## 503818758 05/10/2016

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3865407

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
QUALTECH SYSTEMS, INC.	04/26/2016

## **RECEIVING PARTY DATA**

Name:	BATTELLE ENERGY ALLIANCE, LLC
Street Address:	2525 N FREMONT AVENUE
Internal Address:	MS 3899
City:	IDAHO FALLS
State/Country:	IDAHO
Postal Code:	83415-3899

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Patent Number:	8150643

### **CORRESPONDENCE DATA**

Fax Number:

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.

Email: IPLEGAL@INL.GOV

Correspondent Name: BATTELLE ENERGY ALLIANCE, LLC

Address Line 1: 2525 N FREMONT AVENUE

Address Line 2: MS 3899

Address Line 4: IDAHO FALLS, IDAHO 83415-3899

ATTORNEY DOCKET NUMBER:	BA-396
NAME OF SUBMITTER:	ERIC M. BARZEE
SIGNATURE:	/Eric M. Barzee/
DATE SIGNED:	05/10/2016

### **Total Attachments: 4**

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#### Exhibit A

### ASSIGNMENT

THIS ASSIGNMENT is entered into by QUALTECH SYSTEMS, Incorporated in the state of Connecticut having a place of business at 100 Corporate Place, Suite 220, Rocky Hill, CT 06067 (hereinafter "Assignor"), to and in favor of BATTELLE ENERGY ALLIANCE, LLC, a Limited Liability Company of the state of Delaware having a place of business at 2525 Fremont Avenue, Idaho Falls, ID 83415 (hereinafter "Assignee").

Whereas Assignor previously received from inventor William H. Morrison his entire right, title and interest in and to the improvements disclosed in the United States Letters Patents and Patent Applications identified in Exibit A.1 below, by Assignment from William H. Morrison to Assignor, as recorded in the United States Patent and Trademark Office; and

Whereas Assignor desires to assign its entire right, title and interest in and to the same Patents and Patent Applications and improvements disclosed therein to Assignee for valuable consideration; and

Whereas Assignee desires to receive the entire right, title and interest in and to the same Patents and Patent Applications and improvements disclosed therein from Assignor, and to provide such valuable consideration to Assignor;

Accordingly, the parties agree as follows:

- 1. Assignor hereby conveys and assigns to Assignee, and Assignee accepts, Assignor's entire right, title and interest in and to the Patents and Patent Applications and the improvements disclosed therein, including all continuation, continuation-in-part and divisional applications and all other United States patent applications based in whole or in part on the Patents and Patent Applications or on which the Patents and Patent Applications are based in whole or in part, and including all patents, as well as reexaminations and reissues thereof resulting from the Patents and Patent Applications.
- Assignor's entire right, title and interest in and to all counterparts to, or which are otherwise related to, the Patents and Patent Applications that have been or may be filed outside the United States, whether pursued as a patent, an inventor's certificate, a utility model or the like, including all rights of priority based on the Patents and Patent Applications, further including all continuation, continuation-in-part and division applications and all other applications based in whole or in part on the non-U.S. counterparts, and still further including all patents, inventor's certificates, utility models and reissues based upon or resulting from any of the non-U.S. counterparts.

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- Assignor hereby grants to Assignee, and Assignee accepts, the sole and exclusive right to prosecute (such term including filing of a patent application), maintain, and defend the Patents and Patent Applications and all related patents and applications as described in Paragraphs 1 and 2 above, including without limitation any opposition proceedings, reissue applications, reexaminations, post grant reviews, inter partes reviews and nullity or invalidity proceedings. Assignor authorizes all governmental bodies having the power to issue patents, reissues, inventor's certificates or utility models to issue a patent, reissue, inventor's certificate or utility model based on the Patents and Patent Applications or any related applications as described in Paragraphs 1 and 2 above in the name of Assignee.
- 4. Assignor agrees upon request and without further consideration, but at Assignee's expense: (a) to assist Assignee in prosecuting the Patents and Patent Applications and all related applications as described in Paragraphs 1 through 3 above, as well as opposition proceedings, reissue applications, reexaminations, post grant reviews, inter partes reviews and nullity or invalidity proceedings, (b) to provide Assignee with information concerning the Patents and Patent Applications to enable Assignee to obtain, secure and protect the rights granted under this Assignment; (c) to sign papers to enable Assignee to obtain, secure and protect the rights granted under this Assignment; and (d) to perform all acts reasonable necessary to enable Assignee to obtain, secure and protect the rights granted under this Assignment.
- 5. Assignor warrants and covenants that no assignment, grant, mortgage, license or other agreement or encumbrance affecting the rights and property herein conveyed has been or will be made or entered into by the Assignor, and that the full right to convey the same as herein expressed is possessed by the Assignor.
- 6. Assignor agrees and acknowledges that the sale, assignment and transfer of rights and property set forth herein is and shall be irrevocable and binding upon the assigns, representatives and successors of the undersigned Assignor and extend to the successors, assigns and nominees of the Assignee.
- 7. Assignee may assign the rights granted to it under this Assignment in whole or in part. All references herein to Assignee include any successors, assigns, or nominees of Assignee.
- 8. Assignor acknowledges that Assignee has provided, and Assignor has received, valuable consideration sufficient and adequate for the rights granted to Assignee under this Assignment.
- 9. This Assignment shall be effective upon execution by the respective authorized representatives of Assignor and Assignee, and the parties hereto agree that a true photocopy of this Assignment shall serve as evidence of same.

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	QUALTECH SYSTEMS, INC.
April 26, 2016	
Date	By: Somnath Deb
	Title: President / CTO
3	ASSIGNEE:
*	
	BATTELLE ENERGY ALLIANCE, LLC
:	
5/2//6	Mal O. Kooger
Date	By: Mark A. Kaczor

ASSIGNOR:

Title: Acting Director, Technology Deployment

### Exhibit A.1

## **Assigned Intellectual Property**

- U.S. Patent 7,395,163, BEA Attorney Docket No. BA-559, entitled "Method of Detecting System Function by Measuring Frequency Response", granted 07/01/2008.
- U.S. Patent 8,352,204, BEA Attorney Docket No. BA-395, entitled "Method of Detecting System Function by Measuring Frequency Response", granted 01/08/2013.
- 3. U.S. Patent 8,150,643, BEA Attorney Docket No. BA-396, entitled "Fast Summation Transformation", granted 04/3/2012.
- 4. U.S. Patent 8,868,363, BEA Attorney Docket No. BA-421, entitled "Method of Estimating Pulse Response Using an Impedance Spectrum", granted 10/21/2014.
- U.S. Patent 8,762,109, BEA Attorney Docket No. BA-480, entitled "Crosstalk Compensation in Analysis of Energy Storage Devices", granted 06/24/2014.
- U.S. Patent Application 13/438,741, BEA Docket No. BA-396C1, entitled "Method of Detecting System Function by Measuring Frequency Response", filed on April 3, 2012.
- 7. U.S. Patent Application 61/831,001, BEA Attorney Docket No. BA-706, entitled "Apparatuses and Methods for Testing Electrochemical Cells by Measuring Frequency Response," filed 7/1/2013.
- 8. U.S. Patent Application 14/296,321, BEA Attorney Docket No. BA-706, entitled "Apparatuses and Methods for Testing Electrochemical Cells by Measuring Frequency Response," filed 6/4/2014.

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RECORDED: 05/10/2016