

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
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EPAS ID: PAT3835559

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
W C HUANG	09/20/2010
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	NANOTEK INSTRUMENTS, INC
<b>Street Address:</b>	1240 MCCOOK AVE
<b>City:</b>	DAYTON
<b>State/Country:</b>	OHIO
<b>Postal Code:</b>	45404
<b>PROPERTY NUMBERS Total: 3</b>	
<b>Property Type</b>	<b>Number</b>
<b>Patent Number:</b>	7071258
<b>Patent Number:</b>	7277770
<b>Patent Number:</b>	7186474
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(937)558-0606
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	9373319884
<b>Email:</b>	CLAIRE@ANGSTRONMATERIALS.COM
<b>Correspondent Name:</b>	CLAIRE RUTISER
<b>Address Line 1:</b>	1240 MCCOOK AVE
<b>Address Line 2:</b>	NANOTEK INSTRUMENTS
<b>Address Line 4:</b>	DAYTON, OHIO 45404
<b>NAME OF SUBMITTER:</b>	CLAIRE A. RUTISER
<b>SIGNATURE:</b>	/Claire A. Rutiser/
<b>DATE SIGNED:</b>	04/19/2016
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 8</b>	
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source=Wen Huang 9-20-2010#page3.tif	

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## ASSIGNMENT

This Assignment Agreement is made and entered by and between Wen C. Huang, a citizen of Taiwan, Republic of China, residing at 3299 Cherrybrook Dr. Jamestown, NC 27282 (the "Assignor") and Nanotek Instruments, Inc., an Ohio corporation whose address is 1240 McCook Avenue, Dayton, OH 45404 (the "Assignee").

WHEREAS, Assignor is an inventor of certain new and useful inventions related to rapid prototyping, radiography, advanced materials and processing, energy storage and conversion, and nano materials and processing, including, but not limited to, the composition, production, and use of nano-scaled graphene plates as more fully described herein (the "Inventions"), and

WHEREAS, Assignee desires to acquire the entire right, title and interest in and to the Inventions.

NOW, THEREFORE, the parties agree as follows:

1. The term "Inventions" shall mean (1) the issued United States patents listed in Schedule "A" attached hereto and incorporated herein by reference and all corresponding rights to claim priority, (2) the patent applications listed in Schedule "A" and any and all improvements which are disclosed in any of the aforesaid patent applications, (3) all Letters Patent to be obtained for said Inventions by the above applications or any continuation, divisional, renewal, or substitute thereof and, as to Letters Patent, any reissue or re-examination thereof, (4) all know-how, trade secrets, discoveries, concepts, ideas, and technologies related to the same, (5) any and all copyrights, copyright registrations and copyrightable subject matter related to the same; and (6) any trademarks related to such patents and patent applications.

2. In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt of which is acknowledged, the Assignor hereby assigns, transfers and conveys to Assignee all of Assignor's right, title and interest in and to (a) the Inventions, (b) any U.S. or foreign Letters Patent which may issue from the Inventions, and (c) all divisions, continuations, reissues, re-examinations and extensions of the patents and applications listed on Schedule A.

3. Assignor further covenants that said Assignee will, upon its request, be provided promptly with all pertinent facts and documents relating to said Inventions and said Letters

Patent and legal equivalents, as may be known and accessible to Assignor and he or she will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to said Assignee or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said Inventions and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purpose thereof.

In Witness Whereof, the undersigned has executed this document as of the 20<sup>th</sup> day of September, 2010

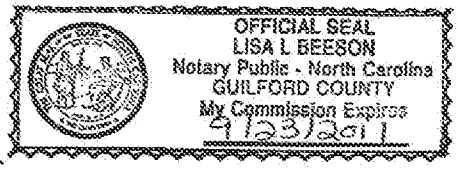
**INVENTOR**

Wen C. Huang (Signature)

Wen C. Huang (Print Name)

State of North Carolina )  
 ) Social Security No: ~~XXXXXXXXXXXX~~  
County of Guilford )

Before me personally appeared said Wen C. Huang and acknowledged the foregoing instrument to be his free act and deed, this 20<sup>th</sup> day of September, 2010.



Lisa L. Beeson  
Notary Public

## EXHIBIT "A"

### Assigned Patents

#### **Invention Patents and Applications**

1. J. Jang, W. C. Huang, and B. Z. Jang, "3-D Color Model Making Apparatus and Process," U.S. Patent No. 6,165,406, 12/26/2000.
2. J. Jang, Wen C. Huang and W. H. Zhong "Improved Layer Manufacturing Process and Apparatus," U.S. Patent No. 6,401,002 (June 4, 2002).
3. W. C. Huang, "Direct Write Method for Polarized Materials," U.S. Patent No. 6,706,234, March 16, 2004.
4. W. C. Huang, "Method for the Production of Semiconductor Quantum Particles," U.S. Patent No. 6,623,559, 9/23/2003.
5. W. C. Huang, "Direct Write Process and Apparatus," US Pat. No. 7,277,770 (10/02/2007).
6. B. Z. Jang and W. C. Huang, "Nano-scaled Graphene Plates," U.S. Pat. No. 7,071,258 (07/04/2006).
7. B. Z. Jang and W. C. Huang, "Working gas-free arc plasma method for producing nano-structured materials," US Pat. Pending, 10/864,089 (06/08/2004).
8. B. Z. Jang and W. C. Huang, "Method for producing surface-coated nanometer particles," US Pat. Pending, 10/868,988 (06/17/2004).
9. W. C. Huang and B. Z. Jang, "Quantitative Stereoscopic Radiography Method," U.S. Patent No. 6,118,843, 09/12/00.
10. W. C. Huang and B. Z. Jang, "Apparatus for Quantitative Stereoscopic Radiography," U.S. Patent No. 6,115,449, 09/05/00.
11. L. W. Wu and W. C. Huang, "Manufacturing Method for Thin Film Solar Cells," U.S. Patent No. 6,635,307, 10/21/2003. (1 wire, no atomization)
12. W. C. Huang, J. Liu and L. W. Wu, "Battery with a Controlled Release Anode," U.S. Patent No. 6,864,018 (03/08/2005).
13. J. Liu and W. C. Huang, "Metal-Air Battery with an Extended Service Life," U.S. Pat. No. 6,773,842 (08/10/2004).
14. W. C. Huang, "Metal-Air Battery with Programmed-Timing Activation," U.S. Patent No. 7,157,171 (01/02/2007).
15. W. C. Huang, "Metal-Air Battery System with Programmed-Timing Activation," U.S. Patent Pending (11/546,707) 10/13/2006, a Divisional of (10/431,661) 05/09/2003.
16. Kevin L. Jang and W. C. Huang, "Actively Controlled Electrochemical Cell," U.S. patent pending (10/702,003) 11/6/2003.
17. L. X. Yang and W. C. Huang, "Local Vapor Fuel Cell," US Pat Pending (10/762,626) 01/23//2004.
18. L. X. Yang, Bor Z. Jang, Jiusheng Guo, and Wen C. Huang, "Portable Hydrogen Generator and Fuel Cell System," US Pat. Pending, 10/998,223 (11/29/2004).

## ASSIGNMENT

This Assignment Agreement is made and entered by and between Bor Z. Jang, a citizen of USA, residing at 9436 Parkside Drive, Centerville, Ohio (the "Assignor") and Nanotek Instruments, Inc., an Ohio corporation whose address is 1240 McCook Avenue, Dayton, OH 45404 (the "Assignee").

**WHEREAS**, Assignor is an inventor or co-inventor of certain new and useful inventions related to the production and use of new materials, including nano-scaled graphene plates, processes, energy technologies, and other technologies as more fully described herein (the "Inventions"), and

**WHEREAS**, Assignee desires to acquire the entire right, title and interest in and to the Inventions.

**NOW, THEREFORE**, the parties agree as follows:

1. The term "Inventions" shall mean (1) the issued United States patents listed in Schedule "A" attached hereto and incorporated herein by reference and all corresponding rights to claim priority, (2) the patent applications listed in Exhibit "A" and any and all improvements which are disclosed in any of the aforesaid patent applications, (3) all Letters Patent to be obtained for said Inventions by the above applications or any continuation, divisional, renewal, or substitute thereof and, as to Letters Patent, any reissue or re-examination thereof, (4) all know-how, trade secrets, discoveries, concepts, ideas, and technologies related to the same, (5) any and all copyrights, copyright registrations and copyrightable subject matter related to the same; and (6) any trademarks related to such patents and patent applications.

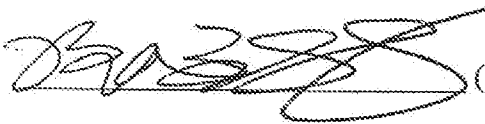
2. In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt of which is acknowledged, the Assignor hereby assigns, transfers and conveys to Assignee all of Assignor's right, title and interest in and to (a) the Inventions, (b) any U.S. or foreign Letters Patent which may issue from the Inventions, and (c) all divisions, continuations, reissues, re-examinations and extensions of the patents and applications listed on Schedule A.

3. Assignor further covenants that said Assignee will, upon its request, be provided promptly with all pertinent facts and documents relating to said Inventions and said Letters Patent and legal equivalents, as may be known and accessible to Assignor and he or she will

testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to said Assignee or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said Inventions and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purpose thereof.

In Witness Whereof, the undersigned has executed this document as of the 11<sup>th</sup> day of June, 2011

**INVENTOR**

 (Signature)

Bor Z. Jang (Print Name)

State of Ohio

)  
)  
)

SSN: 303805880

County of Montgomery

Before me personally appeared said Bor Z. Jang and acknowledged the foregoing instrument to be his free act and deed, this 11<sup>th</sup> day of June, 2011.



CANDY SCHREMPF  
Notary Public, State of Ohio  
My Commission Expires  
October 5, 2013

  
Notary Public

**EXHIBIT "A"**

**Assigned Patents**

**Invention Patents and Applications**

Name of Assigned Patent	Patent Registration No. or Application No.	Status: Registered (R), Applied for Registration (A), Abandoned Application (AA) and Status Not Available (NA)
Bor Z. Jang and Wen C. Huang, "Nano-scaled Graphene Plates,"	U.S. Pat. No. 7,071,258 (07/04/2006)	R
Bor Z. Jang, "Nanocomposite compositions for hydrogen storage and methods for supplying hydrogen to fuel cells,"	US Pat. No. 7,186,474 (03/06/2007)	R
Bor Z. Jang, "Process for Nano-scaled Graphene Plates,"	U.S. Pat. Pending, 11/442,903 (06/20/2006)	A
Bor Z. Jang, "Sheet Molding Compound Flow Field Plate, Bipolar Plate and Fuel Cell,"	11/293,540 (12/05/2005)	A
Aruna Zhamu, Zhenning Yu, Chenguang Liu, and Bor Z. Jang, "Spacer-Modified Nano Graphene Electrodes for Supercapacitors,"	US Patent Application No. 12/655,247 (12/28/2009)	A
Aruna Zhamu, Zhenning Yu, Chenguang Liu, and Bor Z. Jang, "Continuous Process for Producing Spacer-Modified Nano Graphene Electrodes for Supercapacitors,"	US Patent Application No. 12/655,744 (01/07/2010)	A
Aruna Zhamu, Zhenning Yu, Chenguang Liu, and Bor Z. Jang, "Flexible Asymmetric Electrochemical Cells Using Nano Graphene Platelet (NGP) as an Electrode Material,"	US Patent Application No. 12/657,579 (01/25/2010)	A
Zhenning Yu, Chenguang Liu, David Neff, Aruna Zhamu, and Bor Z. Jang, "Supercapacitor with a Meso-porous Nano Graphene Electrode,"	US Patent Application No. 12/804,911 (08/02/2010)	A
Aruna Zhamu, Jinjun Shi, Guorong Chen, Qing Fang, and Bor Z. Jang, "Graphene-Enhanced Anode Particulates for Lithium Batteries,"	US Patent Application No. 12/807,635 (09/10/2010)	A
A. Zhamu and Bor Z. Jang, "Submicron-scale	US Pat. Application	A



Graphitic Fibrils, Methods for Producing Same, and Compositions Containing Same,"	No. 12/592,970 (12/07/2009)	
A. Zhamu and Bor Z. Jang, "Conductive Graphene Polymer Binder for Electrochemical Cell Electrodes,"	US Pat. Application No. 12/655,172 (12/24/2009)	A
A. Zhamu and Bor Z. Jang, "Submicron-scale and Lower-Micron Graphitic Fibrils As an Anode Active Material for a Lithium Ion Battery,"	US Pat. Application No. 12/803,750 (07/06/2010)	A
A. Zhamu and Bor Z. Jang, "Chemically Functionalized Submicron Graphitic Fibrils, Methods for Producing Same, and Compositions Containing Same,"	US Pat. Application No. 12/804,190 (07/16/2010)	A
Aruna Zhamu and Bor Z. Jang, "Nano-structured Anode Compositions for Lithium Metal and Lithium-Air Secondary Batteries,"	US Pat. Appl. No. 12/589,999 (11/02/2009)	A
Aruna Zhamu and Bor Z. Jang, "Anode Compositions for Lithium Secondary Batteries,"	US Pat. Appl. No. 12/655,746 (01/07/2010)	A
Aruna Zhamu, Zenning Yu, and Bor Z. Jang, "Lithium Metal-Sulfur and Lithium Ion-Sulfur Secondary Batteries Containing a Nano-structured Cathode and Processes for Producing Same,"	US Patent Application No. 12/655,597 (01/04/2010)	A
A. Zhamu, Jinjun Shi, Guorong Chen, Qing Fang, M. C. Wang, and B. Z. Jang, "Graphite and Carbon Particulates for the Lithium Ion Battery,"	US Patent Application No. 12/804,413 (07/22/2010)	A
C. G. Liu, David Neff, Zhenning Yu, Aruna Zhamu, and Bor Z. Jang, "Lithium Super-battery with a Functionalized Nano Graphene Cathode,"	US Patent Application No. 12/806,679 (08/19/2010)	A
C. G. Liu, David Neff, Aruna Zhamu, and Bor Z. Jang, "Lithium Super-battery with a Functionalized Disordered Carbon Cathode,"	US Patent Application No. 12/924,211 (09/23/2010)	A
Aruna Zhamu, Jinjun Shi, Guorong Chen, M. C. Wang, and Bor Z. Jang, "Graphene-Enhanced Cathode Particulates for Lithium Batteries,"	US Patent Application No. 12/807,471 (09/07/2010)	A
Aruna Zhamu, Jinjun Shi, Guorong Chen, Qing Fang, and Bor Z. Jang, "Graphene-Enhanced Anode Particulates for Lithium Batteries,"	US Patent Application No. 12/807,635 (09/10/2010)	A
Aruna Zhamu, C. G. Liu, David Neff, and Bor Z. Jang, "Surface-Controlled Lithium Ion-	US Patent Application No. 12/928,927	A

Exchanging Energy Storage Device,"	(12/23/2010)	
Aruna Zhamu, C. G. Liu, David Neff, Z. Yu, and Bor Z. Jang, "Partially and Fully Surface-Enabled Metal Ion-Exchanging Battery Device,"	US Patent Application No. 12/930,294 (01/03/2011)	A
Guorong Chen, Aruna Zhamu, Zhenning Yu, and B. Z. Jang, "Graphene-Enabled Vanadium Oxide Cathode and Lithium Cells Containing Same"	US Patent Application Submitted 06/2011	A