PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Michael J. Messerly	02/04/2011
Jay W. Dawson	02/04/2011
Raymond J. Beach	02/07/2011
Christopher P.J. Barty	02/04/2011

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: 1

Property Type	Number
Application Number:	11809112

CORRESPONDENCE DATA

Fax Number: (925)423-2231

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

Phone: 9254227272

Email: clinkenbeard3@llnl.gov

Correspondent Name: LLNS

Address Line 1: 7000 East Avenue
Address Line 2: P.O. Box 808, L-703

Address Line 4: Livermore, CALIFORNIA 94551

ATTORNEY DOCKET NUMBER: | IL-11694

NAME OF SUBMITTER: Mark H. Lough

PATENT

REEL: 025787 FRAME: 0286

.H \$40.00 11808

Total Attachments: 3

source=IL-11694_rec_and_assign#page1.tif source=IL-11694_rec_and_assign#page2.tif source=IL-11694_rec_and_assign#page3.tif

PATENT REEL: 025787 FRAME: 0287 Form PTO-1595 (Rev. 03-09) OMB No. 0651-0027 (exp. 03/31/2009)

RECORDATION FORM COVER SHEET PATENTS ONLY		
To the Director of the U.S. Patent and Trade	emark Office: Pleas	se record the attached documents or the new address(es) below.
 Name of conveying party(ies) Michael J. Messerly; 2. Jay W. Dawson; 3. Raymond J. Beach; Christopher P.J. Barty 		2. Name and address of receiving party(ies) Name: Lawrence Livermore National Security, LLC Internal Address:
Additional name(s) of conveying party(ies) attached? Yes X No. 3. Nature of conveyance/Execution Date(s): Execution Date(s) _{1,,2,3,2-4-11;3,2-7-11}		Street Address: 2300 First Street, Suite 204
Joint Research Agreement	ger nge of Name	City: Livermore State: California
Government Interest Assignment Executive Order 9424, Confirmatory License Other		Country: US Zip: 94550 Additional name(s) & address(es) attached? Yes X No
		document is being filed together with a new application. B. Patent No.(s)
5. Name and address to whom correspondence		6. Total number of applications and patents involved: 1
Name: LLNL Internal Address: P.O. Box 808, L-703		7. Total fee (37 CFR 1.21(h) & 3.41) \$_40.00
Street Address: 7000 East Avenue		 Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)
City: Livermore		8. Payment Information
State: California Zip: 94550	0	
Phone Number: 925 422-7272 Fax Number: 925 423-2231 Email Address: clinkenbeard3@llnl.gov		Deposit Account Number <u>120695</u> Authorized User Name <u>Linda Clinkenbeard</u>
	/Mark H. Lough / Signature	February 10, 2011 Date
Mark H. Lough Name of Person		Total number of pages including cover sheet, attachments, and documents:

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

PATENT REEL: 025787 FRAME: 0288

ASSIGNMENT

LLNL Case No.: IL-11694	
For good and valuable consideration the receipt of w	which is hereby acknowledged ASSIGNOR(s)
1. Michael J. Messerly	2. Jay W. Dawson
3. Raymond J. Beach	4. Christopher P.J. Barty
5.	6.
having its administrative offices located at 2300 Fir and legal representative of the ASSIGNEE all of its r	Lawrence Livermore National Security, LLC, a Delaware Corporation, rst Street, Suite 204, Livermore, CA 94550 and the successors, assigns right, title and interest for the United States and its territorial possessions provements which are disclosed in the invention entitled:
OPTICAL FIBER HAVING WAVE-GUIDIN	NG RINGS
and which is found in	
U.S. patent application executed on listing the above named persons as inventor	, entitled as above and
U.S. patent application serial no. 11/8091	112 , filed on May 30, 2007
U. S. patent no, issued	
be obtained for said invention by the above applic	y, including the right to claim priority and, in and to, all Letters Patent to cation or any continuation, division, continuation-in-part, extension or extension of said Letters Patent and all rights under all International
ASSIGNOR(S) hereby covenants that no assignment into which would conflict with this assignment;	nt, sale, agreement or encumbrance has been or will be made or entered
documents relating to said invention and said Lett ASSIGNOR and will testify as to the same in any in execute and deliver to ASSIGNEE or its legal repres for, obtain, maintain, issue or enforce said application which may be necessary or desirable to carry out the	will, upon its request, be provided promptly with all pertinent facts and ters Patent and legal equivalents as may be known and accessible to interference, litigation, or proceeding relating thereto and will promptly esentative any and all papers, instruments or affidavits required to apply ion, said invention and said Letters Patent and said equivalents thereof e purposes thereof. An attorney of record is authorized and requested by assignment the filing date and serial number of said application when
	er of Patents and Trademarks to issue said Letters Patent of the United SIGNEE, Lawrence Livermore National Security, LLC.
executed this	Signature of Inventor(s)
2/4/11	Mikeel A. Manuel
Date	Michael J. Messerly
executed this Date	Signature of Inventor(s) Jay W. Dawson

PATENT REEL: 025787 FRAME: 0289

LLNL Case No.: IL-11694	
executed this 7-Feb-1	Signature of Inventor(s) Caymon J- Brack
Date executed this Feb 4th, 2011	Raymond . Beach Signature of Inventor(s)
Date*	Christopher PJ Barty /

RECORDED: 02/10/2011