### PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Alexander Ivanovich Karev	11/17/2011
Valery Georgievich Raevsky	11/17/2011
Leonid Zavenovich Dzhilavyan	11/17/2011
Louis Joseph Brothers	11/28/2011
Larry K. Wilhide	11/29/2011

#### **RECEIVING PARTY DATA**

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Street Address:	2300 First Street	
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City:	Livermore	
State/Country:	CALIFORNIA	
Postal Code:	94550	

#### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13253927

# **CORRESPONDENCE DATA**

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ATTORNEY DOCKET NUMBER: IL-12416

> PATENT **REEL: 027310 FRAME: 0768**

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NAME OF SUBMITTER:	Mark H. Lough
Total Attachments: 2 source=IL12416_Assign#page1.tif source=IL12416_Assign#page2.tif	

PATENT REEL: 027310 FRAME: 0769

# **ASSIGNMENT**

LLI	NL Case No.: IL-12416		
For good and valuable consideration the receipt of which is hereby acknowledged ASSIGNOR(s)			
1.	Alexander Ivanovich KAREV		2 Valery Georgievich RAEVSKY
3.	Leonid Zavenovich DZHILAVYAN		4 Louis Joseph BROTHERS
5.	Larry K. WILHIDE		6
hereby sells, assigns and transfers to ASSIGNEE, Lawrence Livermore National Security, LLC, a Delaware Corporation, having its administrative offices located at 2300 First Street, Suite 204, Livermore, CA 94550 and the successors, assigns and legal representative of the ASSIGNEE all of its right, title and interest for the United States and its territorial possessions and in all foreign countries other than the New Independent States in and to, any and all improvements which are disclosed in the invention entitled:  METHODS OF DETECTION AND IDENTIFICATION OF CARBON- AND NITROGEN-CONTAINING MATERIALS			
and	which is found in		
	U.S. patent application executed on listing the above named persons as inventors	MINISTER	, entitled as above and
	U.S. patent application 13/253,927	filed on	October 5, 2011
	U. S. patent no.	, issued	
	PCT patent application	-	
and any legal equivalent thereof in a foreign country other than the New Independent States, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;			
	<u>SIGNOR(S)</u> hereby covenants that no assignment, sale, agree ch would conflict with this assignment;	ement or e	ncumbrance has been or will be made or entered into
ASS	SIGNOR(S) further covenants that ASSIGNEE will, upon	its reques	t, be provided promptly with all pertinent facts and

ASSIGNOR(S) further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.

## Royalty Sharing

LLNL shall notify authors about possible commercialization and licensing discussions. All further relations of LLNL with commercial company are regulated by STCU Agreement P344 (Annex 4). As per STCU Annex 4, to the extent that the LLNL licenses the Subject Invention to a third party which results in income therefrom, the ASSIGNORs and the LLNL will share the net income therefrom fifty percent (50%) to the ASSIGNORS and fifty percent (50%) to the LLNL or the <u>ASSIGNORS</u> could receive a lump sum (minimum of \$30,000) for full transfer of rights to the LLNL in all countries except NIS.

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PATENT REEL: 027310 FRAME: 0770 AND the <u>ASSIGNOR(S)</u> requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, Lawrence Livermore National Security, LLC.

Alexander Ivanovich KAREV  Date	Signature of Inventor(s)
executed this  Valery Georgievich RAEVSKY  Date	Signature of Inventor(s)
executed this  Leonid Zavenovich DZHILAVYAN  Date  17, 11, 2011	Signature of Inventor(s)
executed this  Louis Joseph BROTHERS  Date	Signature of Inventor(s)  Source () - Brillow  NOV-18-20/1
executed this  Larry K. WILHIDE  Date	Signature of Inventor(s)  Larry R. Malfaile  11-24-61
Received by	
Ping Yu Legal Office LAWRENCE LIVERMORE NATIONAL SECURI 700 East Avenue Livermore, California 94551-9234 United States of America	TY, LLC  Ping yu Dec. 12011

Signature and Date

**RECORDED: 12/01/2011**