

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
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EPAS ID: PAT4491560

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
GRAFTECH INTERNATIONAL HOLDINGS INC.	07/03/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ADVANCED ENERGY TECHNOLOGIES LLC
<b>Street Address:</b>	6100 OAK TREE BOULEVARD
<b>Internal Address:</b>	SUITE 300 PARK CENTER I
<b>City:</b>	INDEPENDENCE
<b>State/Country:</b>	OHIO
<b>Postal Code:</b>	44131
<b>PROPERTY NUMBERS Total: 9</b>	
<b>Property Type</b>	<b>Number</b>
Patent Number:	6923631
Patent Number:	9673494
Patent Number:	6902841
Patent Number:	6605379
Patent Number:	6228914
Patent Number:	6982874
Patent Number:	7292441
Application Number:	62408873
Application Number:	62430537
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(312)862-2200
<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>	
<b>Phone:</b>	3128622000
<b>Email:</b>	michelle.nowicki@kirkland.com
<b>Correspondent Name:</b>	MICHELLE NOWICKI
<b>Address Line 1:</b>	300 N. LASALLE
<b>Address Line 2:</b>	KIRKLAND & ELLIS LLP
<b>Address Line 4:</b>	CHICAGO, ILLINOIS 60654
<b>ATTORNEY DOCKET NUMBER:</b>	15913-23 MN

PATENT

<b>NAME OF SUBMITTER:</b>	MICHELLE NOWICKI
<b>SIGNATURE:</b>	/Michelle Nowicki/
<b>DATE SIGNED:</b>	07/06/2017
<b>Total Attachments: 5</b> source=AET- Short Form IP Assignment (Final) - EXECUTED_(47749554_4)#page1.tif source=AET- Short Form IP Assignment (Final) - EXECUTED_(47749554_4)#page2.tif source=AET- Short Form IP Assignment (Final) - EXECUTED_(47749554_4)#page3.tif source=AET- Short Form IP Assignment (Final) - EXECUTED_(47749554_4)#page4.tif source=AET- Short Form IP Assignment (Final) - EXECUTED_(47749554_4)#page5.tif	

**INTELLECTUAL PROPERTY ASSIGNMENT**

**THIS INTELLECTUAL PROPERTY ASSIGNMENT** (this "Assignment") is dated as of July 3, 2017, and effective as of June 30, 2017 ("Effective Date") by and between **GRAFTECH INTERNATIONAL HOLDINGS INC.**, a Delaware corporation ("Assignor"), and **ADVANCED ENERGY TECHNOLOGIES LLC**, a Delaware limited liability company ("Assignee").

**WHEREAS**, Assignor and Assignee are parties to that certain Supplemental Asset Assignment Agreement dated as of the date hereof (the "Agreement");

**WHEREAS**, pursuant to the Agreement, Assignor agreed to assign to Assignee certain assets, including: (i) the trademark registrations and applications set forth on Schedule A attached hereto, including any registrations and applications therefor, any renewals and extensions of registrations, and all other corresponding rights, and in each case, together with the goodwill of the business associated therewith (collectively, the "Marks"); and (ii) the patents and patent applications set forth on Schedule B attached hereto, including any continuations, divisions, continuations-in-part, reissues, reexaminations, extensions or equivalents thereof, and including any right to exclude that may be associated with the subject matter of all claims which may be obtained therefrom (collectively, the "Patents" and together with the Marks, the "Assigned Intellectual Property"); and

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby sells, assigns, delivers, transfers, and sets over to Assignee its entire right, title and interest in and to the Assigned Intellectual Property, for the United States and for all other countries, including, without limitation, all rights therein provided by international conventions and treaties, for Assignee's own use and enjoyment, and for the use and enjoyment of Assignee's successors, assigns or other legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor if this Assignment had not been made, together with all income, royalties or payments due or payable as of the Effective Date or thereafter, including, without limitation, all claims for damages by reason of past, present or future infringement or other unauthorized use of the Assigned Intellectual Property, with the right to sue for, and collect the same for Assignee's own use and enjoyment and for the use and enjoyment of its successors, assigns or other legal representatives. Assignor agrees that no rights in the Assigned Intellectual Property are retained by Assignor.

Assignor hereby requests the Commissioner of Patents and Trademarks, the Register of Copyrights, and the corresponding entities or agencies in any other applicable jurisdiction, to record Assignee as the assignee and owner of the Assigned Intellectual Property.

\* \* \* \* \*

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IN WITNESS WHEREOF, Assignor and Assignee have caused this Assignment to be executed by their duly authorized representatives as of the Effective Date.

GRAFTECH INTERNATIONAL  
HOLDINGS INC.

ADVANCED ENERGY TECHNOLOGIES  
LLC

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

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

Name: Jeffrey C. Dutton

Name: Robert A. Reynolds III

Title: President

Title: President

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**SCHEDULE A**

**TRADEMARK REGISTRATIONS AND APPLICATIONS**

<b>Mark</b>	<b>Jurisdiction</b>	<b>App. No.</b>	<b>Filing Date</b>	<b>Registration No.</b>	<b>Registration Date</b>
GRAF+	US	86339778	17-JUL-2014	4886579	12-JAN-2016

**SCHEDULE B****PATENTS AND PATENT APPLICATIONS**

<b>Patent Title</b>	<b>Jurisdiction</b>	<b>Application No.</b>	<b>Filing Date</b>	<b>Patent No.</b>	<b>Issue Date</b>
Apparatus for forming a resin impregnated flexible graphite sheet	U.S.	09906281	7/16/2001	6923631	8/2/2005
Portable electronic device thermal management system	U.S.	14771299	8/28/2015	9673494	6/6/2017
Hydrophobic fuel cell electrode	U.S.	10184840	6/28/2002	6902841	6/7/2005
Hydrophobic fuel cell electrode	U.S.	09706532	11/3/2000	6605379	8/12/2003
Intumescent composition and method	U.S.	09002347	1/2/1998	6228914	5/8/2001
Thermal solution for electronic devices	U.S.	10722364	11/25/2003	6982874	1/3/2006
Thermal solution for portable electronic devices	U.S.	11176596	7/7/2005	7292441	11/6/2007
	U.S.	62408873	10/17/2016	—	—
	U.S.	62430537	12/6/2016	—	—