

PATENT ASSIGNMENT

Electronic Version v1.1
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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>Alexander E. Gash</td> <td>02/08/2013</td> </tr> <tr> <td>John S. Sze</td> <td>02/13/2013</td> </tr> </tbody> </table>		Name	Execution Date	Alexander E. Gash	02/08/2013	John S. Sze	02/13/2013
Name	Execution Date						
Alexander E. Gash	02/08/2013						
John S. Sze	02/13/2013						
RECEIVING PARTY DATA							
Name:	Lawrence Livermore National Security, LLC						
Street Address:	2300 First Street						
Internal Address:	Suite 204						
City:	Livermore						
State/Country:	CALIFORNIA						
Postal Code:	94550						
PROPERTY NUMBERS Total: 2							
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12605281</td> </tr> <tr> <td>Application Number:</td> <td>61107915</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12605281	Application Number:	61107915
Property Type	Number						
Application Number:	12605281						
Application Number:	61107915						
CORRESPONDENCE DATA							
Fax Number:	9254232231						
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>							
Phone:	9254227272						
Email:	clinkenbeard3@llnl.gov						
Correspondent Name:	Lawrence Livermore National Laboratory						
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ATTORNEY DOCKET NUMBER:	IL-12041						
NAME OF SUBMITTER:	Mark H. Lough						
Total Attachments: 2 source=IL-12041_signed_assign#page1.tif source=IL-12041_signed_assign#page2.tif							

CH \$80.00 12605281

ASSIGNMENT

LLNL Case No.: IL-12041

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

- 1. Alexander E. Gash
- 2. John S. Sze
- 3. _____
- 4. _____

LAYERED REACTIVE PARTICLES WITH CONTROLLED GEOMETRIES, ENERGIES, AND REACTIVITIES, AND METHODS FOR MAKING THE SAME

hereby sells, assigns and transfers to ASSIGNEE, Lawrence Livermore National Security, LLC, a Delaware Corpora having its administrative offices located at Sunset Plaza Building C, 1658 Holmes St., Livermore, CA 94551 and successors, assigns and legal representative of the ASSIGNEE all of its right, title and interest for the United States an territorial possessions and in all foreign countries in and to, any and all improvements which are disclosed in the inver entitled:
and which is found in

- U.S. patent application executed on _____, entitled as above and listing the above named persons as inventors
- U.S. patent application serial no. 12/605,281, filed on 10/23/2009
- U.S. provisional 61/107,915, filed 10/23/2008

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 assignm~~ent~~ to insert into this assignment the filing date and serial number of said application when officially known.

executed this

Signature of Inventor(s)

Date

Alexander E. Gash

executed this

Signature of Inventor(s)

Feb. 13, 2013
Date

John S. Sze
John S. Sze

PATENT