

FORM PTO-1596 (Modified)
(Rev. 03-01)
OMB No. 0851-0027 (exp.5/31/2007)
P08/REV03

RECORDATION FORM COVER SHEET

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

PATENTS ONLY

Tab settings

To the Director of the United States Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Wayne A. Bryden
Peter F. Scholl
Micah A. Carlson
Michael P. McLoughlin

Additional names(s) of conveying party(ies) Yes No

2. Name and address of receiving party(ies):

Name: THE JOHNS HOPKINS UNIVERSITY

Internal Address:

Street Address: 34th and Charles Streets

City: Baltimore State: MD ZIP: 21218

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

3. Nature of conveyance:

- Assignment Merger
- Security Agreement Change of Name
- Other

Execution Date: 5/5/04, 4/21/04, 4/6/04, 4/7/03 ^{04 FAC} respectively

4. Application number(s) or patent numbers(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

B. Patent No.(s)

10/473,530

Additional numbers attached? Yes No

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

Name: Francis A. Cooch, Reg. No. 31,495

Internal Address: Office of Patent Counsel

The Johns Hopkins University/Applied Physics

Laboratory

Street Address: 11100 Johns Hopkins Road

City: Laurel State: MD ZIP: 20723

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41): \$ 40.00

Enclosed - Any excess or insufficiency should be credited or debited to deposit account

Authorized to be charged to deposit account

8. Deposit account number:

01-2218

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Francis A. Cooch

Francis A. Cooch

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: PATENT

Mail documents to be recorded with required cover sheet information to
Mail Stop Assignment Recordation Services

REEL: 014722 FRAME: 0157

PATENT
Docket No. 1812-0005
Page 1

ASSIGNMENT

WHEREAS, Wayne A. Bryden, Peter F. Scholl, Micah A. Carlson, and Michael P. McLoughlin, hereinafter referred to as the ASSIGNORS, have made an invention as described in a United States patent application entitled, METHOD AND APPARATUS FOR ENHANCED PARTICLE COLLECTION EFFICIENCY, which application was executed by them on 5/1/04, 4/21/04, 4/6/04, and 4/7/04 respectively; and

WHEREAS, The Johns Hopkins University, a corporation organized and existing under the laws of the State of Maryland and having its principal place of business at Baltimore, Maryland, hereinafter referred to as the ASSIGNEE, desires to acquire an interest therein;

NOW, THEREFORE, in consideration of their employment by ASSIGNEE, the ASSIGNORS do hereby sell, assign and transfer to the ASSIGNEE the entire right, title and interest in and to said invention in the United States and its territories and possessions and in all foreign countries and the entire right, title and interest in and to said patent application and any substitutions, divisions, continuations, or continuations-in-part based upon said application, and in and to any and all Letters Patent, whether original or reissue, which may be granted for said invention in the United States and its territories and possessions and in any and all foreign countries, the invention, said patent application, and any and all such patents to be held and enjoyed by the ASSIGNEE for its own use and benefit and for its legal representatives as fully and entirely as the same would have been held by the ASSIGNORS had this agreement not been made.

THE ASSIGNORS here further agree to make, execute, and deliver to the ASSIGNEE, its successors, assigns, and legal representatives, upon request but at the expense of the ASSIGNEE, any and all papers, documents, affidavits, statements, or other instruments that may be necessary in the prosecution of the aforesaid application, and of any foreign applications, and of any substitutions, divisions, continuations, or continuations-in-part of said application, or applications for reissues of said Letters Patents, and to aid the ASSIGNEE, its successors, assigns, and legal representatives in every way in protecting the said invention as may be requested, provided, however that they shall not have to pay any expenses arising from extending such assistance.

THE ASSIGNORS hereby covenant that they have the right to grant the foregoing assignment.

PATENT
REEL: 014722 FRAME: 0158

PATENT
ASSIGNMENT
Page 2

Docket No. 1828-0071

Inventor(s): Wayne A. Bryden, Peter F. Scholl, Micah A. Carlson, and Michael P. McLoughlin

Title: Method and Apparatus for Enhanced Particle Collection Efficiency

Application Execution Date:

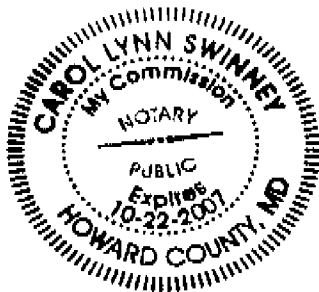
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IN TESTIMONY WHEREOF, they have set their hand and affixed their seal on the date given hereinbelow.

Wayne A. Bryden SEAL 5/5/04 DATE
Wayne A. Bryden

STATE OF MARYLAND)
COUNTY OF HOWARD)

On this 5th day of May, 2004, before me, the undersigned officer, personally appeared the above-named Wayne A. Bryden, known to me or satisfactorily proven to be the person whose name is subscribed to within the instrument and acknowledged that he/she executed the same for the purpose therein contained.



Carol Lynn Swinney
(Signature)
CAROL LYNN
(Printed Name)

Notary Public
My Commission expires 10-22-2007

Peter F. Scholl SEAL _____ DATE

STATE OF MARYLAND)
COUNTY OF _____)

On this _____ day of _____, 2004, before me, the undersigned officer, personally appeared the above-named Peter F. Scholl, known to me or satisfactorily proven to be the person whose name is subscribed to within the instrument and acknowledged that he/she executed the same for the purpose therein contained.

(Signature)

(Printed Name)

Notary Public
My Commission expires _____

PATENT
ASSIGNMENT
Page 2

Docket No. 1828-0071

Inventor(s): Wayne A. Bryden, Peter F. Scholl, Micah A. Carlson, and Michael P. McLoughlin

Title: Method and Apparatus for Enhanced Particle Collection Efficiency

Application Execution Date:

=====

IN TESTIMONY WHEREOF, they have set their hand and affixed their seal on the date given hereinbelow.

Wayne A. Bryden SEAL _____ DATE _____

STATE OF MARYLAND)
COUNTY OF _____)

On this ____ day of _____, 2004, before me, the undersigned officer, personally appeared the above-named Wayne A. Bryden, known to me or satisfactorily proven to be the person whose name is subscribed to within the instrument and acknowledged that he/she executed the same for the purpose therein contained.

(Signature)

(Printed Name)
Notary Public
My Commission expires _____

Peter F. Scholl SEAL ^x 4-21-04 DATE
Peter F. Scholl

STATE OF MARYLAND)
COUNTY OF Baltimore)

On this 21 day of April, 2004, before me, the undersigned officer, personally appeared the above-named Peter F. Scholl, known to me or satisfactorily proven to be the person whose name is subscribed to within the instrument and acknowledged that he/she executed the same for the purpose therein contained.

Erin Crotty

(Signature)

(Printed Name) **ERIN CROTTY**
Notary Public **NOTARY PUBLIC STATE OF MARYLAND**
My Commission Expires **May 1, 2007**
My Commission expires _____

PATENT
ASSIGNMENT
Page 3

Docket No. 1828-0071

Inventor(s): Wayne A. Bryden, Peter F. Scholl, Micah A. Carlson, and Michael P. McLoughlin

Title: Method and Apparatus for Enhanced Particle Collection Efficiency

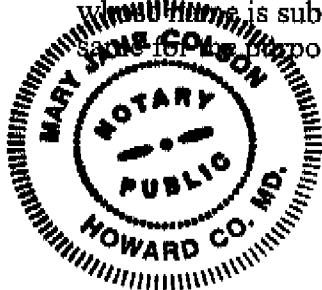
Application Execution Date:

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Micah A. Carlson SEAL 4/6/04 DATE
Micah A. Carlson

STATE OF MARYLAND)
COUNTY OF Howard)

On this 6 day of April, 2004, before me, the undersigned officer, personally appeared the above-named Micah A. Carlson, known to me or satisfactorily proven to be the person whose name is subscribed to within the instrument and acknowledged that he/she executed the same for the purpose therein contained.



Mary Jane Colson
(Signature)
Mary Jane Colson
(Printed Name)

Notary Public
My Commission expires 4/1/08

_____ SEAL _____ DATE
Michael P. McLoughlin

STATE OF MARYLAND)
COUNTY OF _____)

On this _____ day of _____, 2004, before me, the undersigned officer, personally appeared the above-named Michael P. McLoughlin, known to me or satisfactorily proven to be the person whose name is subscribed to within the instrument and acknowledged that he/she executed the same for the purpose therein contained.

(Signature)

(Printed Name)

Notary Public
My Commission expires _____

PATENT
ASSIGNMENT
Page 3

Docket No. 1828-0071

Inventor(s): Wayne A. Bryden, Peter F. Scholl, Micah A. Carlson, and Michael P. McLoughlin

Title: Method and Apparatus for Enhanced Particle Collection Efficiency

Application Execution Date:

=====

Micah A. Carlson SEAL _____ DATE

STATE OF MARYLAND)
COUNTY OF _____)

On this ____ day of _____, 2004, before me, the undersigned officer, personally appeared the above-named Micah A. Carlson, known to me or satisfactorily proven to be the person whose name is subscribed to within the instrument and acknowledged that he/she executed the same for the purpose therein contained.

(Signature)

(Printed Name)
Notary Public
My Commission expires _____

[Signature]
Michael P. McLoughlin SEAL 4/07/04 DATE

STATE OF MARYLAND)
COUNTY OF Howard)

On this 7 day of April, 2004, before me, the undersigned officer, personally appeared the above-named Michael P. McLoughlin, known to me or satisfactorily proven to be the person whose name is subscribed to within the instrument and acknowledged that he/she executed the same for the purpose therein contained.

[Signature]
(Signature)
Mary Jane Colson
(Printed Name)
Notary Public
My Commission expires 4/1/08

