#### 503699375 02/18/2016

EPAS ID: PAT3746013

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

**SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT** 

#### **CONVEYING PARTY DATA**

Name	Execution Date
GINA L. MCNAMARA	11/21/2014
DAVID T. DOUGHTY	11/21/2014

#### **RECEIVING PARTY DATA**

Name:	CALGON CARBON CORPORATION	
Street Address: 3000 GSK DRIVE		
City:	MOON TOWNSHIP	
State/Country: PENNSYLVANIA		
Postal Code:	15108	

### **PROPERTY NUMBERS Total: 2**

Property Type	Number
Application Number:	14992554
PCT Number:	US2016012852

### CORRESPONDENCE DATA

Fax Number: (412)281-0717

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: 4124545000

Email: docketingpgh@pepperlaw.com PEPPER HAMILTON LLP **Correspondent Name:** Address Line 1: **500 GRANT STREET** 

Address Line 2: **SUITE 5000** 

Address Line 4: PITTSBURGH, PENNSYLVANIA 15219-2507

ATTORNEY DOCKET NUMBER: 123450.11101 **NAME OF SUBMITTER: CURTIS WADSWORTH** SIGNATURE: /Curtis Wadsworth/ **DATE SIGNED:** 02/18/2016

#### **Total Attachments: 8**

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> **PATENT REEL: 037770 FRAME: 0982** 503699375

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PATENT REEL: 037770 FRAME: 0983

#### ASSIGNMENT

WHEREAS, I, Gina L. MCNAMARA (hereinafter "Assignor"), am an inventor of a certain new and useful invention(s) as set forth and disclosed in the patent application(s) listed in <u>Schedule A</u> attached hereto (hereinafter the "Invention"):

WHEREAS, Calgon Carbon Corporation, having an address of 3000 GSK Drive, Moon Township, PA 15108 (hereinafter "Assignee"), is desirous of acquiring Assignor's entire right, title and interest in and to said Invention and in and to any and all Letters Patent of the United States and foreign countries that may be obtained therefor.

WHEREAS, Assignor conveyed to Assignee all of Assignor's right, title, and interest in the Invention pursuant to Assignor's obligations under the Assignment executed on November 21, 2014.

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, at least as of November 21, 2014. Assignor does hereby confirm Assignor's previous assignment and does hereby sell, assign, transfer and set over unto Assignee, its legal representatives, successors, and assigns, Assignor's entire right, title and interest in and to said Invention as set forth in the scheduled application(s), including any applications which claim priority to the scheduled application(s), any application(s) to which the scheduled application(s) claim priority, and any continuations, continuations-in-part, divisions, registrations, reissues, re-examinations or extensions thereof, whether in the U.S. or any foreign country, and in and to any and all patents of the United States and foreign countries which may be issued for said Invention;

AND for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, Assignor does hereby sell, assign, transfer and set over unto Assignee, its legal representatives, successors, and assigns all rights to claim priority rights deriving from the Invention and scheduled application(s); all causes of action and remedies related to the Invention and scheduled application(s) (including, without limitation, the right to sue for past, present, or future infringement, misappropriate or violation of rights related to any of the foregoing and the right to collect royalties and other payments under or on account of any of the foregoing); and any and all other rights and interests arising out of, in connection with, or in relation to the Invention and scheduled application(s).

UPON SAID CONSIDERATION, Assignor shall not execute any writing or do any act whatsoever conflicting with the terms and conditions of this Assignment, and that Assignor will, at any time upon request, without further or additional consideration, but at the expense of said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect Assignee's enjoyment of this grant, and render all necessary assistance in making application for or obtaining original patents or applications, continuations, continuations-in-part, divisions, registrations, reissues, re-examinations or extensions thereof, whether in the U.S. or any foreign country, for said Invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any and all proceedings or transactions involving such applications or patents, and by executing preliminary statements and other

affidavits, it being understood that the foregoing covenant and agreement shall bind and inure to the benefit of the assigns and legal representatives of Assignor and Assignee.

The undersigned hereby grant(s) the firm of PEPPER HAMILTON LLP the power to insert on this Assignment any further identification, including the country, application number, filing date and/or title, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office or other patent office for recordation of this document; and

The undersigned requests that any patents that may be issued for said Invention be issued to said Assignee, its legal representatives, successors or assigns, as an owner of my entire right, title and interest in and to said patent and the Invention covered thereby.

Date:	January	28.	2016
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Assignor: Assign

## <u>ACKNOWLEDGMENT</u>

STATE OF PENNSYLVANIA	)	
COUNTY OF AUGGHEM	)	SS

On this 2010 day of 2010 appeared Gina L. MCNAMARA, to me known (or satisfactorily proven) to be the person named in and who executed the above instrument, and acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

My commission expires \_\_\_

SEAL

Notary Public

COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL Cynthia Cerchie Ligo, Notary Public

Moon Twp., Allegheny County My Commission Expires April 20, 2019

MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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Attorney Docket No.: 1	23450.11101/11102
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**PATENT** 

Agreed and accepted:	Calgon Carbon Corporation	Calgon Carbon Corporation	
Date: <u>January 29, 2016</u>	Assignee: Chal Whe  By: Chal Whalen  Title: General Come Scorctary	5e1 ¢	
£	CKNOWLEDGMENT		
STATE OF <u>PENUSYLVANA</u> COUNTY OF <u>AUGHEM</u>	) ) SS: )		
satisfactorily proven) to be the per-	, 2016, before me, a Notary Public, appeared <u>Chad Whalen</u> , to me known (or on named in and who executed the above instrument, and uted the same for the uses and purposes therein set forth.		
SEAL	Notary Public <u>Jessiem Rockel Fuff</u> My commission expires QUOWE 11 2019		
COMMONWEALTH OF PENNSYLVANIA	My commission expires QUOUL II 2019		

NOTARIAL SEAL
Jessica Rachel Duffy, Notary Public
Moon Twp., Allegheny County
My Commission Expires Aug. 11, 2019
\*\*EMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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# SCHEDULE A

Country	Patent Application No.	Filing Date	Title
US	62/101,622	January 9, 2015	CARBON SORBENTS FOR THE REMOVAL OF NITROGEN OXIDES AND METHODS FOR MAKING THE SAME
US	14/992,554	January 11, 2016	CARBON SORBENTS FOR THE REMOVAL OF NITROGEN OXIDES AND METHODS FOR MAKING THE SAME
WO	PCT/US2016/012852	January 11, 2016	CARBON SORBENTS FOR THE REMOVAL OF NITROGEN OXIDES AND METHODS FOR MAKING THE SAME
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Attorney Docket No.: 123450.11101/11102

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#### ASSIGNMENT

WHEREAS, I, David T. DOUGHTY (hereinafter "Assignor"), am an inventor of a certain new and useful invention(s) as set forth and disclosed in the patent application(s) listed in **Schedule A** attached hereto (hereinafter the "Invention"):

WHEREAS, Calgon Carbon Corporation, having an address of 3000 GSK Drive, Moon Township, PA 15108 (hereinafter "Assignee"), is desirous of acquiring Assignor's entire right, title and interest in and to said Invention and in and to any and all Letters Patent of the United States and foreign countries that may be obtained therefor.

WHEREAS, Assignor conveyed to Assignee all of Assignor's right, title, and interest in the Invention pursuant to Assignor's obligations under the Assignment executed on November 21, 2014.

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, at least as of <u>November 21, 2014</u>, Assignor does hereby confirm Assignor's previous assignment and does hereby sell, assign, transfer and set over unto Assignee, its legal representatives, successors, and assigns, Assignor's entire right, title and interest in and to said Invention as set forth in the scheduled application(s), including any applications which claim priority to the scheduled application(s), any application(s) to which the scheduled application(s) claim priority, and any continuations, continuations-in-part, divisions, registrations, reissues, re-examinations or extensions thereof, whether in the U.S. or any foreign country, and in and to any and all patents of the United States and foreign countries which may be issued for said Invention;

AND for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, Assignor does hereby sell, assign, transfer and set over unto Assignee, its legal representatives, successors, and assigns all rights to claim priority rights deriving from the Invention and scheduled application(s); all causes of action and remedies related to the Invention and scheduled application(s) (including, without limitation, the right to sue for past, present, or future infringement, misappropriate or violation of rights related to any of the foregoing and the right to collect royalties and other payments under or on account of any of the foregoing); and any and all other rights and interests arising out of, in connection with, or in relation to the Invention and scheduled application(s).

UPON SAID CONSIDERATION, Assignor shall not execute any writing or do any act whatsoever conflicting with the terms and conditions of this Assignment, and that Assignor will, at any time upon request, without further or additional consideration, but at the expense of said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect Assignee's enjoyment of this grant, and render all necessary assistance in making application for or obtaining original patents or applications, continuations, continuations-in-part, divisions, registrations, reissues, re-examinations or extensions thereof, whether in the U.S. or any foreign country, for said Invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any and all proceedings or transactions involving such applications or patents, and by executing preliminary statements and other

affidavits, it being understood that the foregoing covenant and agreement shall bind and inure to the benefit of the assigns and legal representatives of Assignor and Assignee.

The undersigned hereby grant(s) the firm of PEPPER HAMILTON LLP the power to insert on this Assignment any further identification, including the country, application number, filing date and/or title, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office or other patent office for recordation of this document; and

The undersigned requests that any patents that may be issued for said Invention be issued to said Assignee, its legal representatives, successors or assigns, as an owner of my entire right, title and interest in and to said patent and the Invention covered thereby.

Date: 1/29/16	Assignor: David T. DOUGHTY	2
	ACKNOWLEDGMENT	
STATE OF <u>PENDENLIN</u> COUNTY OF <u>AUGUL</u>	) SS: M——————————————————————————————————	
me undersigned officer, satisfactorily proven) to be	day of, 2016, before me, a Notary Publersonally appeared David T. DOUGHTY, to me known the person named in and who executed the above instrument, as the executed the same for the uses and purposes therein set forth.	(or and
SEAL	Notary Public Gululy  My commission expires 4/20/19	
	COMMONWEALTH OF PENNSYLVA	NIĄ

NOTARIAL SEAL

Cynthia Cerchie Ligo, Notary Public Moon Twp., Allegheny County My Commission Expires April 20, 2019

MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Attorney Docket No.: 123450.11101/11102			PATENT
Agreed and accepted:	Calgon Ca	arbon Corporation	· ·
Date: <u>)anvan</u> 29, 2016	Assignee: By: Title:	Charles Lines VIII President, Gener Survey VIII President, Gener Surveyang	va i Covn
ACKNO	WLEDG	MENT	
STATE OF PENNSYLVANIA COUNTY OF ANGHEN	) ) SS		
COUNTY OF ALEGHEN	) 33	•	
On this 24th day of Janu the undersigned officer, personally appeared satisfactorily proven) to be the person name acknowledged to me that he/she executed the	a <u>CNQQ</u> ed in and	who executed the above instrur	mown (or nent, and
		1 : an Ourlow	h n

SEAL

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL
Jessica Rachel Duffy, Notary Public
Moon Twp., Allegheny County
My Commission Expires Aug. 11, 2019
WEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Notary Public

My commission expires Qu

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Attorney Docket No.: 123450.11101/11102

## SCHEDULE A

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WO	PCT/US2016/012852	January 11, 2016	CARBON SORBENTS FOR THE REMOVAL OF NITROGEN OXIDES AND METHODS FOR MAKING THE SAME
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