	S-100,591	Rev. 04/03/2006	
	Form PTO1595 0 5 -	U.S. Department of Commerce	
	(Rev. 10/02) (Rev. 10/02) (Rev. 10/02) (Rev. 10/02) (Rev. 10/02)	Patent and Trademark Office	
	100	3245414 original documents or copy thereof.	
	Name of converge V(ies):		
	The Regents of the University of California	Name and address of receiving party:	
20.82	Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No	Name: Los Alamos National Security, LLC	
	3. Nature of Conveyance:	Address:	
2		Los Alamos National Laboratory	
(1)	☐ Security Agreement ☐ Change of Name ☐ Other	LC/IP, MS A187	
	Execution Date: 01 May 2006	Los Alamos, NM 87545	
nes		Additional name(s) address(es) attached Yes No	
	Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is:		
	A. Patent Application No.(s) 10/387,688	B. Patent No.(s) 6,732,515	
	Additional numbers attached ☐ Yes ☒ No		
	5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41): \$ 40.00	
	Name: Bruce H. Cottrell	☐ Enclosed	
	Registration No.: 30,620	Authorized to be charged to deposit account	
	Address: Los Alamos National Laboratory LC/IP, MS A187 Los Alamos, NM 87545		
		8. Deposit account number 12-2150	
ŀ	DO NOT US	SE THIS SPACE	
	9. Statement and signature:		
	To the best of my knowledge and belief, the foregois a true copy of the original document. Bruce H. Cottrell	ping information is true and correct and any attached copy 15 May 2006	
ł	Name of person signing Signature	Date	
	Signature Signature	Total number of pages: 3	
	OMB No. 0651-0027 (exp. 6/30/05)		
	Fax documents to be recorded with required cover sheet to: (703) 306-5995		
	OR Mail documents to be recorded with required cover si 124/2006 DBYRNE 00000077 122150 1038/685	heet to: Commissioner for Patents	
05	1/24/2006 DBYRHE 00000077 122150 10387688 COUNTY	Mail Stop Assignments	
/ 01	FC:8021 40.00 DA	PO Box 1450	
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PATENT REEL: 017914 FRAME: 0574

Rev. 04/06/2006

ASSIGNMENT

DOE S-100,591

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

The Regents of the University of California 1111 Franklin Street, Fifth Floor, Oakland, CA 94607-5200

The previous assignment of which was Recorded on November 12, 2003, Reel 14121, Frame 0844.

Conventions for the Protection of Industrial Property;

hereby sells, assigns and transfers

TO STATE OF THE PROPERTY OF THE STATE OF THE

National I	Labora	Los Alamos National Security, LLC, a Delaware Limited Liability Company, at Los Alamos atory, LC/IP, Mail Stop A187, Los Alamos, NM 87545 and the successors, assigns and atives of the ASSIGNEE
its en	tire rig	ht, title and interest
an und	divided	fifty percent (50%) interest
☐ an un	divide	d percent (_%) interest
for the Ur	nited S	tates and its territorial possessions
		reign countries, including all rights to claim priority, in and to any and all improvements osed in the invention titled:
TRAVELI	NG-W	AVE THERMOACOUSTIC ENGINES WITH INTERNAL COMBUSTION
Name of	Invent	ors, Nathan T. Weiland, Ben T. Zinn, Gregory W. Swift
and which	h is fou	und in
(a)	\boxtimes	U.S. application Serial No. 10/387,688, filed on 3/13/2003.
(b)	\boxtimes	U.S. Patent No. 6,732,515, issued 5/11/2004.
	and, i	nd any legal equivalent thereof in a foreign country, including the right to claim priority in and to, all Letters Patent to be obtained for said invention by the above application or continuation, division, continuation-in-part, extension or substitute thereof, and any reissue, period of said Letters Patent and all rights under all international

A change of address to which correspondence is to be sent regarding patent maintenance fees is being sent separately.

ASSIGNOR 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 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,

> PATENT REEL: 017914 FRAME: 0575

or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and 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.

AND the **ASSIGNOR** 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

1st day of May, 2006

Signature of Assignor

Bruce H. Cottrell

IP Practice Group Leader