

Form PTO-1595 (Rev. 06-12)  
OMB No. 0651-0027 (exp. 04/30/2015)

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**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)**  
Leonid Germanovich, Lawrence C. Murdoch  
Marvin Robinowitz

**2. Name and address of receiving party(ies)**  
Name: Grand Directions, LLC  
Internal Address: \_\_\_\_\_

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

**3. Nature of conveyance/Execution Date(s):**  
Execution Date(s) 6/29/2011  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Joint Research Agreement  
 Government Interest Assignment  
 Executive Order 9424, Confirmatory License  
 Other \_\_\_\_\_

Street Address: 2448 East 81st Street, Suite 4040  
City: Tulsa  
State: OK  
Country: \_\_\_\_\_ Zip: 74137

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

**4. Application or patent number(s):**  
A. Patent Application No.(s)  
14/129,504

This document serves as an Oath/Declaration (37 CFR 1.63).  
B. Patent No.(s)


Additional numbers attached?  Yes  No

**5. Name and address to whom correspondence concerning document should be mailed:**  
Name: Paul E. Rossler, Gable Gotwals  
Internal Address: \_\_\_\_\_  
Street Address: 100 West 5th Street, 10th Floor  
City: Tulsa  
State: OK Zip: 74103  
Phone Number: 918-595-4963  
Docket Number: 009665-00017  
Email Address: iplaw@gablelaw.com

**6. Total number of applications and patents involved:** 1

**7. Total fee (37 CFR 1.21(h) & 3.41)** \$ 40  
 Authorized to be charged to deposit account  
 Enclosed  
 None required (government interest not affecting title)

**8. Payment Information**  
Deposit Account Number 501971  
Authorized User Name Gable Gotwals

**9. Signature:**   
Paul E. Rossler  
Name of Person Signing

01/08/2014  
Date

Total number of pages including cover sheet, attachments, and documents: 5

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

CH \$40.00 501971 14129504

**ASSIGNMENT OF INVENTION**

Docket No. 009665.00009

This assignment of invention is effective June 29, 2011, and is between Leonid Germanovich, Lawrence C. Murdoch, and Marvin Robinowitz ("the inventors," individually and collectively) and Grand Directions, LLC ("Grand Directions"), an Oklahoma Limited Liability Company.

For good and valuable consideration, each inventor agrees to the following provisions.

**1. BACKGROUND**

- 1.1 The inventors have invented a system and method for ABYSSAL SEQUESTRATION OF NUCLEAR WASTE AND OTHER TYPES OF HAZARDOUS WASTE ("the invention") and disclosed the invention in U.S. Pat. Appl. Ser. No. 61/502,557, filed on June 29, 2011, and in Patent Cooperation Treaty Appl. Ser. No. PCT/US12/45084, filed on June 29, 2012.
- 1.2 Grand Directions desires to obtain the entire interest in the subject matter of the invention for the United States and its territorial possessions and in all foreign countries. This interest includes but is not limited to all rights to claim priority to the invention and any improvements made to the invention and the right to file in the United States and elsewhere any patent applications on the invention and on any improvements to the invention.
- 1.3 The inventors have not entered into any prior assignment, sale, agreement or encumbrance of the invention that would conflict with the assignment to Grand Directions.
- 1.4 The inventors acknowledge the receipt of good and valuable consideration from Grand Directions in exchange for this assignment, and each represents and warrants that he has rights in the invention and the authority to assign those rights.

**2. ASSIGNMENT**

- 2.1 The inventors hereby assign to Grand Directions the entire interest in the invention.
- 2.2 The inventors promise to assign to Grand Directions, and hereby do assign to Grand Directions, any improvements made to the invention.
- 2.3 The inventors shall not enter into any future assignment, sale, agreement or encumbrance of the invention that would conflict with the assignment to Grand Directions.

**3. PATENT PROSECUTION, MAINTENANCE, AND LITIGATION**


- 3.1 The inventors must, upon request by Grand Directions or its successors and assigns, promptly provide facts and documents relating to the invention, including but not limited to instruments and affidavits required to prosecute the patent application and to issue and maintain the patent.
- 3.2 The inventors shall provide facts and testify as needed in any proceeding or litigation relating to the invention.

*[SIGNATURE PAGE FOLLOWS]*

#### 4. SIGNATURE

By signing this assignment of invention, I understand that it provides an assignment of my entire interest in the invention and an assignment of any improvements that I might make to the invention to:

**Grand Directions, LLC**  
2448 East 81st  
Suite 4040  
Tulsa, Oklahoma 74137  
State of Formation: Oklahoma

By:   
**LEONID GERMANOVICH**  
Georgia Institute of Technology  
790 Atlantic Drive, Mason Building CEE  
Atlanta, Georgia 30332

By: \_\_\_\_\_  
**LAWRENCE C. MURDOCH**  
Clemson University  
340 Bracket Hall  
Clemson, South Carolina

By: \_\_\_\_\_  
**MARVIN ROBINOWITZ**  
2448 East 81st  
Suite 4040  
Tulsa, Oklahoma 74137

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**Grand Directions, LLC**  
**2448 East 81st**  
**Suite 4040**  
**Tulsa, Oklahoma 74137**  
**State of Formation: Oklahoma**

By:

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**LEONID GERMANOVICH**  
Georgia Institute of Technology  
790 Atlantic Drive, Mason Building CEE  
Atlanta, Georgia 30332



By:

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**LAWRENCE C. MURDOCH**  
Clemson University  
340 Bracket Hall  
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By:

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**State of Formation: Oklahoma**

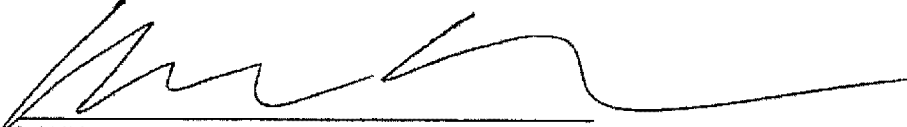
By:

\_\_\_\_\_  
**LEONID GERMANOVICH**  
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790 Atlantic Drive, Mason Building CEE  
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By:

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Clemson, South Carolina

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