U.S. DEPARTMENT OF COMMERCE SUBSTITUTE Patent and Trademark Office FORM PTO-1595 100845030 To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. Name and address of receiving party(jes)
 Name: United States Air Force 1. Name of conveying party(ies): ARTHUR F. SPENCER JOHN D. CORLEY Internal Address: AFMC LOUAZ BIGG-11 Street Address: 2240 B Street, Room 100 Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No City: Wright-Patterson AFB Nature of conveyance: State: Ohio ZIP: 45433-7109 ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Other \_\_\_\_\_ Execution Date(s): 8/10/98 and 7/30/98 I This instrument should be recorded on the governmental register in accordance with 37 CFR 7.1(e)(1) 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) B. Patent No.(s) 09/148,906 Additional numbers attached? ☐ Yes ☑ No Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: 7. Total fee (37 CFR 3.41) .....\$ 40.00 Name: \_\_\_\_\_ Thomas L. Kundert Internal Address: AFMC LO/JAZ, Bldg 11 □ Enclosed Street Address: 2240 B Street, Room 100 Authorized to be charged to deposit account 8. Deposit account number: City: Wright-Patterson AFB AF 01-0465 State: Ohio ZIP: 45433-7109 (Attach duplicate copy of this page if paying by deposit account) 1/1998 JSHABAZZ 00000086 010465 09148906 DO NOT USE THIS SPACE 01 C:581 40.00 CH Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. THOMAS L. KUNDERT Name of person signing Total number of pages including cover sheet, attachments, and document

> PATENT REEL: 9477 FRAME: 0777

## **ASSIGNMENT**

WHEREAS we, Arthur F. Spencer and John D. Corley, while employed by the United States of America, made an invention entitled BLAST AND FRAGMENTATION ENHANCING EXPLOSIVE, described in an application for Letters Patent of the United States executed by us on the 12 day of Access 1998, and the 30th day of Lower 1998, respectively;

WHEREAS, the conditions under which said invention was made are such as to entitle the Government under paragraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, as to such foreign rights, it is the policy of the Government to obtain an option to exercise such rights;

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and other valuable considerations, We, Arthur F. Spencer and John D. Corley, have sold, assigned, and transferred, and by these presents do sell, assign, and transfer unto the Government of the United States, as represented by the Secretary of the Air Force, the entire right, title and interest throughout the United States of America, its territories and dependencies, in and to the aforesaid joint invention described in the aforesaid application for Letters Patent of the United States, and all Letters Patent issuing thereon and any continuations, divisions, and reissues or extensions thereof; We hereby authorize and request the Commissioner of Patents & Trademarks to issue said Letters Patent to the United States of America, as represented by the Secretary of the Air Force, and his successors, as assignee of the entire right, title and interest in and to the same throughout the United States of America, as its territories and dependencies, for the sole use for the full term or terms for which said Letters Patent and any continuations, divisions and reissues or extensions thereof are, or may be. granted as fully and entirely as the same would have been held by us, Arthur F. Spencer and John D. Corley, had this Assignment not been made; and We do hereby also grant unto the United States of America as represented by the Secretary of the Air Force, the option to take all of the right, title and interest in our invention or all applications for Letters Patent thereon in all countries foreign to the United States in which the United States of America may file or cause to be filed, applications for Letters Patent, without payment to us of any further consideration; provided, however, that this grant of an option to take foreign rights in the invention must be exercised by written notice to us within eight months of the filing date of any application for United States Letters Patent covering our invention, within eight months from the declassification of the joint invention, whichever is later, and that all foreign rights not exercised under the option are left to me subject to a nonexclusive, irrevocable, royalty-free license to the United States of America in any patent which may issue on said joint invention in any foreign country, including the power to issue sublicenses for use in behalf of the United States of America and/or in furtherance of the foreign policies of the United States of America; and we, Arthur F. Spencer and John D. Corley, hereby agree to execute any and all applications for Letters Patent, and to furnish all data and documents and to execute any papers which may be necessary for the preparation or filing of such domestic applications, or for the Government to exercise its option granted hereunder, except it shall be understood that we shall not be subject to any out-of-pocket expense relative to such action.

	Arthur F. Spencer Known By: FL Dr. Lic  SIGNED and acknowledged before me this 10 day of Aug , 1998, at Edin AFB  County of Okaloosa , and State of Florida
(Seal)	DEBRA J. RYAN Notary Public - State of Florida My Commission Expires Jan. 21, 2000 Commission # CC 526014  John D/Corley
	SIGNED and acknowledged before me this day of, 1998, at, County of, and State of
(Seal)	Attached CArfornia acknowledgment Notary Public

PATENT REEL: 9477 FRAME: 0778

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State of California	
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County of Manterey	
On July 30 1998 before	e me, Name and Title of Officer (e.g., "Jane Doe, Notary Public")
personally appeared John D	Corley  Name(s) of Signer(s)
Dersonally knewn to me - OR - proved	to me on the basis of satisfactory evidence to be the person(s)
	whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(iss), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) executed the instrument.
C. MICHELETTI Commission # 1129211	WITNESS my hand and official seal.
Notary Public — California.  Monterey County  My Comm. Expires Mar 10, 203	C Prichalds Signature of Notary Public
	- OPTIONAL
	it may prove valuable to persons relying on the document and could prevent reattachment of this form to another document.
<b>Description of Attached Documen</b>	t
	in & Power of attorney for Potent popul
Document Date: July 30,199	· · · · · · · · · · · · · · · · · · ·
Signer(s) Other Than Named Above:	1
Capacity(ies) Claimed by Signer(s	
Signer's Name: Jan D. Corle	Signer's Name:
🖈 Individual	☐ Individual
Corporate Officer Title(s):	☐ Corporate Officer Title(s):
	☐ Partner — ☐ Limited ☐ General
☐ Partner — ☐ Limited ☐ General	
☐ Attorney-in-Fact	☐ Attorney-in-Fact
	☐ Trustee  MBPRINT NER  ☐ Guardian or Conservator  RIGHT THUMBPRINT OF SIGNER
☐ Attorney-in-Fact ☐ Trustee ☐ Guardian or Conservator ☐ Gight thui	☐ Trustee  MBPRINT NER  Guardian or Conservator  RIGHT THUMBPRINT OF SIGNER
☐ Attorney-in-Fact ☐ Trustee ☐ Guardian or Conservator ☐ Gight thui	☐ Trustee  MBPRINT NER  Guardian or Conservator  RIGHT THUMBPRINT OF SIGNER
Attorney-in-Fact  Trustee Guardian or Conservator Of Sig Top of thur	Trustee Guardian or Conservator Of Signer Top of thumb here
Attorney-in-Fact  Trustee Guardian or Conservator Of Sig Top of thur	Trustee Guardian or Conservator Of Signer Top of thumb here

**RECORDED: 09/27/1998** 

**PATENT REEL: 9477 FRAME: 0779**