

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:

NEW ASSIGNMENT

NATURE OF CONVEYANCE:

ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Mr. John W. Guarniere	05/13/2005
Mr. Paul S. Zerwekh	05/18/2005
Mr. Daniel Homa	05/13/2005
Mr. Brooks Childers	05/05/2005
Mr. Justin Crusse	05/13/2005

RECEIVING PARTY DATA

Name:	Luna Energy, LLC
Street Address:	309 North Energy, LLC
City:	Blacksburg
State/Country:	VIRGINIA
Postal Code:	24060

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11095804

CORRESPONDENCE DATA

Fax Number: (202)363-2620

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

Phone: 202-363-2620

Email: jmaha@htthan.com

Correspondent Name: Jennifer R. Mahalingappa

Address Line 1: 1010 Wisconsin Avenue, NW

Address Line 2: Suite 560

Address Line 4: Washington, DISTRICT OF COLUMBIA 20007

NAME OF SUBMITTER:

Jennifer R. Mahalingappa

Total Attachments: 3

PATENT

500042005

REEL: 016317 FRAME: 0452

OP \$40.00 11095804

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JOINT

ASSIGNMENT

WHEREAS, WE, Daniel HOMA, Paul S. ZERWEKH, John W. GUARNIERE, Brooks CHILDERS, AND Justin CRUSSE, ASSIGNORS, citizens of the United States, residing, respectively, at 37 Brunswick Avenue, Bloomsbury, NJ 08804, United States; 2165 Mount Pleasant Road, Shawsville, VA 24162, United States; 604 Yorktown Manor Court, Annapolis, MD 21401, United States; 1425 Red Hawk Run, Christiansburg, VA 24073, United States; and 3315 Meadowview Drive, Manchester, MD 21102, United States; are the inventors of the invention in ~~Hydrogen-Resistant~~ **Optical Fiber Structure** for which we have executed an application for a Patent of the United States

- ☐ which is executed on ☐ even date herewith or ☐ \_\_\_\_\_  
☒ which is identified by Attorney docket no. LUNA-019  
☒ which was filed on March 31, 2005, Application No. 11/095,804

and WHEREAS, LUNA ENERGY, LLC, having a place of business at 309 North Knollwood Drive, Blacksburg, VA 24060, ASSIGNEE, is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

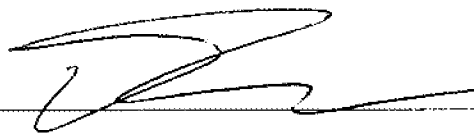
AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

AND WE HEREBY grant the power to H.T. Than (Registration No. 38,632), Teresa U. Medler (Registration No. 44,933), Jennifer R. Mahalingappa (Registration No. 47,765) and Arash Behravesh (Registration No. 45,982) to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date May 13, 2005



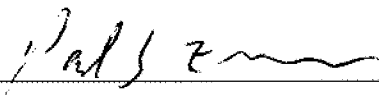
L.S.

State of MARYLAND  
City Baltimore ) SS.:  
County of Baltimore

On 13<sup>th</sup> May, 2005, before me, Kathy Thompson, Notary Public, personally appeared Daniel S. Herna, personally known to me on the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Date 18<sup>th</sup> May, 2005

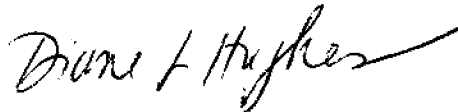


L.S.

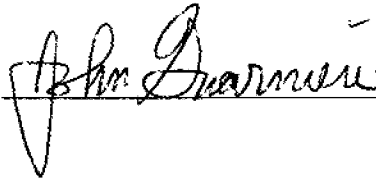
State of Virginia  
County of Montgomery ) SS.:

On May 18, 2005, before me, Diane L. Hughes, Notary Public, personally appeared Paul S. Zerwekh, personally known to me on the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal



Date 5/13, 2005



L.S.

State of MARYLAND  
City Baltimore ) SS.:  
County of Baltimore

On 13<sup>th</sup> May, 2005, before me, Kathy Thompson, Notary Public, personally appeared John W. GUARNIERO, personally known to me on the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Date 5/5, 2005 Lyndy L.S.

State of Virginia )  
 ) SS.:  
County of Montgomery )

On May 5, 2005, before me, Diane L. Hughes, Notary Public,  
personally appeared BRICK'S CHILDERS, personally known to me on the basis of satisfactory evidence to be  
the person(s) whose name(s) is subscribed to the within instrument and acknowledged to me that he/she/they executed the  
same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the  
entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Diane L. Hughes

Date 5/13, 2005 Justin W. Cyrusse L.S.

State of MARYLAND )  
City of Baltimore ) SS.:  
County of Baltimore )

On 13th, 2005, before me, Kathy Thompson, Notary Public,  
personally appeared Justin W. CYRUSSE, personally known to me on the basis of satisfactory evidence to be  
the person(s) whose name(s) is subscribed to the within instrument and acknowledged to me that he/she/they executed the  
same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the  
entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal