

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4057520

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST	
<b>CONVEYING PARTY DATA</b>		
<b>Name</b>		<b>Execution Date</b>
AMTEK RESEARCH INTERNATIONAL LLC		09/16/2016
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	U.S. BANK NATIONAL ASSOCIATION	
<b>Street Address:</b>	111 S.W. 5TH AVENUE	
<b>Internal Address:</b>	SUITE 400	
<b>City:</b>	PORTLAND	
<b>State/Country:</b>	OREGON	
<b>Postal Code:</b>	97204	
<b>PROPERTY NUMBERS Total: 15</b>		
<b>Property Type</b>	<b>Number</b>	
<b>Patent Number:</b>	9093694	
<b>Application Number:</b>	14604539	
<b>Application Number:</b>	14775604	
<b>Application Number:</b>	14775608	
<b>Application Number:</b>	13255868	
<b>Application Number:</b>	14412416	
<b>Application Number:</b>	14911241	
<b>Application Number:</b>	62203842	
<b>Application Number:</b>	62301423	
<b>Application Number:</b>	62308112	
<b>Application Number:</b>	62363836	
<b>Application Number:</b>	62371453	
<b>Application Number:</b>	62373791	
<b>PCT Number:</b>	US1536804	
<b>PCT Number:</b>	US1531215	
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>		
<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>		

PATENT

**Phone:** 612-340-2600  
**Email:** ip.docket@dorsey.com  
**Correspondent Name:** DORSEY & WHITNEY LLP  
**Address Line 1:** 50 SOUTH SIXTH STREET, SUITE 1500  
**Address Line 2:** INTELLECTUAL PROPERTY PRACTICE GROUP  
**Address Line 4:** MINNEAPOLIS, MINNESOTA 55402-1498

<b>NAME OF SUBMITTER:</b>	KATHERINE BENTON
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<b>SIGNATURE:</b>	/Katherine Benton/
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<b>DATE SIGNED:</b>	09/19/2016
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**Total Attachments: 6**

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## **SUPPLEMENTAL CONFIRMATORY GRANT OF SECURITY INTEREST IN PATENTS**

This SUPPLEMENTAL CONFIRMATORY GRANT OF SECURITY INTEREST IN PATENTS ("Supplemental Confirmatory Grant"), is made effective as of September 16, 2016, by and from AMTEK Research International LLC, a Delaware limited liability company, (the "Grantor"), in favor of U.S. BANK NATIONAL ASSOCIATION, in its capacity as Administrative Agent (the "Secured Party") for itself and as administrative agent for the Lenders (as defined in the Credit Agreement referenced below).

### **WITNESSETH:**

WHEREAS, pursuant to that certain Credit Agreement dated as of November 21, 2011, by and among the Grantor, the other borrowers from time to time party thereto, the lenders from time to time party thereto, and the Secured Party, as amended and restated by that certain Amended and Restated Credit Agreement dated as of August 28, 2013, by and among the Grantor, the other borrowers from time to time party thereto, the lenders from time to time party thereto, and the Secured Party, as further amended and restated by that certain Second Amended and Restated Credit Agreement dated as of September 16, 2016, by and among the Grantor, Membrane Holdings LLC, a Delaware limited liability company ("Membrane Holdings"), ENTEK International LLC, a Delaware limited liability company ("Entek International"), ENTEK Manufacturing LLC, a Delaware limited liability company ("Entek Manufacturing"), ENTEK Membranes LLC, a Delaware limited liability company ("Entek Membranes"), ENTEK AB Holdings LLC, a Delaware limited liability company ("Entek AB", and together with the Grantor, Membrane Holdings, Entek International, Entek Manufacturing, and Entek Membranes, each a "Borrower" and collectively, the "Borrowers"), the lenders from time to time party thereto (the "Lenders"), and the Secured Party (as the same may be further amended, restated, or otherwise modified from time to time, the "Credit Agreement"), the Lenders have agreed to make certain loans and financial accommodations to the Borrowers;

WHEREAS, to secure the obligations under the Credit Agreement, the Grantor granted security interests to the Secured Party under the Security Agreement dated November 21, 2011 (as amended, restated, supplemented or otherwise modified from time to time, the "Security Agreement");

WHEREAS, pursuant to the Security Agreement, the Grantor executed and delivered to the Secured Party, for itself and the ratable benefit of the Lenders, a Confirmatory Security Agreement in Patents - Patent Security Agreement executed November 21, 2011, which was recorded with the United States Patent and Trademark Office on November 23, 2011, at Reel 027281, Frame 0113 (as the same may be further amended, restated, supplemented, or otherwise modified from time to time the "Existing Confirmatory Grant");

WHEREAS, in addition to the patents described in the Existing Confirmatory Grant, the Grantor owns the Patents (as defined below), including those referred to on Exhibit A attached hereto;

WHEREAS, pursuant to the Security Agreement, the Grantor is required to execute and deliver to the Secured Party, for itself and the ratable benefit of the Lenders, this Supplemental Confirmatory Grant; and

WHEREAS, this Supplemental Confirmatory Grant supplements and does not replace the Existing Confirmatory Grant;

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, it is hereby agreed that:

1) Definitions. All capitalized terms not defined herein shall have the respective meaning given to them in the Credit Agreement.

2) The Security Interest. The Grantor hereby grants to the Secured Party, on behalf of itself and the Lenders, a continuing first priority security interest in all of the Grantor's right, title and interest in, to and under the following, whether presently existing or hereafter created or acquired (collectively, the "Patent Collateral"):

(a) all of its right, title, and interest in and to: (i) any and all United States, state and foreign patents and patent applications; (ii) all inventions and improvements described and claimed in any of the foregoing; (iii) all reissues, divisions, continuations, extensions, and continuations-in-part of any of the foregoing; (iv) all income, royalties, damages, claims, and payments now or hereafter due or payable under and with respect thereto, including, without limitation, damages and payments for past and future infringements of any of the foregoing; (v) all rights to sue for past, present, and future infringements of any of the foregoing; and (vi) all rights corresponding to any of the foregoing throughout the world (collectively, the "Patents") to which it is a party including those referred to on Exhibit A hereto; and

(b) all products and proceeds of the foregoing, including, without limitation, any claim by the Grantor against third parties for past, present or future (i) infringement or dilution of any Patent or (ii) injury to the goodwill associated with any patent license.

3) The Security Agreement. The security interests granted pursuant to this Supplemental Confirmatory Grant are granted in conjunction with the security interests granted to the Secured Party, on behalf of itself and the Lenders, pursuant to the Security Agreement. The Grantor hereby acknowledges and affirms that the rights and remedies of the Secured Party with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

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IN WITNESS WHEREOF, the parties hereto have executed this Supplemental Confirmatory Grant of Security Interest in Patents effective as of the date first written above.

**GRANTOR:**

AMTEK RESEARCH INTERNATIONAL LLC

By:   
Name: Jeffrey H. Grimm  
Title: Chief Financial Officer

Supplemental Confirmatory Grant of Security Interest in Patents  
(Amtek Research International LLC)

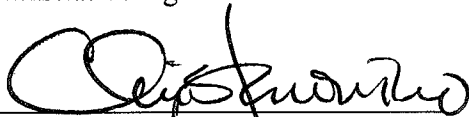
**PATENT**  
**REEL: 039779 FRAME: 0606**

ACCEPTED AND ACKNOWLEDGED BY:

**SECURED PARTY:**

U. S. BANK NATIONAL ASSOCIATION,  
as Administrative Agent

By: \_\_\_\_\_

A handwritten signature in black ink, appearing to read "Christian Jacomino", written over a horizontal line.

Name: Christian Jacomino

Title: Vice President

Supplemental Confirmatory Grant of Security Interest in Patents  
(Amtek Research International LLC)

**PATENT**  
**REEL: 039779 FRAME: 0607**

SUPPLEMENTAL CONFIRMATORY GRANT OF SECURITY INTEREST  
IN UNITED STATES PATENTS

**Exhibit A - SCHEDULE OF PATENTS**

I. Patent Registrations

<b>U.S. Patent No.</b>	<b>Issue Date</b>	<b>Title</b>
9,093,694	7/28/2015	COMPOSITE BATTERY SEPARATOR

II. Patent Applications

<b>U.S. Publication No.</b>	<b>Publication Date</b>	<b>Appl. No.</b>	<b>Filed</b>	<b>Title</b>
20150207121	7/23/2015	14/604539	1/23/2015	HIGH POROSITY SILICA-CONTAINING MICROPOROUS SHEETS
20160028067	1/28/2016	14/775,604	9/11/2015	FREESTANDING, DIMENSIONALLY STABLE MICROPOROUS WEBS
20160028060	1/28/2016	14/775,608	9/11/2015	LEAD-ACID BATTERY SEPARATORS WITH ULTRA LOW RESISTIVITY AND SUSTAINED WETTABILITY
20120145468	6/14/2012	13/255,868	11/17/2011	FREESTANDING, HEAT RESISTANT MICROPOROUS FILM FOR USE IN ENERGY STORAGE DEVICES
20150194653	7/9/2015	14/412416	12/31/2014	METHOD OF MAKING A RUBBER-CONTAINING POLYOLEFIN SEPARATOR

<b>U.S. Publication No.</b>	<b>Publication Date</b>	<b>Appl. No.</b>	<b>Filed</b>	<b>Title</b>
US 2016-0190656	6/30/2016	14/911,241	2/9/2016	INSTANTANEOUSLY WETTABLE POLYMER FIBER SHEET
WO 2015-196151	12/23/2015	PCT/US15/36804	6/19/2015	POROUS GRANULES CONTAINING MIXTURE OF RUBBER AND SILICA POWDERS
WO 2015-176016	11/19/2015	PCT/US15/31215	5/15/2015	COVALENTLY CROSS-LINKED GEL ELECTROLYTES
N/A	N/A	62/203,842	8/11/2015	LOW RESISTANCE SEPARATORS
N/A	N/A	62/301,423	2/29/2016	MULTI-ROW MELT-BLOWN FIBER DIE HEAD
N/A	N/A	62/308,112	3/14/2016	DIMENSIONALLY STABLE MICROPOROUS WEBS
N/A	N/A	62/363,836	7/18/2016	LAMINABLE, DIMENSIONALLY-STABLE MICROPOROUS WEBS
N/A	N/A	62/371,453	8/5/2016	DRY PROCESS MONOLITH FORMATION
N/A	N/A	62/373,791	8/11/2016	DRY PROCESS MONOLITH FORMATION