PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Qing Li	09/05/2013
Piotr Zelenay	09/04/2013

RECEIVING PARTY DATA

Name:	Los Alamos National Security, LLC
Street Address:	Los Alamos National Laboratory
Internal Address:	LC/IP MS A187
City:	Los Alamos
State/Country:	NEW MEXICO
Postal Code:	87545

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13840831

CORRESPONDENCE DATA

Fax Number: 5056654424

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

Phone: 505-665-3111

Email: lolas@lanl.gov

Correspondent Name: Samuel L. Borkowsky

Address Line 1: Los Alamos National Laboratory

Address Line 2: LC/IP MS A187

Address Line 4: Los Alamos, NEW MEXICO 87545

ATTORNEY DOCKET NUMBER:	S-129,411
NAME OF SUBMITTER:	Samuel L. Borkowsky
Signature:	/Samuel L. Borkowsky/

PATENT REEL: 031167 FRAME: 0079 13840

Date:	09/09/2013
Total Attachments: 4	

source=S129411-ASG-Li-2013_09_05#page1.tif source=S129411-ASG-Li-2013_09_05#page2.tif source=S129411-ASG-Zelenay-2013_09_04#page1.tif source=S129411-ASG-Zelenay-2013_09_04#page2.tif

> PATENT REEL: 031167 FRAME: 0080

Rev. 06/19/12

ASSIGNMENT

DOE S-129,411

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S),

- 1. Qing Li
- 2. Piotr Zelenay

hereby sells, assigns and transfers to ASSIGNEE, Los Alamos National Security, LLC, a Delaware Limited Liability Company, having its statewide administrative offices located at Los Alamos National Laboratory, LC/IP, Los Alamos, New Mexico 87545, and the successors, assigns and legal representatives of the ASSIGNEE all of its right, title and interest for the United States and its territorial possessions and in all foreign countries in and to, any and all improvements which are disclosed in the invention titled:

CATALYTIC OXIDATION OF DIMETHYL ETHER

and which is found in			
(a)		U.S. patent application executed on, entitled as above and listing the above-named person(s) as inventor(s)	
(p)	\boxtimes	U.S. application Serial No. <u>13/840.831</u> , filed on March 15, 2013.	
(c)	П	U.S. Patent No, issued	
(d)		U.S. provisional application filed on entitled as above and listing the above-named person(s) as inventor(s)	

and any legal equivalent thereof in a foreign country, 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;

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

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.

PATENT REEL: 031167 FRAME: 0081 Patent of the United States and any reissue or extension thereof to the ASSIGNEE, Los Alamos National Security, LLC.

executed this

Signature of Inventor(s)

Sthday of September, 2013

Qing Li

Piotr Zelenay

AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters

Rev. 06/19/12

ASSIGNMENT

DOE S-129,411

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S),

- 1. Qing Li
- 2. Piotr Zelenay

hereby sells, assigns and transfers to ASSIGNEE, Los Alamos National Security, LLC, a Delaware Limited Liability Company, having its statewide administrative offices located at Los Alamos National Laboratory, LC/IP, Los Alamos, New Mexico 87545, and the successors, assigns and legal representatives of the ASSIGNEE all of its right, title and interest for the United States and its territorial possessions and in all foreign countries in and to, any and all improvements which are disclosed in the invention titled:

catalytic oxidation of dimethyl ether and which is found in (a) U.S. patent application executed on _______, entitled as above and listing the above-named person(s) as inventor(s) (b) U.S. application Serial No. 13/840,831, filed on March 15, 2013. (c) U.S. Patent No. _______, issued ______. (d) U.S. provisional application filed on _______, entitled as above and listing the above-named person(s) as inventor(s)

and any legal equivalent thereof in a foreign country, 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;

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment:

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.

PATENT REEL: 031167 FRAME: 0083 \$-129,411

AND the ASSIGNOR(S) 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, Los Alamos National Security, LLC.

executed this	Signature of Inventor(s)
day of	
4th day of September, 2013	aing Li Pigte Isleman
	Piotr Zelenay