

<b>PATENT ASSIGNMENT COVER SHEET</b>
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 Stylesheet Version v1.2

EPAS ID: PAT4211986

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT

**CONVEYING PARTY DATA**

Name	Execution Date
BOR Z. JANG	12/22/2016

**RECEIVING PARTY DATA**

<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

**PROPERTY NUMBERS Total: 33**

Property Type	Number
Application Number:	15170387
Application Number:	15175715
Application Number:	15175775
Application Number:	15192241
Application Number:	15193090
Application Number:	15193092
Application Number:	15211209
Application Number:	15211269
Application Number:	15211408
Application Number:	15211522
Application Number:	15211727
Application Number:	15228133
Application Number:	15228345
Application Number:	15231486
Application Number:	15231498
Application Number:	15240537
Application Number:	15240543
Application Number:	15241886
Application Number:	15243589
Application Number:	15243606

PATENT

Property Type	Number
Application Number:	15251841
Application Number:	15251849
Application Number:	15251857
Application Number:	15270868
Application Number:	15270871
Application Number:	15287078
Application Number:	15297877
Application Number:	15353906
Application Number:	15354706
Application Number:	15365049
Application Number:	15375508
Application Number:	15384749
Application Number:	15384781

**CORRESPONDENCE DATA**

**Fax Number:** (937)558-0606  
*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.*

**Phone:** 9373319884  
**Email:** CLAIRE@ANGSTRONMATERIALS.COM  
**Correspondent Name:** CLAIRE RUTISER  
**Address Line 1:** 1240 MCCOOK AVE  
**Address Line 2:** NANOTEK INSTRUMENTS  
**Address Line 4:** DAYTON, OHIO 45404

<b>NAME OF SUBMITTER:</b>	CLAIRE A. RUTISER
<b>SIGNATURE:</b>	/Claire A. Rutiser/
<b>DATE SIGNED:</b>	01/05/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

**Total Attachments: 4**  
source=DrJang\_assignment\_12222016#page1.tif  
source=DrJang\_assignment\_12222016#page2.tif  
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source=DrJang\_assignment\_12222016#page4.tif

## ASSIGNMENT

This Assignment Agreement is made and entered by and between Dr. Bor Z. Jang, a citizen of USA, residing at 2301 E. Social Row Rd., Centerville OH 45458 (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, nano-scaled graphene plates, processes, energy technologies, and/or 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 patents and patent applications listed in Exhibit "A" attached hereto, any application claiming priority therefrom, any non-provisionals, continuations, or divisions thereof, the inventions disclosed therein, any improvements thereon, and any patent or patents that may be issued or reissued thereon; (2) all know-how, trade secrets, discoveries, concepts, ideas, and technologies related to the same; (3) any and all copyrights, copyright registrations and copyrightable subject matter related to the same; and (4) 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 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 authorizes and requests the Commissioner of Patents and Trademarks to issue any patent which may issue from the Inventions to said Assignee, its successor and assigns; and authorizes said Assignee, its successors and assigns, to file in its own name applications for patent in foreign countries in connection with the Inventions hereby transferred, and to secure in its own name the patent or patents issued thereon.

4. Assignor further covenants and agrees that, upon request, Assignor will promptly provide Assignee with all pertinent facts and documents relating to said Inventions, as may be known and accessible to Assignor, and Assignee will testify as to the same in any interference, litigation or proceeding related thereto and will do all acts including promptly execute and deliver to said Assignee

or its legal representatives any and all papers, instruments or affidavits that Assignee, its successors or assigns may consider necessary or desirable to apply for, obtain, maintain, issue, transfer and enforce said Inventions or any United States or foreign patent or application filed in connection with said Inventions.

In Witness Whereof, the undersigned has executed this document as of the \_\_\_\_\_ day of December, 2016.

**INVENTOR**

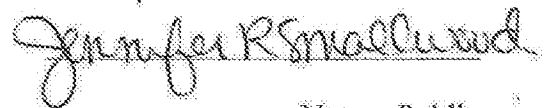
 (Signature)

Dr. Bor Z. Jang (Print Name)

State of Ohio )

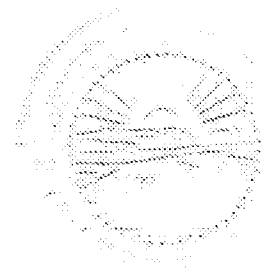
County of Montgomery )

Before me personally appeared said Dr. Bor Z. Jang and acknowledged the foregoing instrument to be his free act and deed, this 22<sup>nd</sup> day of December, 2016



Notary Public

**Jennifer R. Smallwood**  
**NOTARY PUBLIC**  
**STATE OF OHIO**  
My commission expires  
**June 29, 2019**



**Exhibit A - Assigned Patents and Patent Applications**

Inventors	Patent	Patent Number	Application Number	Filing Date
Aruna Zhamu and Bor Z. Jang	Highly Conductive Graphitic Films		15/170387	6/1/2016
Aruna Zhamu and Bor Z. Jang	Alkali Metal Battery Having an Integral 3D Graphene-Carbon-Metal Hybrid Foam-Based Electrode		15/175715	6/7/2016
Aruna Zhamu and Bor Z. Jang	Graphene-Metal Hybrid Foam-Based Electrode for an Alkali Metal Battery		15/175775	6/7/2016
Aruna Zhamu and Bor Z. Jang	Highly conducting graphitic films from graphene liquid crystals		15/192241	6/24/2016
Aruna Zhamu and Bor Z. Jang	Electrochemical production of Graphene Sheets from coke or coal		15/193090	6/26/2016
Aruna Zhamu and Bor Z. Jang	Direct Ultrasonification of graphene sheets from coke or coal		15/193092	6/26/2016
Chai, Song-Hai, Aruna Zhamu, Bor Z. Jang	Humic Acid-Based Supercapacitors		15/211209	7/15/2016
Aruna Zhamu, Bor Z. Jang	Production of Graphene-Based Supercapacitor Electrode from Coke or Coal Using Direct Ultrasonication		15/211269	7/15/2016
Aruna Zhamu, Bor Z. Jang	Supercritical Fluid Process for Producing Graphene from Coke or Coal		15/211408	7/15/2016
Aruna Zhamu, Bor Z. Jang	Supercritical Fluid Production of Graphene-Based Supercapacitor Electrode from Coke or Coal		15/211522	7/15/2016
Aruna Zhamu, Bor Z. Jang	Electrochemical Method of Producing Graphene-Based Supercapacitor Electrode from Coke or Coal		15/211727	7/15/2016
Aruna Zhamu, Bor Z. Jang	Method of Producing Integral 3D Humic Acid-Carbon Hybrid Foam		15/228133	8/4/2016
Aruna Zhamu, Bor Z. Jang	Integral 3D Humic Acid-Carbon Hybrid Foam and Devices Containing Same		15/228345	8/4/2016
Aruna Zhamu, Yi-Jun Lin and Bor Z. Jang	Process for Producing Graphene Oxide-bonded Metal Foil Thin Film Current Collector for a Battery or Supercapacitor		15/231486	8/8/2016
Aruna Zhamu, Yi-Jun Lin and Bor Z. Jang	Graphene Oxide-bonded Metal Foil Thin Film Current Collector and Battery and Supercapacitor Containing Same		15/231498	8/8/2016
Aruna Zhamu, Bor Z. Jang	Process for Producing Highly Oriented Humic Acid Films and Highly Conducting Graphitic Films Derived Therefrom		15/240537	8/18/2016
Aruna Zhamu, Bor Z. Jang	Highly Oriented Humic Acid Films and Highly Conducting Graphitic Films Derived Therefrom and Devices Containing Same		15/240543	8/18/2016

Aruna Zhamu, Bor Z. Jang	PATTERNED NANO GRAPHENE PLATELET-BASED CONDUCTIVE INKS		15/241886	8/19/2016
Aruna Zhamu, Bor Z. Jang	PROCESS FOR PRODUCING HUMIC ACID-BONDED METAL FOIL FILM CURRENT COLLECTOR		15/243589	8/22/2016
Aruna Zhamu, Bor Z. Jang	HUMIC ACID-BONDED METAL FOIL FILM CURRENT COLLECTOR AND BATTERY AND SUPERCAPACITOR CONTAINING SAME		15/243606	8/22/2016
Aruna Zhamu, Bor Z. Jang	Highly Conductive Graphitic Films and Production Process		15/251841	8/30/2016
Aruna Zhamu, Bor Z. Jang	Process for Producing Humic Acid-Derived Conductive Foams		15/251849	8/30/2016
Aruna Zhamu, Bor Z. Jang	Humic Acid-Derived Conductive Foams and Devices		15/251857	8/30/2016
Aruna Zhamu, Bor Z. Jang	Process for Metal-Sulfur Battery Cathode Containing Humic Acid-Derived Conductive Foam		15/270868	9/20/2016
Aruna Zhamu, Bor Z. Jang	Metal-Sulfur Battery Cathode Containing Humic Acid-Derived Conductive Foam impregnated with Sulfur or Sulfide		15/270871	9/20/2016
Yu-Sheng Su, Jun Yin, Qing Fang, Aruna Zhamu and Bor Z. Jang	Lithium Ion Battery Anode Containing Silicon Nanowires Grown in situ in Pores of Graphene Foam and Production Process		15/287078	10/6/2016
Yu-Sheng Su, Minjie Li, Hui He, Qing Fang, Aruna Zhamu and Bor Z. Jang	Battery Having a Low Output Voltage		15/297877	10/19/2016
Yi-Jun Lin, Aruna Zhamu, and Bor Z. Jang	Graphene Oxide-Metal Nanowire Transparent Conductive Films		15/353906	11/17/2016
Aruna Zhamu, Wei Xiong, Bor Z. Jang	Process for Unitary Graphene Layer or Graphene Single Crystal		15/354706	11/18/2016
Aruna Zhamu, Bor Z. Jang	Graphene-protected Lead Acid Batteries		15/365049	11/30/2016
Aruna Zhamu, Bor Z. Jang	Hybrid Solid State Electrolyte for Lithium Secondary Battery		15/375508	12/12/2016
Aruna Zhamu, Hui He, Baofei Pan, Yu-Sheng Su, and Bor Z. Jang	Flexible and Shape-Conformal Cable-Type Alkali Metal Batteries		15/384749	12/20/2016
Aruna Zhamu, Hui He, Baofei Pan, Yu-Sheng Su, and Bor Z. Jang	Process for Producing Flexible and Shape-Conformal Cable-Type Alkali Metal Batteries		15/384781	12/20/2016
Aruna Zhamu, Hui He, Baofei Pan, Yu-Sheng Su, and Bor Z. Jang	Flexible and Shape-Conformal Cable-Shape Alkali Metal Sulfur Batteries			
Aruna Zhamu, Hui He, Baofei Pan, Yu-Sheng Su, and Bor Z. Jang	Process for Producing Flexible and Shape-Conformal Cable-Shape Alkali Metal Sulfur Batteries			