

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Mr. Donald B. Coyle</td> <td>12/06/2012</td> </tr> <tr> <td>Mr. Paul Stysley</td> <td>12/03/2012</td> </tr> <tr> <td>Mr. Demetrios Poullos</td> <td>12/18/2012</td> </tr> <tr> <td>American University</td> <td>12/17/2012</td> </tr> </tbody> </table>		Name	Execution Date	Mr. Donald B. Coyle	12/06/2012	Mr. Paul Stysley	12/03/2012	Mr. Demetrios Poullos	12/18/2012	American University	12/17/2012
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Mr. Donald B. Coyle	12/06/2012										
Mr. Paul Stysley	12/03/2012										
Mr. Demetrios Poullos	12/18/2012										
American University	12/17/2012										
RECEIVING PARTY DATA											
Name:	United States of America as represented by the Administrator of the National Aeronautics and Space Administration										
Street Address:	300 E Street SW										
City:	Washington										
State/Country:	DISTRICT OF COLUMBIA										
Postal Code:	20546										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13622465</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13622465						
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Application Number:	13622465										
CORRESPONDENCE DATA											
Fax Number:	3012869502										
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
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Email:	Milelene.Gunyon-1@nasa.gov										
Correspondent Name:	Milelene Gunyon										
Address Line 1:	NASA Goddard Space Flight Center										
Address Line 2:	Office of Patent Counsel M/S 140.1										
Address Line 4:	Greenbelt, MARYLAND 20771										
ATTORNEY DOCKET NUMBER:	GSC-16299-1										
NAME OF SUBMITTER:	Milelene Gunyon										

CH \$40.00 13622465

Total Attachments: 6

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STATEMENT UNDER 37 CFR 3.73(c)Applicant/Patent Owner: U.S.A. as represented by the Administrator of the National Aeronautics and Space AdministrationApplication No./Patent No.: 13/622,465 Filed/Issue Date: 9/19/2012Titled: System, Apparatus and Method Employing A Dual Head LaserU.S.A. as represented by the Administrator of the National Aeronautics and Space Administration, a Government agency

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose one of options 1, 2, 3 or 4 below):

1. The assignee of the entire right, title, and interest.
2. An assignee of less than the entire right, title, and interest (check applicable box):
- The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.
- There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. The recipient, via a court proceeding or the like (e.g., bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose one of options A or B below):

- A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
- B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:
1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

[Page 1 of 2]

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PATENT
REEL: 029498 FRAME: 0820

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(c)

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

4. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

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Reel _____, Frame _____, or for which a copy thereof is attached.

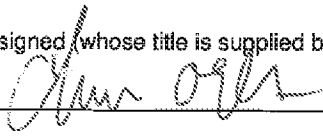
Additional documents in the chain of title are listed on a supplemental sheet(s).

As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Signature



Christopher O. Edwards

Printed or Typed Name

Date

12/18/2012

36,127

Title or Registration Number



**Assignment to the Government
(by Government Employee)**

Title of Invention: SYSTEM, APPARATUS AND METHOD EMPLOYING A DUAL HEAD LASER

Inventor(s): BARRY COYLE, PAUL STYSLEY, DEMETRIOS POULIOS

NASA Case No. GSC-16296-1 Application No. 13/622465 Filing Date: 9/19/2012

WHEREAS, the parties to this Assignment and Agreement are the undersigned inventor(s) and the United States Government (hereinafter Government), as represented by the Administrator of the National Aeronautics and Space Administration;

WHEREAS, the making of this Assignment and Agreement is in accordance with 37 CFR Part 501; and

WHEREAS, the undersigned inventor(s) has (have) executed, on the date(s) indicated below, an application for United States Patent on the above-entitled invention;

NOW THEREFORE, in consideration of employment by the Government, the undersigned hereby:

1. Assign to the Government my (our) full and exclusive right in and to said invention within the United States of America, its territories and possessions, and my (our) entire right, title and interest in and to said application, and any corresponding continuation or divisional application(s) and any patent(s) that may issue therefrom.
2. Agree to grant to the Government my (our) full and exclusive foreign rights in and to said invention, in accordance with 37 CFR 501.9(d), including rights of priority under the International Convention of Paris (1883), as amended, if the Government chooses not to file an application in any foreign country, I (we) may request rights in that country, in accordance with 37 CFR 501.9(c), and such rights will be subject to the reservation to the Government of a nonexclusive, irrevocable, royalty-free license in the invention with power to grant licenses for all governmental purposes. The terms of such reservation will appear, where practicable, in any foreign patent which may issue on such invention.
3. Agree, at the expense of the Government, (a) to execute any document for, (b) to deliver any requested information to, and (c) to cooperate in any manner with the Government in order to allow the Government to protect any interest transferred by this Assignment and Agreement.
4. Authorize and request the attorneys of record in the application to insert the application number and filing date above when required.

[Signature] 12-6-12
 (Signature of Inventor) (Date Assignment Executed) (Date Application Executed)
BARRY COYLE 3605 Front Hill Dr Ellicott City MD 21042
 (Inventor's Typed Name) (Mailing Address - Including Country)

[Signature] _____
 (Signature of Inventor) (Date Assignment Executed) (Date Application Executed)
PAUL STYSLEY 306 South Rolling Rd Catonsville, MD 21228
 (Inventor's Typed Name) (Mailing Address - Including Country)

_____ _____
 (Signature of Inventor) (Date Assignment Executed) (Date Application Executed)
 (Inventor's Typed Name) (Mailing Address - Including Country)



Assignment to the Government (by Government Employee)

Title of Invention: SYSTEM, APPARATUS AND METHOD EMPLOYING A DUAL HEAD LASER

Inventor(s): BARRY COYLE, PAUL STYSLEY, DEMETRIOS POULIOS

NASA Case No.: GSC-16299-1 Application No. #: 13/622465 Filing Date*: 9/19/2012

WHEREAS, the parties to this Assignment and Agreement are the undersigned inventor(s) and the United States Government (hereafter Government), as represented by the Administrator of the National Aeronautics and Space Administration.

WHEREAS, the making of this Assignment and Agreement is in accordance with 37 CFR Part 501, and

WHEREAS, the undersigned inventor(s) has (have) executed, on the date(s) indicated below, an application for United States Patent on the above-entitled invention.

NOW THEREFORE, in consideration of employment by the Government, the undersigned hereby:

1. Assign to the Government my (our) full and exclusive right in and to said invention within the United States of America, its territories and possessions, and my (our) entire right, title and interest in and to said application, and any corresponding continuation or divisional application(s) and any patent(s) that may issue therefrom.

2. Agree to grant to the Government my (our) full and exclusive foreign rights in and to said invention, in accordance with 37 CFR 501.9(d), including rights of priority under the International Convention of Paris (1883), as amended. If the Government chooses not to file an application in any foreign country, I (we) may request rights in that country, in accordance with 37 CFR 501.9(d), and such rights will be subject to the reservation to the Government of a nonexclusive, irrevocable, royalty-free license in the invention with power to grant licenses for all governmental purposes. The terms of such reservation will appear, where practicable, in any foreign patent which may issue on such invention.

3. Agree, at the expense of the Government, (a) to execute any document for, (b) to deliver any requested information to, and (c) to cooperate in any manner with the Government in order to allow the Government to protect any interest transferred by this Assignment and Agreement.

*4. Authorize and request the attorneys of record in the application to insert the application number and filing date above when required.

(Signature of Inventor) BARRY COYLE _____
(Inventor's Typed Name) _____
(Date Assignment Executed) 3606 Front Hill Dr Ellicott City MD 21042 _____
(Date Application Executed) _____
(Mailing Address - Including Country)

(Signature of Inventor) PAUL STYSLEY _____
(Inventor's Typed Name) _____
(Date Assignment Executed) 12/3/10 _____
(Date Application Executed) _____
(Mailing Address - Including Country) 306 South Rolling Rd Catonsville, MD 21228

(Signature of Inventor) _____
(Inventor's Typed Name) _____
(Date Assignment Executed) _____
(Date Application Executed) _____
(Mailing Address - Including Country) _____



National Aeronautics and
Space Administration

Patent Application

ASSIGNMENT TO THE U.S. GOVERNMENT
(Small Business or Nonprofit Organization)

Subject Invention Title: **SYSTEM, APPARATUS AND METHOD EMPLOYING A DUAL HEAD LASER**

Serial No. and Filing Date: **_13/622465 9/19/2012**

NASA Case No.: **GSC-16299-1**

Contractor: **American University**

Contract Number: **NNX08AJ95A**

WHEREAS, the above identified Contractor has elected not to retain title, or hereby elects not to retain title, under the provisions of 35 U.S.C. 202 to the above identified Subject Invention made in the performance of work under the above identified Contract between the Contractor and the Government of the United States of America (the Government).

WHEREAS, the Government as represented by the Administrator of the National Aeronautics and Space Administration (NASA), is desirous of acquiring title to the above identified Subject Invention and other rights and benefits herein granted.

NOW THEREFORE, the undersigned inventor(s) and Contractor hereby assign to the Government, as represented by the Administrator of NASA, their entire right, title, and interest throughout the world in and to the Subject Invention as disclosed in the above identified U.S. patent application and patent applications continuing therefrom and such Letters Patent as may issue therefrom, subject to the reservation to the Contractor of any license to which the Contractor may be entitled under the Contract.

The undersigned inventor(s) and the Contractor further agree to make, execute, and/or deliver to the Government, upon request, but at the expense of the Government, any and all data, drawings, notes, reports, information, papers, documents, affidavits, statements or other items necessary in the preparation and prosecution of the above identified patent application and of any applications continuing therefrom or applications for reissue or reexamination of said Letters Patent, or of any foreign patent or patent application, or any application continuing therefrom, and to assist the Government in every way in protecting the Subject Invention as may be requested, provided that any expenses arising through such assistance will be paid by the Government.

The undersigned inventor(s) and Contractor hereby covenant that they have the right to grant the foregoing assignment.

For the Inventor(s):

Inventor Name: Demetrios Poullos

I have not previously transferred any of my rights in the Subject Invention, and I hereby agree as stated above.

Signature: [Handwritten Signature] Date: 12/18/12

- or -

Attached hereto is an assignment of my entire rights in the Subject Invention to the Contractor, signed on or before the date this Assignment to the U.S. Government is executed by the Contractor below. As stated above, I agree to assist the Government with patenting and protecting the Subject Invention.

Signature: _____ Date: _____

For the Contractor:

Name: JONATHAN G. TUBMAN

Title: Vice Provost, Graduate Studies and Research

Signature: [Handwritten Signature] Date: 12/17/12