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PATENT ASSIGNMENT COVER SHEET

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CONVEYING PARTY DATA

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BOR Z. JANG	10/26/2013
YANBO WANG	08/28/2013
XIQING WANG	05/05/2014
GUORONG CHEN	08/29/2013
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Property Type	Number	
Application Number:	13385561	

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This Assignment Agreement is made and entered by and between <u>Aruna Zhamu</u>, a citizen of P. R. China, residing at <u>765 Hidden Circle, Centerville, Ohio</u> (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

EXHIBIT "A" <u>Assigned Patents</u> Invention Patents and Applications

- 1. Jiusheng Guo, A. Zhamu, and B. Z. Jang, "Nano-scaled Graphene Plate-Reinforced Composite Materials and Method of Producing Same," US Patent No. 7,662,321 (02/16/2010) (US Pat. Appl No.11/257,508 (10/26/05)).
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This Assignment Agreement is made and entered by and between <u>Bor Z. Jang</u>, a citizen of USA, residing at <u>9436 Parkside Drive</u>, <u>Centerville</u>, <u>Ohio</u> (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

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 26 day of 2013 INVENTOR

(Signature)

Bor Z. Jang (Print Name)

State of Ohio

SSN: 303 80 5885

County of Montgomery

Before me personally appeared said 30 2 Jane and acknowledged the foregoing instrument to be his free act and deed, this 26 day of 2013.

ROBERT ROCKWELL Notary Public, State of Ohio Notary Public Notary Public 27, 2017

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

EXHIBIT "A": <u>Assigned Patents</u> Invention Patents and Applications

- 1. Jiusheng Guo, A. Zhamu, and B. Z. Jang, "Nano-scaled Graphene Plate-Reinforced Composite Materials and Method of Producing Same," US Patent No. 7,662,321 (02/16/2010) (US Pat. Appl No.11/257,508 (10/26/05)).
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This Assignment Agreement is made and entered by and between <u>Yanbo Wang</u>, a citizen of the Peoples Republic of China, residing at <u>2108 E David Rd</u>, <u>Kettering</u>, <u>OH 45440</u> (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 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 Exhibit "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 Exhibit A.
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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 28^{44} day of
August , 2013
INVENTOR
Signature)
Yanbo Wang (Print Name)
State of Ohio) SSN: 27/-17-4380 County of Montgomery Before me personally appeared said Mod Cong and acknowledged the foregoing instrument to be his free act and deed, this day of Mod May of Mod May of
SAUNI L MCFARLAND NOTARY PUBLIC STATE OF OHIO MY COMMISSION EXPIRES 7/5/14

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)
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- 14. Guorong Chen, Yanbo Wang, Aruna Zhamu, and Bor Z. Jang, "Rechargeable Lithium Cell Having a Phthalocyanine-Based High-Capacity Cathode," US Patent Appl. No. 13/506,778 (05/17/2012).
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- 20. Hui He, Yanbo Wang, Aruna Zhamu, and Bor Z. Jang, "Non-flammable Quasi-Solid Electrolyte-Separator Layer Product for Lithium Battery Applications," US Patent Application No. 13/987,394 (07/22/2013).
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This Assignment Agreement is made and entered by and between <u>Xiqing Wang</u>, a citizen of the Peoples Republic of China, residing at <u>11670 E. Currier Lane, Cincinnati, Ohio 45249</u> (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 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.

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BETTY J. WHITE Notary Public, State of Ohio My Comm. Expires Jan. 5, 2016

EXHIBIT "A"

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- 3. Aruna Zhamu, Guorong Chen, X. Q. Wang, Yanbo Wang, and B. Z. Jang, "Hybrid Electrode and Surface-Mediated Cell-based Super-Hybrid Energy Storage Device Containing Same," US Patent Application No. 13/374,408 (12/29/2011).
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ASSIGNMENT

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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 $\frac{29^{-h}}{}$ day of
August, 2013
INVENTOR
Guithong Chem (Signature)
Guorong Chen (Print Name)
State of Ohio)
County of 19799279
Before me personally appeared said Sucress Chan and acknowledged the foregoing instrument to be his free act and deed, this day of May 1884
2013.
Notary, Public SAUNI L MCFARLAND NOTARY PUBLIC STATE OF OHIO MY COMMISSION EXPIRES 7/5/14

instruments or affidavits required to apply for, obtain, maintain, issue and enforce said

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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
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Yanbo Wang, Zhenning Yu, Aruna Zhamu, Guorong Chen, and Bor Z. Jang, "Inorganic Nano Sheet-Enabled Lithium-Exchanging Surface- Mediated Cells,"	US Patent Application No. 13/385,366 (02/ 16/2012)	A
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- 1. 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).
- 2. 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).
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- 17. Guorong Chen, Yanbo Wang, Aruna Zhamu, and Bor Z. Jang, "Rechargeable Lithium Cell Having a Meso-Porous Conductive Material Structure-Supported Phthalocyanine Compound Cathode," US Patent Appl. No. 13/507,168 (06/11/2012).
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- 19. Mingchao Wang, Guorong Chen, Aruna Zhamu, and Bor Z. Jang, "Solvent-Free Process Based Graphene Electrode for Energy Storage Devices," US Patent Application No. 13/507,739 (07/25/2012).
- 20. Guorong Chen, Zhenning Yu, Chen-guang Liu, Aruna Zhamu, and Bor Z. Jang, "Rechargeable Lithium Cell Having a Chemically Bonded Phthalocyanine Compound Cathode," US Patent Application No. 13/573,275 (09/07/2012).
- 21. Guorong Chen, Aruna Zhamu, and Bor Z. Jang, "Encapsulated Phthalocyanine Particles, High-Capacity Cathode Containing These Particles, and Rechargeable Lithium Cell Containing Such a Cathode," US Patent Application No. 13/573,298 (09/10/2012).

ASSIGNMENT

This Assignment Agreement is made and entered by and between Oing Fang, a citizen of the Peoples Republic of China, residing at Wahtwind Ct Hunty Height of 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 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 Exhibit "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 knowhow, 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 Exhibit 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 4th day of September , 2013

INVENTOR

(Signature)

Qing Fang (Print Name)

State of Ohio

County of Mindsmey

Before me personally appeared said Qing Fang and acknowledged the foregoing instrument to be his free act and deed, this 4th day of September.

2013.

Motary Public, State of Ohio My Comm. Expires Jan. 5, 2016



EXHIBIT "A"

Assigned Patents

Invention Patents and Applications

Name of Assigned Patent	Patent Registration No. or Application	Status: Registered (R), Applied for
	No.	Registration (A),
		Abandoned
		Application (AA) and Status Not
		Available (NA)
A. Zhamu, Jinjun Shi, Guorong Chen, Qing Fang,	US Patent Application	Available (NA)
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