## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
NANOTEK INSTRUMENTS, INC.	06/17/2016

## **RECEIVING PARTY DATA**

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City:	DAYTON	
State/Country:	ОНЮ	
Postal Code:	45404	

## **PROPERTY NUMBERS Total: 81**

Property Type	Number
Patent Number:	5936861
Patent Number:	6115449
Patent Number:	6118843
Patent Number:	6126097
Patent Number:	6129872
Patent Number:	6165406
Patent Number:	6180049
Patent Number:	6214279
Patent Number:	6280784
Patent Number:	6280785
Patent Number:	6376148
Patent Number:	6398125
Patent Number:	6401001
Patent Number:	6401002
Patent Number:	6405095
Patent Number:	6444009
Patent Number:	6465052
Patent Number:	6471800
Patent Number:	6616734
Patent Number:	6623559

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Property Type	Number
Patent Number:	6635307
Patent Number:	6706234
Patent Number:	6780368
Patent Number:	7186474
Patent Number:	7277770
Patent Number:	7623340
Patent Number:	7722981
Patent Number:	7758783
Patent Number:	7785498
Patent Number:	7858068
Patent Number:	7875219
Patent Number:	7887927
Patent Number:	7948739
Patent Number:	7993791
Patent Number:	8153324
Patent Number:	8202669
Patent Number:	8315039
Patent Number:	8318385
Patent Number:	8497225
Patent Number:	8501307
Patent Number:	8518603
Patent Number:	8597453
Patent Number:	8691129
Patent Number:	8728679
Patent Number:	8765303
Patent Number:	8790814
Patent Number:	8795899
Patent Number:	8865040
Patent Number:	8889298
Patent Number:	8895189
Patent Number:	8900755
Patent Number:	8914176
Patent Number:	8947854
Patent Number:	9017756
Patent Number:	9053870
Patent Number:	9166252
Patent Number:	9190667
Patent Number:	9203098

Property Type	Number
Patent Number:	9437372
Patent Number:	9847184
Patent Number:	9905373
Patent Number:	9966199
Application Number:	11293690
Application Number:	11293706
Application Number:	11699176
Application Number:	11704873
Application Number:	11644477
Application Number:	11644122
Application Number:	11800729
Application Number:	11899008
Application Number:	12002279
Application Number:	12657579
Application Number:	14756315
Application Number:	14756292
Application Number:	14756777
Application Number:	14757124
Application Number:	13199713
Application Number:	13374321
Application Number:	13374408
Application Number:	13385245
Application Number:	13385350

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NAME OF SUBMITTER:	CAROL J. WEATHERBY
SIGNATURE:	/Carol J Weatherby/
DATE SIGNED:	07/18/2019

**Total Attachments: 7** 

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#### PATENT ASSIGNMENT

THIS PATENT ASSIGNMENT (this "<u>Assignment</u>") is made and entered into as of the <u>17</u> day of <u>June</u>, 2016 (the "<u>Effective Date</u>") by and between Nanotek Instruments, Inc. ("<u>Assignor</u>"), and Nanotek Instruments Group, LLC ("<u>Assignee</u>"), who, for good and valuable consideration, the receipt of which is hereby acknowledged, agree as follows:

## 1. Transfer of Patent Rights.

- (a) Assignor hereby sells, assigns and transfers all of its right, title and interest whatsoever throughout the world in and to the patents and patent applications identified on Exhibit A hereto, all patents that issue from such patent application, and all reissues, divisionals, continuations, continuation-in-parts, revisions, extensions, and reexaminations of any of the foregoing, both foreign and domestic (the "Patents"), unto Assignee in perpetuity (or for the longest period of time otherwise permitted by law).
- (b) Assignor hereby authorizes Assignee, its successors and assigns, or anyone it may properly designate, to apply for letters patent for the inventions identified in the Patents, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of said United States application and/or otherwise take advantage of the provisions of the International Convention.
- (c) Assignor authorizes and requests the Commissioner of Patents of the United States Patent and Trademark Office and any similar governmental authority in a foreign jurisdiction to issue to Assignee, its successors and assigns, all such Patents.
- (d) Assignee shall be responsible for all obligations related to the Patents after the Effective Date.
- 2. <u>Further Assurances.</u> Assignor covenants that it will, at Assignee's sole cost and expense, sign all lawful papers, make all rightful oaths, and generally do anything reasonably possible for Assignee to obtain and enforce proper protection for the Patents in the United States and in any and all countries. Assignor agrees, at Assignee's sole cost and expense, to execute such bills of sale, assignments, and other documents as may be necessary to give effect or evidence the transaction contemplated by this Assignment.
- 3. <u>Binding Effect.</u> This Assignment will be binding upon the Assignor and its permitted successors and assigns and will inure the benefit of Assignee and its permitted successors and assigns.
- 4. <u>No Rights in Third Parties.</u> This Assignment (including all representations, warranties and covenants contained herein) is solely for the benefit of the parties hereto and their successors and permitted assigns, and it shall not be construed as conferring any rights, benefit or cause of action in or on behalf of any other persons.
- 5. <u>Disclaimer</u>. Assignor makes no representations, warranties, covenants, agreements or indemnities, and hereby disclaims all implied warranties, of any kind, including

with respect to the validity or enforceability of, or Assignor's or Assignee's ability to enforce or commercialize the Patents or obtain patent protection from any pending patent application included among the Patents.

- 6. <u>Indemnification</u>. Assignee shall defend, indemnify and hold harmless Assignor, its affiliates and their respective shareholders, directors, officers and employees from and against all claims, judgments, damages, liabilities, settlements, losses, costs and expenses, including attorneys' fees and disbursements, arising from or relating to this Assignment, the Patents or Assignee's or any of its licensee's exploitation of the Patents, including any federal, state, county, local or foreign taxes due and payable by Assignor or Assignee resulting from this Assignment or the transactions contemplated hereby.
- 7. Governing Law. This Assignment and its execution, interpretation and performance shall be construed in accordance with and governed by the law of the State of Ohio, without regard to or application of any conflicts of law principles.
- 8. Amendments; Waivers. This Assignment may not be amended except by an instrument in writing signed on behalf of each of Assignee and Assignor. Any term or provision of this Assignment may be waived at any time by the party entitled to the benefit thereof by written notice to the other party. The waiver of a breach of any provision of this Assignment shall not operate or be construed as a waiver of compliance with any representations, warranties, conditions or covenants contained in this Assignment or of any subsequent breach.
- 9. <u>Counterparts; Effectiveness.</u> This Assignment may be executed in any number of counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument. Any signature page delivered by facsimile or email shall be binding to the same extent as an original. This Assignment shall become effective when each party hereto shall have received a counterpart hereof signed by the other parties hereto.

IN WITNESS WHEREOF, this Assignment has been duly executed and delivered by the duly authorized officers of Assignor and Assignee as of the date and year first above written.

NANOTEK INSTRUMENTS, INC.	NANOTEK GROUP, LLC
By: <u>Da 3338</u>	By: 123-33-33
Print name: Box Jana	Print name: Bor Jana
Title: President	Tide: President

# EXHIBIT A U.S. AND FOREIGN PATENTS

**Group 1:** 3D Printing (Freeform Fabrication, Rapid Prototyping, and 3D Visualization)

- 1. B. Z. Jang, E. Ma and C. J. Wang, "Apparatus and Process for Freeform Fabrication of Fiber Reinforced Composite Objects," U.S. Patent 5,936,861 (Aug. 10, 1999).
- 2. J. S. Yang, L. W. Wu, E. J. Ma and B. Z. Jang, "Apparatus and Process for Freeform Fabrication of Composite Reinforcement Preforms," U.S. Patent No. 6,214,279 (April 10, 2001).
- 3. J. Jang, "Process and Apparatus for Creating a Colorful 3-D Object," U.S. Pat. No. 6,129,872 (Oct. 10, 2000).
- 4. 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.
- 5. 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).
- 6. B. Z. Jang, J. Duan, K. Chen, Xin Lu, and E. J. Ma, "Rapid Prototyping and Tooling System," U.S. Patent No. 6,405,095 (06/11/22).
- 7. B. Z. Jang and J. S. Yang, "Layer Manufacturing Using Focused Chemical Vapor Deposition," U.S. Patent No. 6,180,049, 01/30/2001.
- 8. B. Z. Jang, J. S. Yang, J. H. Liu and L. J. Pan "Layer Manufacturing Using Deposition of Fused Droplets," U.S. Patent No. 6,401,001 (June 4, 2002).
- 9. W. C. Huang, "Direct Write Method for Polarized Materials," U.S. Patent No. 6,706,234, March 16, 2004.
- 10. W. C. Huang, "Method for the Production of Semiconductor Quantum Particles," U.S. Patent No. 6,623,559, 9/23/2003.
- 11. W. C. Huang, "Direct Write Process and Apparatus," US Pat. No. 7,277,770 (10/02/2007).
- 12. J. S. Yang, L. W. Wu and J. H. Liu, "Method for Rapidly Making a 3-D Food Object," U.S. Patent No. 6,280,784, 08/28/2001.
- 13. J. S. Yang, L. W. Wu and J. H. Liu, "Rapid Prototyping and Fabrication Method for 3-D Food Objects," U.S. Patent No. 6,280,785, 08/28/2001.
- 14. B. Z. Jang and E. J. Ma, "Layer Additive Method and Apparatus for Freeform Fabrication of 3-D Objects," U.S. Patent No. 6,471,800 (Oct. 29, 2002).
- 15. W. C. Huang and B. Z. Jang, "Quantitative Stereoscopic Radiography Method," U.S. Patent No. 6,118,843, 09/12/2000.
- 16. W. C. Huang and B. Z. Jang, "Apparatus for Quantitative Stereoscopic Radiography," U.S. Patent No. 6,115,449, 09/05/2000.
- 17. J. H. Liu and B. Z. Jang, "Layer Manufacturing Using Electrostatic Imaging and Lamination," U.S. Patent No. 6,376,148 (04/23/2002).
- 18. J. H. Liu and B. Z. Jang, "Layer Manufacturing of a Multi-Material, Multi-Color Object Using Electrostatic Imaging and Lamination," U.S. Patent No. 6,780,368 (Aug.24, 2004).

**Group 2:** Nano Materials Technologies

- 19. S. Z. Chen, J. S. Yang and B. Z. Jang, "High-Energy Ball Milling Apparatus and Method for the Preparation of Nanometer-Sized Powders," U.S. Patent No. 6,126,097 (10/03/00).
- 20. J. H. Liu and B. Z. Jang, "Process and Apparatus for the Production of Nano-Scaled Powders," U.S. Patent No. 6,398,125 (June 4, 2002).
- 21. J. H. Liu and B. Z. Jang, "Method for Producing Environmentally Stable Reactive Alloy Powders," U.S. Patent No. 6,444,009, 09/03/2002. (2-wire, 2 stage)
- 22. J. H. Liu, "A Dynamic Filtration Method for Separating Nano Powders," U.S. Patent No. 6,616,734, Sept.9, 2003.
- 23. L. W. Wu, "Method for Production of Nano-Porous Coatings" U.S. Patent No. 6,465,052 10/15/2002. (2-wire)
- 24. L. W. Wu and W. C. Huang, "Manufacturing Method for Thin Film Solar Cells," U.S. Patent No. 6,635,307, 10/21/2003.

### **Group 3:** Fuel Cells

- 25. 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).
- 26. A. Zhamu, Jiusheng Guo, and B. Z. Jang, "Self-humidifying Membrane, Catalyst-Coated Membrane, Membrane Electrode Assembly, and Fuel Cell," US Patent No. 7,993,791 (08/09/2011).
- 27. Jiusheng Guo, A. Zhamu, and B. Z. Jang, "Organic Vapor Fuel Cell," US Patent No. 9,203,098 (12/01/2015).
- 28. A. Zhamu and B. Z. Jang, "Method of Manufacturing Integrated Bipolar Plate/Diffuser Components for Proton Exchange Membrane Fuel Cells," U.S. Pat. Appl. No. 11/293,690 (12/05/2005).
- 29. A. Zhamu and B. Z. Jang, "Integrated Bipolar Plate/Diffuser Components for Proton Exchange Membrane Fuel Cells," U.S. Pat. Appl. No. 11/293,706 (12/05//2005).
- 30. Bor Z. Jang, "Sheet Molding Compound Flow Field Plate, Bipolar Plate and Fuel Cell," US Patent No. 8,518,603 (08/27/2013).
- 31. Bor Z. Jang, A. Zhamu, Lulu Song, "Method for Producing Highly Conductive Sheet Molding Compound, Fuel cell Flow Field Plate, and Bipolar Plate," US Patent No. 8,597,453 (12/03/2013).
- 32. Bor Z. Jang, A. Zhamu, and Lulu Song, "Highly Conductive Composites for Fuel Cell Flow Field Plates and Bipolar Plates," US Patent No. 8,865,040 (10/21/2014).
- 33. Lulu Song, Jiusheng Guo, A. Zhamu, and Bor Z. Jang, "Controlled Release Vapor Fuel Cell" US Patent No. 8,153,324 (04/10/2012).
- 34. Bor Z. Jang, Aruna Zhamu, and Jiusheng Guo, "Process for Producing Fuel Cell Electrode, Catalyst-Coated Electrode, and Membrane-Electrode Assembly," US Patent No. 8,318,385 (11/27/2012).
- 35. Bor Z. Jang, Aruna Zhamu, and Jiusheng Guo, "Electro-catalyst Composition, Fuel Cell Electrode, and Membrane-Electrode Assembly," US Patent No. 7,722, 981 (05/25/2010).
- 36. Bor Z. Jang, Aruna Zhamu, and Jiusheng Guo, "Electro-catalyst Compositions for Fuel Cells," US Patent No. 8,202,669 (06/19/2012).
- 37. Bor Z. Jang, Aruna Zhamu, and Jiusheng Guo, "Fuel Cell Electro-catalyst Composite Composition, Electrode, Catalyst-Coated Electrode, and Membrane-Electrode Assembly," US Pat. Appl. No. 11/699,176 (01/30/2007).
- 38. Bor Z. Jang and Aruna Zhamu, "Conducting Polymer-Transition Metal Electro-catalyst Compositions for Fuel Cells," US Pat. Appl. No. 11/704,873 (02/12/2007).

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- 39. Bor Z. Jang and Aruna Zhamu, "Method of Producing Conducting Polymer-Transition Metal Electro-catalyst Compositions for Fuel Cells," US Patent No. 7,785,498 (Aug. 31, 2010).
- 40. Bor Z. Jang, Aruna Zhamu, and Jiusheng Guo, "Process for Producing Carbon-Cladded Composite Bipolar Plates for Fuel Cells," US Pat. Appl. No. 11/644,477 (12/26/2006).
- 41. Bor Z. Jang, Aruna Zhamu, and Jiusheng Guo, "Carbon-Cladded Composite Flow Field Plate, Bipolar Plate, and Fuel Cell," US Pat. Appl. No. 11/644,122 (12/26/2006).
- 42. Bor Z. Jang, Aruna Zhamu, and Jiusheng Guo, "Highly Conductive, Multi-layer Precursor Composite Composition to Fuel Cell Flow Field Plate or Bipolar Plate," US Patent No. 7,887,927 (02/15/2011).
- 43. Ian M. Fuller and Bor Z. Jang, "Method of Storing and Generating Hydrogen for Fuel Cell Applications" US Patent No. 7,858,068 (12/28/2010).
- 44. Aruna Zhamu, Jinjun Shi, Jiusheng Guo and Bor Z. Jang, "Exfoliated Graphite Composite Compositions for Fuel Cell Flow Field Plates," US Pat. Appl. No., 11/800,729 (05/08/2007).
- 45. Aruna Zhamu, Jinjun Shi, Jiusheng Guo and Bor Z. Jang, "Method of Producing Exfoliated Graphite Composite Compositions for Fuel Cell Flow Field Plates," US Patent No. 8,691,129 (04/08/2014).
- 46. Aruna Zhamu, Jinjun Shi, Jiusheng Guo and Bor Z. Jang, "Laminated Exfoliated Graphite Composite-Metal Compositions for Fuel Cell Flow Field Plate or Bipolar Plate Applications," US Patent No. 8,728,679 (05/20/2014).
- 47. Aruna Zhamu and Bor Z. Jang, "Method of Producing Graphite-Carbon Composite Electrodes for Supercapacitors" US Pat. Appl. No. 11/895,588 (08/27/2007); Now US Patent No. 8,497,225 (07/30/2013).
- 48. Aruna Zhamu, Jinjun Shi, Jiusheng Guo and Bor Z. Jang, "Recompressed Exfoliated Graphite Articles," US Patent No. 8,501,307 (08/06/2013).
- 49. Aruna Zhamu, Jinjun Shi, Jiusheng Guo and Bor Z. Jang, "Method of Producing Less Anisotropic Flexible Graphite," US Pat. Appl. No. 11/899,008 (09/04/2007).
- 50. Jinjun Shi, Aruna Zhamu, Jiusheng Guo and Bor Z. Jang, "Method of Continuously Producing Laminated Exfoliated Graphite Composite-Metal Compositions for Fuel Cell Flow Field Plate Applications," US Pat. Appl. No. 12/002,279, (12/17/2007).
- 51. Jinjun Shi, Aruna Zhamu, Jiusheng Guo and Bor Z. Jang, "Continuous Production of Exfoliated Graphite Composite Compositions and Flow Field Plates," US Patent No. 7,758,783 (July 20, 2010).

## Group 4: Supercapacitors and Related Lithium/Sodium-ion Capacitors and Surface Mediated Cells

- 52. Lulu Song, A. Zhamu, Jiusheng Guo, and B. Z. Jang "Nano-scaled Graphene Plate Nanocomposites for Supercapacitor Electrodes" US Pat. No. 7,623,340 (11/24/2009). (sold to Samsung; with grant-back rights)
- 53. Aruna Zhamu and Bor Z. Jang, "Graphite-Carbon Composite Electrodes for Supercapacitors" US Pat. App. No. 11/895,657 (08/27/2007); Now US Patent No. 7,948,739 (05/24/2011). (sold to Samsung; with grant-back rights)
- 54. Aruna Zhamu and Bor Z. Jang, "Process for Producing Nano-scaled Graphene Platelet Nanocomposite Electrodes for Supercapacitors," U.S. Patent App. No. 11/906,786 (submitted 10/04/2007); now US Patent No. 7,875,219 (01/25/2011). (sold to Samsung; with grant-back rights)

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- 55. Aruna Zhamu and Bor Z. Jang, "Method of Producing Graphite-Carbon Composite Electrodes for Supercapacitors" US Pat. Appl. No. 11/895,588 (08/27/2007); Now US Patent No. 8,497,225 (07/30/2013).
- 56. Aruna Zhamu, Zhenning Yu, C, G. Liu, and Bor Z. Jang, "Spacer-Modified Nano Graphene Electrodes for Supercapacitors," US Patent Application No. 12/655,247 (12/28/2009); now US Patent No. 8,315,039 (11/20/2012).
- 57. Aruna Zhamu, Zhenning Yu, C, G. Liu, and Bor Z. Jang, "Spacer-Modified Nano Graphene Electrodes for Supercapacitors," US Patent Application No. 13/573,844 (10/09/2012); now US Patent No. 8,947,854 (02/03/2015); A divisional of US App. No. 12/655,247 (12/28/2009), now US Patent No. 8,315,039 (11/20/2012).
- 58. Aruna Zhamu, Zhenning Yu, C, G. 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); now US Patent No. 9,017,756 (04/28/2015).
- 59. Zhenning Yu, Jinjun Shi, C. G. Liu, Bor Z. Jang, and Aruna Zhamu "Flexible Asymmetric Electrochemical Cells Using Nano Graphene Platelet as an Electrode Material," US Patent Application No. 12/657,579 (01/25/2010).
- 60. Zhenning Yu, Chen-guang Liu, David Neff, A. Zhamu, and B. Z. Jang, "Supercapacitor with a Meso-porous Nano Graphene Electrode," US Patent Application No. 12/804,911 (08/02/2010); Now US Patent No. 9,053,870 (06/09/2015).
- 61. Aruna Zhamu and Bor Z. Jang, "Graphene Nanocomposites for Electrochemical cell Electrodes," U.S. Patent Appl. No. 12/220,651 (07/28/2008); Now US Patent No. 9,190,667 (11/17/2015).
- 62. Aruna Zhamu and Bor Z. Jang, "Porous Particles of Interconnected 3D Graphene as a Supercapacitor Electrode Active Material and Production Process," US Patent Application No. 14/756,315 (08/26/2015).
- 63. Aruna Zhamu and Bor Z. Jang, "Production Process for a Supercapacitor Having a High Volumetric Energy Density," US Patent Application No. 14/756,292 (08/24/2015).
- 64. Aruna Zhamu and Bor Z. Jang, "Continuous Process for Producing Electrodes for Supercapacitors Having High Energy Densities," US Patent Application No. 14/756,777 (10/13/2015).
- 65. Aruna Zhamu and Bor Z. Jang, "Method of Producing Supercapacitor Electrodes and Cells Having High Active Mass Loading," US Patent Application No. 14/757,124 (11/23/2015).
- 66. Aruna Zhamu and Bor Z. Jang, "Supercapacitor Having an Integral 3D Graphene-Carbon Hybrid Foam-Based Electrode," US Patent Application No. (01/05/2016).
- 67. Aruna Zhamu and Bor Z. Jang, "Supercapacitor Having a Highly Conductive Graphene Foam Electrode," US Patent Application No. (01/09/2016).
- 67. Aruna Zhamu and Bor Z. Jang, "Process for Producing Graphene Foam Supercapacitor Electrode," US Patent Application No. (01/09/2016).
- 68. Aruna Zhamu and Bor Z. Jang, "Supercapacitor Electrode Having Highly Oriented and Closely Packed Graphene Sheets and Production Process," US Patent Application No. (01/28/2016).

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- 69. 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); Now US Patent No. 8,795,899 (08/05/2014).
- 70. 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); Now US Patent No. 8,900,755 (12/02/2014).
- 71. Aruna Zhamu, C. G. Liu, David Neff, and Bor Z. Jang, "Surface-Controlled Lithium Ion-Exchanging Energy Storage Device," US Patent Application No. 12/928,927 (12/23/2010); now US Patent No. 9,166,252 (10/20/2015).
- 72. Aruna Zhamu, Chen-guang Liu, X. Q. Wang, and Bor Z. Jang, "Surface-Mediated Lithium Ion-Exchanging Energy Storage Device," US Patent Application No. 13/199,450 (08/30/2011); now US Patent No. 8,889,298 (11/18/2014).
- 73. Aruna Zhamu, Chen-guang Liu, and Bor Z. Jang, "Partially Surface-Mediated Lithium Ion-Exchanging Cells and Method of Operating Same," US Patent Application No. 13/199,713 (09/07/2011).
- 74. Aruna Zhamu, Guorong Chen, X. Q. Wang, Yanbo Wang, and B. Z. Jang, "Stacks of Internally Connected Surface-Mediated Cells and Methods of Operating Same," US Patent Application No. 13/374,321 (12/21/2011).
- 75. Guorong Chen, Yanbo Wang, Xiqing Wang, Aruna Zhamu, and Bor 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).
- 76. Aruna Zhamu, Guorong Chen, Qing Fang, Xiqing Wang, Yanbo Wang, and Bor Z. Jang, "Surface-Mediated Cell-Powered Vehicles and Methods of Operating Same," US Patent App. No. 13/374,894 (01/23/2012); Now US Patent No. 8,914,176 (12/16/2014).
- 77. Aruna Zhamu, Guorong Chen, Qing Fang, Xiqing Wang, Yanbo Wang, and Bor Z. Jang, "Surface-Mediated Cells with High Power Density and High energy Density," US Patent App. No. 13/385,105 (02/03/2012); Now US Patent No. 8,895,189 (11/25/2014)
- 78. Aruna Zhamu, Guorong Chen, Qing Fang, Xiqing Wang, Yanbo Wang, and Bor Z. Jang, "Surface-Mediated Cell-Powered Portable Computing Devices and Methods of Operating Same," US Patent Application No. 13/385,245 (02/10/2012).
- 79. Aruna Zhamu, Guorong Chen, Qing Fang, Xiqing Wang, Yanbo Wang, and Bor Z. Jang, "Surface-Mediated Cell-Driven Power Tools and Methods of Operating Same," US Patent Application No. 13/385,350 (02/16/2012).
- 80. 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); Now US Patent No. 8,790,814 (07/29/2014).
- 82. Guorong Chen, Yanbo Wang, Qing Fang, Xiqing Wang, Aruna Zhamu, and Bor Z. Jang, "Lithium-ion Surface Cell Having a High Energy Density and High Power Density" US Patent Application No. 13/506,168 (04/02/2012); Now US Patent No. 8,765,303 (07/01/2014).

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**RECORDED: 07/18/2019**