PATENT ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE BY SECURED PARTY

CONVEYING PARTY DATA

Name	Execution Date
JPMorgan Chase Bank, N.A.	05/08/2009

RECEIVING PARTY DATA

Name:	Calgon Carbon Corporation
Street Address:	500 Calgon Carbon Drive
City:	Pittsburgh
State/Country:	PENNSYLVANIA
Postal Code:	15205

PROPERTY NUMBERS Total: 37

Property Type	Number
Patent Number:	5063196
Patent Number:	5202301
Patent Number:	5336835
Patent Number:	5492882
Patent Number:	5368738
Patent Number:	5466378
Patent Number:	5444031
Patent Number:	5504050
Patent Number:	5338458
Patent Number:	5352370
Patent Number:	6114273
Patent Number:	5470748
Patent Number:	5368739
Patent Number:	5494869
Patent Number:	5466645

CH $1480.00 5063196

Patent Number:	5733515
Patent Number:	5674462
Patent Number:	6310000
Patent Number:	5714433
Patent Number:	5876607
Patent Number:	5925241
Patent Number:	5843381
Patent Number:	6214212
Patent Number:	6131368
Patent Number:	6000198
Patent Number:	5942643
Patent Number:	6342129
Patent Number:	6534442
Patent Number:	6066257
Patent Number:	6238641
Patent Number:	6696030
Patent Number:	6412628
Patent Number:	6475386
Patent Number:	6422059
Patent Number:	6682667
Patent Number:	6914034
Patent Number:	6949219

CORRESPONDENCE DATA

Fax Number: (412)355-6501

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 412-355-8382

Email: robert.toth@klgates.com

Correspondent Name: Robert J. Toth

Address Line 1: 535 Smithfield Street

Address Line 2: K&L Gates LLP

Address Line 4: Pittsburgh, PENNSYLVANIA 15222

ATTORNEY DOCKET NUMBER:	0232165.00115
NAME OF SUBMITTER:	Robert J. Toth

Total Attachments: 21

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Form PTO-1595 (Rev. 03-09)
OMB No. 0651-0027 (exp. 03/31/2009)

U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

RECORDATION FORM COVER SHEET
PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

JPMorgan Chase Bank, N.A.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies)

Name: Calgon Carbon Corportation

Internal Address:

Street Address: 500 Calgon Carbon Drive

City: Pittsburgh

State: Pennsylvania

Country: USA Zip: 15205

Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) May 8, 2009

☐ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☒ Other: Release of Security Interest

4. Application or patent number(s): ☐ This document is being filed together with a new application.

A. Patent Application No.(s)

—

B. Patent No.(s)

See attached sheet listing patent numbers

Additional numbers attached? ☒ Yes ☐ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: John K. Williamson

Internal Address: K&L Gates LLP

Street Address: Henry W. Oliver Building
535 Smithfield Street

City: Pittsburgh

State: Pennsylvania Zip: 15222

Phone Number: (412) 355-6438

Fax Number: (412) 355-6501

Email Address: john.williamson@klgates.com

6. Total number of applications and patents involved: 37

7. Total fee (37 CFR 1.21(h) & 3.41) $ 1480.00

☒ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account Number 11-1110

Authorized User Name John K. Williamson

9. Signature:

J K Williamson — Signature

5/8/09 — Date

John K. Williamson (Reg. No. 27845) — Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 21

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Form PTO-1595: Recordation Form Cover Sheet (Patents)

[continuation of section 4.B]

PATENT NO.	SERIAL NO.
5,063,196	07/371,430
5,202,301	07/441,034
5,336,835	07/892,080
5,492,882	08/097,423
5,368,738	08/060,590
5,466,378	08/289,234
5,444,031	08/007,169
5,504,050	08/407,233
5,338,458	08/007,146
5,352,370	08/008,722
6,114,273	08/933,569
5,470,748	08/266,137
5,368,739	08/115,214
5,494,869	08/219,625
5,466,645	08/219,207
5,733,515	08/608,272
5,674,462	08/279,783
6,310,000	08/342,817
5,714,433	08/597,115
5,876,607	08/795,002
5,925,241	09/009,404
5,843,381	08/631,070
6,214,212	09/078,749
6,131,368	09/056,305
6,000,198	09/056,406
5,942,643	09/078,748
6,342,129	09/079,424
6,534,442	09/354,178
6,066,257	09/128,569
6,238,641	09/078,919
6,696,030	09/079,021
6,412,628	09/532,476
6,475,386	09/558,558
6,422,059	09/630,112
6,682,667	10/067,953
6,914,034	09/940,178
6,949,219	10/319,322

RELEASE OF SECURITY INTEREST

THIS RELEASE OF SECURITY INTEREST is made and entered into this 8th day of May, 2009, by JPMORGAN CHASE BANK, N.A., acting in the capacity as US Administrative Agent for the benefit of itself and the other lenders party to the Credit Agreement referred to below (in such capacity, "Administrative Agent") in favor of CALGON CARBON CORPORATION ("Borrower").

WHEREAS, Administrative Agent and Borrower are parties to: (1) a certain Credit Agreement, dated as of August 18, 2006, under which Administrative Agent extended credit and made certain financial accommodations to Borrower ("Credit Agreement"); (2) a certain Pledge and Security Agreement dated as of August 18, 2006, under which the Borrower granted Administrative Agent a security interest in certain collateral, as defined in the Pledge and Security Agreement ("Pledge and Security Agreement"); and (3) a certain Patent Security Agreement dated as of August 18, 2006, recorded in the United States Patent and Trademark Office on June 6, 2007 at Reel 019382, Frame 0937, a copy of which is attached hereto as Appendix I, under which Borrower granted Administrative Agent a security interest in certain patents and patent applications (as defined in the Patent Security Agreement and Schedule A to the Patent Security Agreement), including but not limited to the patents and patent applications listed in Schedule I attached hereto (collectively referred to as the "Patents"); and

WHEREAS, Administrative Agent now desires to terminate the Patent Security Agreement and fully and forever release any and all security interests pledged in the Patents;

NOW THEREFORE, for good and valuable consideration, receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, Administrative Agent hereby fully and forever releases to Borrower any and all right, title or interest which Administrative Agent possesses or is otherwise entitled to in the Patents.

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IN WITNESS WHEREOF, JPMORGAN CHASE BANK, N.A. has executed this Release of Security Interest as of the date first above written.

JPMORGAN CHASE BANK, N.A.

By: Donna M. DiForio
Name: Donna M. DiForio
Title: Vice President

STATE OF New York
COUNTY OF KINGS

Before me, the undersigned, a Notary Public, in and for the County and State aforesaid, personally appeared Donna M. DiForio, with whom I am personally acquainted (or proved to me on the basis of satisfactory evidence), and who upon oath acknowledged himself/herself to be a Vice President of JPMORGAN CHASE BANK, N.A., and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, on behalf of JPMORGAN CHASE BANK, N.A.

Witness my hand and seal, at office in New York, New York this the 7th day of May, 2009.

Amy K. Steck
NOTARY PUBLIC

My Commission Expires:
4/24/2010

May 7th, 2009

AMY K. STECK
NOTARY PUBLIC, STATE OF NEW YORK
QUALIFIED IN KINGS COUNTY
REG. #01ST6144421
MY COMM. EXP. APRIL 24, 2010

IN WITNESS WHEREOF, CALGON CARBON CORPORATION has executed this Release of Security Interest as of the date first above written.

CALGON CARBON CORPORATION

By: _____

Name: Leroy M. Ball

Title: Senior Vice President and Chief Financial Officer

STATE OF PENNSYLVANIA
COUNTY OF ALLEGHENY

Before me, the undersigned, a Notary Public, in and for the County and State aforesaid, personally appeared Leroy M. Ball, with whom I am personally acquainted (or proved to me on the basis of satisfactory evidence), and who upon oath acknowledged himself/herself to be Senior Vice President and Chief Financial Officer of CALGON CARBON CORPORATION, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, on behalf of CALGON CARBON CORPORATION.

Witness my hand and seal, at office in Pittsburgh, Pennsylvania this the 7th day of May, 2009.

_____
NOTARY PUBLIC

My Commission Expires:

NOTARIAL SEAL
Cynthia Cerchie Ligo, Notary Public
City of Pittsburgh, Allegheny County
My commission expires November 13, 2010

_____

SCHEDULE I

PATENTS

PATENT NO.	SERIAL NO.	PATENT TITLE/DESCRIPTION
5,063,196	07/371,430	Chromium-free impregnated activated carbon for adsorption of toxic gases and/or vapors
5,202,301	07/441,034	Product/process/application for removal of mercury from liquid hydrocarbon
5,336,835	07/892,080	Product/process/application for removal of mercury from liquid hydrocarbon
5,492,882	08/097,423	Chromium-free impregnated activated universal respirator carbon for adsorption of toxic gases and/or vapors in industrial applications
5,149,342	07/686,669	System for recovering solvents and disposing of contaminants released by regeneration of solvent laden air adsorber vessels
5,368,738	08/060,590	Oxidized activated carbon for the control of PH and alkalinity in water treatment applications
5,466,378	08/289,234	Oxidized activated carbon for the control of PH and alkalinity in water treatment applications
5,356,849	08/007,164	Catalytic carbon
5,444,031	08/007,169	Process for making catalytic carbon
5,464,605	08/194,826	Process for the decomposition and removal of peroxides

PATENT NO.	SERIAL NO.	PATENT TITLE/DESCRIPTION
5,504,050	08/407,233	Process for making a catalytically-active carbonaceous char
5,338,458	08/007,146	Method for removing chloramine with catalytic carbon
5,352,370	08/008,722	Method for sox removal by catalytic carbon
6,114,273	08/933,569	Method for sox removal by catalytic carbon
5,470,748	08/266,137	Method for measuring the relative catalytic activity of carbonaceous chars
5,368,739	08/115,214	Activated carbon oxidized by air at near ambient temperatures for the control of PH and in water treatment applications
5,494,869	08/219,625	Process for regenerating nitrogen-treated carbonaceous chars used for hydrogen sulfide removal
5,466,645	08/219,207	Method for reactivating nitrogen-treated carbon catalysts
5,733,515	08/608,272	Purification of air in enclosed spaces
5,674,462	08/279,783	Method for the removal of non-metal and metalloid hydrides
6,310,000	08/342,817	Process for making a co-impregnant catalyst carbon
5,714,433	08/597,115	Activated carbon treated by carbon dioxide for the stabilization of treated water ph
5,876,607	08/795,002	Activated carbon treated by carbon dioxide for the stabilization of treated water ph and the control of aluminum in the treated water

PATENT NO.	SERIAL NO.	PATENT TITLE/DESCRIPTION
5,925,241	09/009,404	Floor drain odor control device
5,843,381	08/631,070	Apparatus for removal of hydrogen sulfide
5,227,140	07/739,811	Modular Self-Cleaning Oxidation Chamber
6,517,797	08/806,912	Process for separation of nox from N2O in a mixture
5,962,729	09/078,775	Method for the manufacture of n-phosphonomethylglycine from n-phosphonomethyliminodiacetic acid using a catalytic carbon
6,214,212	09/078,749	Method for removal of hydrogen sulfide from gaseous and liquid streams by catalytic carbon
6,503,472	09/078,796	Method for removal of nitrogen oxides from gaseous streams by catalytic carbon in the presence of ammonia
6,514,906	09/078,920	Carbonaceous chars having reduced catalytic activity
6,131,368	09/056,305	Method for packaging adsorbents
6,000,198	09/056,406	Method and package for packaging contents at reduced pressures
5,942,643	09/078,748	Method for the manufacture of n-phosphonomethylglycine from n-phosphonomethyliminodiacetic acid using a low temperature catalytic carbon
6,342,129	09/079,424	Process for production of carbonaceous chars having catalytic activity
6,534,442	09/354,178	Process for production of carbonaceous chars having catalytic activity

PATENT NO.	SERIAL NO.	PATENT TITLE/DESCRIPTION
6,066,257	09/128,569	A process for the removal and destruction of perchlorate and nitrate from aqueous streams
6,238,641	09/078,919	Reduced catalytic carbonaceous char and process for reducing the inherent carbon catalytic reactivity of carbonaceous chars
6,696,030	09/079,021	Method for reducing the chemical conversion of oxidizable or disproportionable compounds contacting carbonaceous chars
6,129,893	09/078,116	Method for preventing replication in cryptosporidium parvum using ultraviolet light
6,565,803	09/300,325	Method for the inactivation of cryptosporidium parvum using ultraviolet light
4,808,317	07/036,502	Process for continuous contacting of fluids and solids
6,431,202	09/452,256	Fluid-directing multiport rotary valve
6,719,001	10/217,183	Fluid-directing multiport rotary valve
6,412,628	09/532,476	Apparatus for preventing the formation of metal tarnish
6,475,386	09/558,558	Filter for purifying domestic drinking water
6,422,059	09/630,112	Apparatus for detecting changes in concentrations of components of fluid mixtures
6,682,667	10/067,953	Method for producing self-supporting activated carbon structures
6,593,271	09/355,108	Carbon char for metals-removal

PATENT NO.	SERIAL NO.	PATENT TITLE/DESCRIPTION
6,914,034	09/940,178	Carbon adsorbent useful for removing heavy metal anions like arsenic or selenium from e.g. drinking water source, comprises porous carbon containing oxides or hydroxides of metals such as iron, copper and aluminum
6,949,219	10/319,322	Method for disinfection of activated carbon through contact with peroxide containing materials
6,933,416	10/412,180	Process for the production of bisphenol-a
7,045,057	10/441,900	Preparation of homogeneously loaded ion exchangers

PATENT APPLICATIONS

APPLICATION SERIAL NO. / PUBLICATION NO.	APPLICATION FILING DATE / PUBLICATION DATE	APPLICATION TITLE / DESCRIPTION
10/975,976 – App. No. 2005-0059549 – Pub. No.	10/28/04 – Filing Date 03/17/05 – Pub. Date	Method for removing heavy metals using an adsorbent
11/005,825 – App. No. 2005-0093189 – Pub. No.	12/07/04 – Filing Date 05/05/05 – Pub. Date	Adsorbents for removing heavy metals and methods for producing and using the same
11/006,084 – App. No. 2005-0150835 – Pub. No	12/07/04 – Filing Date 07/14/05 – Pub. Date	Adsorbents for removing heavy metals and methods for producing and using the same
11/014,892 – App. No. 2005-0155934 – Pub. No.	12/16/04 – Filing Date 07/21/05 – Pub. Date	Method for removing contaminants from fluid streams
11/014,295 – App. No. 2005-0247635 – Pub. No.	12/16/04 – Filing Date 11/10/05 – Pub. Date	Adsorbents for removing heavy metal cations and methods for producing and using these adsorbents
10/207,585 – App. No. 2004-0099605 – Pub. No.	07/29/02 – Filing Date 05/27/04 – Pub. Date	High performance continuous reaction/separation process using a continuous liquid-solid contactor
10/213,580 – App. No. 2004-0031757 – Pub. No.	08/06/02 – Filing Date 02/19/04 – Pub. Date	High performance continuous reaction/separation process using a continuous liquid-solid contactor
10/412,502 – App. No. 2004-0063992 – Pub. No.	04/11/03 – Filing Date 04/01/04 – Pub. Date	High performance continuous reaction/separation process using a continuous liquid-solid contactor
10/696,072 – App. No. 2005-0092932 – Pub. No.	10/29/03 – Filing Date 05/05/05 – Pub. Date	Fluid treatment device
11/008,827 – App. No. 2006-0123571 – Pub. No.	12/10/04 – filing Date 06/15/06 – Pub. Date	Scraper for cleaning tubular members
10/807,375 – App. No. 2005-0211099 – Pub. No.	03/23/04 – Filing Date 09/29/05 – Pub. Date	Spiral composite adsorbent material

APPENDIX I

PATENT SECURITY AGREEMENT

PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT (this "Agreement"), dated as of August 18, 2006, between each of the undersigned (each, a "Grantor"), and JPMorgan Chase Bank, N.A., acting in the capacity as US Administrative Agent for the benefit of itself and the other lenders party to the Credit Agreement referred to below (in such capacity, the "Administrative Agent").

WITNESSETH:

WHEREAS pursuant to the terms of that certain Credit Agreement, dated as of August 18, 2006 (as it may be amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), by and among Calgon Carbon Corporation (the "Company"), and the other Borrowers named therein (collectively with the Company, the "Borrowers"), the Loan Guarantors party thereto, the Lenders from time to time party thereto (the "Lenders"), the Administrative Agent, J.P. Morgan Europe Limited, as European Administrative Agent, and the other agents party thereto, the Lenders have agreed to extend credit and make certain financial accommodations to the Borrowers.

WHEREAS pursuant to the Pledge and Security Agreement, dated as of August 18, 2006 (as it may be amended, restated, supplemented or otherwise modified from time to time, the "Security Agreement"), among Grantors and Administrative Agent, each Grantor granted to the Administrative Agent a security interest and continuing lien on all of such Grantor's right, title and interest in, to and under all Collateral, including the Patent Collateral (as defined below), and all Collateral in each case whether now owned or existing or hereafter acquired or arising and wherever located to secure the prompt and complete payment and performance of all Secured Obligations (as defined in the Credit Agreement) including the obligations of the Loan Parties under the Credit Agreement;

WHEREAS the parties to the Credit Agreement contemplate and intend that, if an Event of Default (as defined in the Credit Agreement) shall occur and be continuing, the Administrative Agent shall have all rights of a secured party in and to the Patent Collateral and any proceeds thereof, including, without limitation, the right to exercise its remedies under the Credit Agreement in connection with all of the Grantors' right, title and interest in the Patent Collateral; and

WHEREAS pursuant to the Credit Agreement, the Grantors are required to execute and deliver this Agreement.

NOW, THEREFORE, in consideration of the premises and the agreements, provisions and covenants herein contained, each Grantor agrees as follows:

Section 1. Defined Terms

Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

Section 2. Grant of Security Interest in Patentss

Each Grantor hereby grants to the Administrative Agent a security interest and continuing lien on all of such Grantor's right, title and interest in, to and under the Patents, including the Patents listed in Schedule A, in each case whether owned or existing or hereafter acquired or arising and wherever located (collectively, the "Patent Collateral").

Section 3. Security for Obligations

This Agreement secures, and the Patent Collateral is collateral security for, the prompt and complete payment or performance in full when due, whether at stated maturity, by required prepayment, declaration, acceleration, demand or otherwise (including the payment of amounts that would become due but for the operation of the automatic stay under Section 362(a) of the Bankruptcy Code, 11 U.S.C. §362(a) (and any successor provision thereof)), of all Secured Obligations.

Section 4. Security Agreement

The security interests granted pursuant to this Agreement are granted in conjunction with the security interests granted to the Administrative Agent pursuant to the Security Agreement and each Grantor hereby acknowledges and affirms that the rights and remedies of the Administrative Agent 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. In the event of any irreconcilable conflict between the terms of this Agreement and the terms of the Security Agreement, the terms of the Security Agreement shall control.

Section 5. Recordation

The Grantors hereby authorize and request that the Commissioner of Patent and Trademarks and any other applicable United States government officer record this Agreement.

Section 6. Miscellaneous

This Agreement shall be governed by, and construed in accordance with the laws of the State of New York.

This Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single agreement.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, each Grantor has caused this Agreement to be duly executed and delivered by its duly authorized officer as of the date first set forth above.

GRANTORS:

CALGON CARBON CORPORATION

By: _____
Name: Leroy M. Ball
Title: Senior Vice President and Chief Financial Officer

ADMINISTRATIVE AGENT:

JPMORGAN CHASE BANK, N.A.

By: _____
Name: Marc H. Laurri
Title: Vice President

IN WITNESS WHEREOF, each Grantor has caused this Agreement to be duly executed and delivered by its duly authorized officer as of the date first set forth above.

GRANTORS:

CALGON CARBON CORPORATION

By: _____
Name:
Title:

ADMINISTRATIVE AGENT:

JPMORGAN CHASE BANK, N.A.

By: Marc H. Laurri
Name: Marc H. Laurri
Title: Vice President

SCHEDULE A
TO
PATENT SECURITY AGREEMENT

ACTIVE UNITED STATES ISSUED PATENTS

Registered Patent No.	Patent Title/Description
5,063,196	Chromium-free impregnated activated carbon for adsorption of toxic gases and/or vapors
5,202,301	Product/process/application for removal of mercury from liquid hydrocarbon
5,336,835	Product/process/application for removal of mercury from liquid hydrocarbon
5,492,882	Chromium-free impregnated activated universal respirator carbon for adsorption of toxic gases and/or vapors in industrial applications
5,149,342	System for recovering solvents and disposing of contaminants released by regeneration of solvent laden air adsorber vessels
[5,368,738]	Oxidized activated carbon for the control of PH and alkalinity in water treatment applications
5,466,378	Oxidized activated carbon for the control of PH and alkalinity in water treatment applications
5,356,849	Catalytic carbon
5,444,031	Process for making catalytic carbon
5,464,605	Process for the decomposition and removal of peroxides
5,504,050	Process for making a catalytically-active carbonaceous char
5,338,458	Method for removing chloramine with catalytic carbon
5,352,370	Method for sox removal by catalytic carbon
6,114,273	Method for sox removal by catalytic carbon
5,470,748	Method for measuring the relative catalytic activity of carbonaceous chars

Registered Patent No.	Patent Title/Description
5,368,739	Activated carbon oxidized by air at near ambient temperatures for the control of PH and in water treatment applications
5,494,869	Process for regenerating nitrogen-treated carbonaceous chars used for hydrogen sulfide removal
5,466,645	Method for reactivating nitrogen-treated carbon catalysts
5,733,515	Purification of air in enclosed spaces
5,674,462	Method for the removal of non-metal and metalloid hydrides
6,310,000	Process for making a co-impregnant catalyst carbon
5,714,433	Activated carbon treated by carbon dioxide for the stabilization of treated water ph
5,876,607	Activated carbon treated by carbon dioxide for the stabilization of treated water ph and the control of aluminum in the treated water
5,925,241	Floor drain odor control device
5,843,381	Apparatus for removal of hydrogen sulfide
5,227,140	Modular Self-Cleaning Oxidation Chamber
6,517,797	Process for separation of nox from N2O in a mixture
5,962,729	Method for the manufacture of n-phosphonomethylglycine from n-phosphonomethyliminodiacetic acid using a catalytic carbon
6,214,212	Method for removal of hydrogen sulfide from gaseous and liquid streams by catalytic carbon
6,503,472	Method for removal of nitrogen oxides from gaseous streams by catalytic carbon in the presence of ammonia
6,514,906	Carbonaceous chars having reduced catalytic activity
6,131,368	Method for packaging adsorbents

Registered Patent No.	Patent Title/Description
6,000,198	Method and package for packaging contents at reduced pressures
5,942,643	Method for the manufacture of n-phosphonomethylglycine from n-phosphonomethyliminodiacetic acid using a low temperature catalytic carbon
6,342,129	Process for production of carbonaceous chars having catalytic activity
6,534,442	Process for production of carbonaceous chars having catalytic activity
6,066,257	A process for the removal and destruction of perchlorate and nitrate from aqueous streams
6,238,641	Reduced catalytic carbonaceous char and process for reducing the inherent carbon catalytic reactivity of carbonaceous chars
6,696,030	Method for reducing the chemical conversion of oxidizable or disproportionable compounds contacting carbonaceous chars
6,129,893	Method for preventing replication in cryptosporidium parvum using ultraviolet light
6,565,803	Method for the inactivation of cryptosporidium parvum using ultraviolet light
4,808,317	Process for continuous contacting of fluids and solids
6,431,202	Fluid-directing multiport rotary valve
6,719,001	Fluid-directing multiport rotary valve
6,412,628	Apparatus for preventing the formation of metal tarnish
6,475,386	Filter for purifying domestic drinking water
6,422,059	Apparatus for detecting changes in concentrations of components of fluid mixtures
6,682,667	Method for producing self-supporting activated carbon structures

Registered Patent No.	Patent Title/Description
6,593,271	Carbon char for metals-removal
6,914,034	Carbon adsorbent useful for removing heavy metal anions like arsenic or selenium from e.g. drinking water source, comprises porous carbon containing oxides or hydroxides of metals such as iron, copper and aluminum
6,949,219	Method for disinfection of activated carbon through contact with peroxide containing materials
6,933,416	Process for the production of bisphenol-a
7,045,057	Preparation of homogeneously loaded ion exchangers

US PATENT APPLICATIONS

Application Serial Number	Application Filing Date	Patent Title/Description
10/975,976 – appln. 2005-0059549 – publn.	10/28/04 03/17/05	Method for removing heavy metals using an adsorbent
11/005,825 – appln. 2005-0093189 – publn.	12/07/04 05/05/05	Adsorbents for removing heavy metals and methods for producing and using the same
11/006,084 – appln. 2005-0150835 – publn.	12/07/04 07/14/05	Adsorbents for removing heavy metals and methods for producing and using the same
11/014,892 – appln. 2005-0155934 – publn.	12/16/04 07/21/05	Method for removing contaminants from fluid streams
11/014,295 – appln. 2005-0247635 – publn.	12/16/04 11/10/05	Adsorbents for removing heavy metal cations and methods for producing and using these adsorbents
10/207,585 – appln. 2004-0099605 – publn.	07/29/02 05/27/04	High performance continuous reaction/separation process using a continuous liquid-solid contactor

Application Serial Number	Application Filing Date	Patent Title/Description
10/213,580 – appln. 2004-0031757 – publn.	08/06/02 02/19/04	High performance continuous reaction/separation process using a continuous liquid-solid contactor
10/412,502 – appln. 2004-0063992 – publn.	04/11/03 04/01/04	High performance continuous reaction/separation process using a continuous liquid-solid contactor
10/696,072 – appln. 2005-0092932 – publn.	10/29/03 05/05/05	Fluid treatment device
11/008,827 – appln. 2006-0123571 – publn.	12/10/04 06/15/06	Scraper for cleaning tubular members
10/807,375 – appln. 2005-0211099 – publn.	03/23/04 09/29/05	Spiral composite adsorbent material