being a citizen of Germany, residing at 8 West Hill Place, Boston, Massachusetts 02114; **Bernhard Vogeli**, being a citizen of Switzerland, residing at 76 West Cedar Street #4R, Boston, Massachusetts 02114; **Darren Brock**, being a citizen of the United States, residing at 94 Nob Hill Drive, Elmsford, New York 10523; **Venkatachalam C. Jaiprakash**, being a citizen of India, residing at 3184 Ingersoll Place, Fremont, California 94538; and **Claude L. Bertin**, being a citizen of the United States, residing at 33 Pheasant Way, South Burlington, Vermont 05403, are the inventors of certain new and useful inventions and discoveries, for which we have made an application for Letters Patent entitled **Sensor Platform Using a Horizontally Oriented Nanotube Element**, the specification of which was filed on **May 12, 2004** with the United States Patent and Trademark Office and assigned Serial No. **10/844,913**; and

WHEREAS, Nantero, Inc. a corporation of Delaware, whose address is 25-D Olympia Avenue, Woburn, MA 01801, and which, together with its successors and assigns is hereinafter called "ASSIGNEE," is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited;

NOW, THEREFORE, for and in consideration of good and valuable consideration furnished by ASSIGNEE to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservations:

1. Assign, transfer, and convey to ASSIGNEE the entire right, title, and interest in and to said inventions and discoveries, said application for Letters Patent, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-in-part, and convention applications based in whole, or in part, upon said inventions or discoveries, or upon said applications, and any and all Letters Patents, reissues, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon, or arise from, said inventions, said discoveries, said applications, and said Letters Patent;

Atty. Docket No. 112020.153 US2 (NAN-29)

2. Authorize ASSIGNEE to file patent applications in any or all countries on any or all of said inventions and discoveries in our names or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable, under International Conventions or otherwise;
3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments throughout the world to issue or transfer all said Letters Patents to ASSIGNEE, as assignee of the entire right, title, and interest therein or otherwise as ASSIGNEE may direct;
4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications, or patents, or any license to use the same, or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to ASSIGNEE without encumbrance;
5. Bind our heirs, legal representatives, and assigns, as well as ourselves, to do, upon ASSIGNEE's request and at ASSIGNEE's expense, but without additional consideration to us or them, all acts reasonably serving to assure that said inventions and discoveries, said patent applications, and said Letters Patents shall be held and enjoyed by ASSIGNEE as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives, and assigns if this Assignment had not been made; and particularly to execute and deliver to ASSIGNEE all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by ASSIGNEE; and to communicate to ASSIGNEE all facts known to us relating to said inventions and discoveries or the history thereof, and to testify as to the same in any court or proceeding; and to furnish ASSIGNEE any and all documents, photographs, models, samples, and other physical exhibits in our control or in the control of our heirs, legal representatives, or assigns which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.



Atty. Docket No. 112020.153 US2 (NAN-29)

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

\_\_\_\_\_  
Date  
State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )  
Brent M. Segal

On this \_\_\_\_\_ day of \_\_\_\_\_, 2004, before me, the undersigned notary public, personally appeared **Brent M. Segal**, proved to me through satisfactory evidence of identification, which were \_\_\_\_\_ to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

\_\_\_\_\_  
\_\_\_\_\_, Notary Public  
My Commission Expires: \_\_\_\_\_

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

\_\_\_\_\_  
Date  
State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )  
Thomas Rueckes

On this \_\_\_\_\_ day of \_\_\_\_\_, 2004, before me, the undersigned notary public, personally appeared **Thomas Rueckes**, proved to me through satisfactory evidence of identification, which were \_\_\_\_\_, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

\_\_\_\_\_  
\_\_\_\_\_, Notary Public  
My Commission Expires: \_\_\_\_\_

Atty. Docket No. 112020.153 US2 (NAN-29)

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

9/16/2004                      [Signature]  
Date                                      **Bernhard Vogeli**  
State of                                      )  
County of                                      )

On this \_\_\_\_ day of \_\_\_\_\_, 2004, before me, the undersigned notary public, personally appeared **Bernhard Vogeli**, proved to me through satisfactory evidence of identification, which were \_\_\_\_\_, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

\_\_\_\_\_, Notary Public  
My Commission Expires: \_\_\_\_\_

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

\_\_\_\_\_  
Date                                      **Darren Brock**  
State of                                      )  
County of                                      )

On this \_\_\_\_ day of \_\_\_\_\_, 2004, before me, the undersigned notary public, personally appeared **Darren Brock**, proved to me through satisfactory evidence of identification, which were \_\_\_\_\_, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

\_\_\_\_\_, Notary Public  
My Commission Expires: \_\_\_\_\_

Atty. Docket No. 112020.153 US2 (NAN-29)

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

\_\_\_\_\_  
Date  
State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )  
**Venkatachalam C. Jaiprakash**

On this \_\_\_\_\_ day of \_\_\_\_\_, 2004, before me, the undersigned notary public, personally appeared **Venkatachalam C. Jaiprakash**, proved to me through satisfactory evidence of identification, which were \_\_\_\_\_, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

\_\_\_\_\_, Notary Public  
My Commission Expires: \_\_\_\_\_

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal.

\_\_\_\_\_  
Date  
State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )  
**Claude L. Bertin**

On this \_\_\_\_\_ day of \_\_\_\_\_, 2004, before me, the undersigned notary public, personally appeared **Claude L. Bertin**, proved to me through satisfactory evidence of identification, which were \_\_\_\_\_, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

\_\_\_\_\_, Notary Public  
My Commission Expires: \_\_\_\_\_

SWISS CONFEDERATION )  
 CANTON AND CITY OF ZURICH )  
 CONSULAR AGENCY OF THE ) SS:  
 UNITED STATES OF AMERICA )

I, Ellen Bruckmann, Consular Agent of the United States of America at Zurich, Switzerland, duly commissioned and qualified, do hereby certify that on this 16<sup>th</sup> day of September 2004 before me personally appeared **Bernhard Voegeli**, personally known and known to me to be the individual (s) described in, whose name (s) is/are subscribed to, and produced a Swiss Identity Card as identification and who executed the foregoing instrument, and being informed by me of the contents thereof and duly acknowledged to me that he/she/they executed the same freely and voluntarily for the uses and purposes therein mentioned.

**In witness whereof** I have hereunto set my hand and official seal the day and year last above written.



Ellen A. Bruckmann  
 Consular Agent of the  
 United States of America

My commission expires indefinitely