Form **PTO-1595** (Rev. 07/05) <u>OMB No. 0651-0027</u> (exp. 6/30/2008)

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	ORM COVER SHEET			
	se record the attached documents or the new address(es) below.			
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)			
DANIEL L. DEAN 11/17/2005	Name: The United States of America as Represented by the			
MICHAEL DEEDS 11/21/2005 ALLEN KEENEY 10/25/2005	Internal Address: Secretary of the Navy			
	Office of Counsel Atten: Code OOCCIP			
Additional name(s) of conveying party(ies) attached? Yes / No 3. Nature of conveyance/Execution Date(s):				
Execution Date(s)	Street Address: Ballston Tower One			
✓ Assignment Merger	800 North Quincy Street			
Security Agreement Change of Name	City: Arlington			
Joint Research Agreement	State: Virginia			
Government Interest Assignment				
Executive Order 9424, Confirmatory License	Country: United States Zip: 22217-5660			
Other	Additional name(s) & address(es) attached? Yes Vo			
4. Application or patent number(s): A. Patent Application No.(s) 11/311,584 Additional numbers att	document is being filed together with a new application. B. Patent No.(s) ached? Yes No			
5. Name and address to whom correspondence	6. Total number of applications and patents			
concerning document should be mailed:	involved:			
Name:Office of Counsel, Code OC4	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00			
Internal Address; Naval Surface Warfare Center	Authorized to be charged by credit card			
	Authorized to be charged to deposit account			
Street Address: 101 Strauss Ave. Building D-31	Enclosed			
	None required (government interest not affecting title)			
City: Indian Head	8. Payment Information			
State: Maryland Zip: 20640-5035	a. Credit Card Last 4 Numbers Expiration Date			
Phone Number: <u>301-744-5603</u>				
Fax Number: 301-744-4423	b. Deposit Account Number 50-1114			
Email Address: fredric.zimmerman@navy.mil	Authorized User Name Fredric Zimmerman			
9. Signature: Red	25			
Signature	SJanuary 2006_			
Fredric Zimmerman, Reg. No. 48,747 Name of Person Signing	Total number of pages including cover sheet, attachments, and documents: 4			
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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: 017159 FRAME: 0603

Command Counsel

Command Counsel

ASSIGNMENT (Contractor Invention)

INVENTOR(S) (Names)	PECT RATIO METAL STRUCTURES				
ALLEN KEENEY	JOHN HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY				
	CONTRACT NO.		GOVERNMENT AGENCY		
	- · · · · · · · · · · · · · · · · · · ·		DEPARTMENT OF THE NAVY		
	CONTRACTOR INVENTION D	CONTRACTOR INVENTION DOCKET NO.		AGENCY DOCKET NO. 96,756	
	DATE EXECUTED	DATE EXECUTED SERIAL NO.		FILING DATE	
application. The license reserved to the Contractor extension the Contractor is a part and includes the risologisted to do so at the time the contract was a transferred to the successor of that part of the Contractor in the inventor(s) turther agrees (agree) to assist information and decuments, and by performing a the invention(s). The Contractor joins in and agrees to the for and assigns all right, title and interest in and to a	ght to grant sublicenses of the warded. The license is transfortractor's business to which at the Contractor, and the Gall acts and doing all things were going assignment and, excepting invention(s), and further	ne same scope to errable only with it such invention per permanent, upon a high may be reasoned for the above a sprace to furnish.	the extent the Corne approval of the stains. equest, by furnishinably necessary to esservation of a lice to the United State	hiractor was legally Navy except when ing any available o obtain a patent on ense, relinquishes es of America, upon	
prosecution and settlement of interferences), and	any other patent application	on the invention(a		tor palent (including	
prosecution and settlement of interferences). and $\frac{10/25/05}{\text{DATE}}$	any other patent application	on the invention(s	Pener	(299)	
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NAVOCNR 5870/43 (7-69)

(SEAL)

Reg. No. 43,607 Albert J. Fasulo, It Associate Patent Course

PATENT REEL: 017159 FRAME: 0604

ASSIGNMENT OF INVENTION

WHEREAS we, Daniel L. Dean of Odenton, Md., and Michael Deeds of Port Tobacco, Md., while employed by the Government of the United States of America, hereinafter referred to as the Government, have made an invention entitled METHOD FOR FABRICATING HIGH ASPECT RATIO METAL STRUCTURES identified as Navy Case No. 96,756 and described in application for Letters Patent of the United States of America as executed by us on _______, 2005; and

WHEREAS, the conditions under which the 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, the Government desires to obtain the entire right, title and interest in and to the invention disclosed in said application within the United States of America, its territories and possessions and other rights and benefits herein granted; and

WHEREAS, the Government desires an option to obtain the foreign rights in and to the invention;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration the receipt of which is hereby acknowledged, we hereby assign and transfer to the United States of America as represented by the Secretary of the Navy the entire right, title, and interest in and to said invention within the United States of America, its territories and possessions, and the entire right, title, and interest in and to said application and any continuation, division or substitution thereof, and such Letters Patent as may issue therefrom and any reissue or extensions thereof, said invention, application and Letters Patent to be held by the United States of America as represented by the Secretary of the Navy to the end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by us had this assignment not been made.

We do hereby also grant to the Government, the option to take the entire right, title, and interest in and to the invention and all patent applications, patents and other forms of protection thereon in countries foreign to the United States of America within eight months of the filing date of any application for United States Letters Patent covering the invention; such option to be exercised by a written notification to us within such eight months identifying the specific foreign countries in which the Government will file or cause to be filed an application for patent or other form of protection on the invention; and that the rights in the foreign countries not exercised under the option are left to us subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent or other form of protection which may issue on the invention in any foreign country, including the power to issue sub-licenses for use in behalf of the Government and/or in furtherance of the foreign policies of the Government.

WE hereby further agree to make, execute, and deliver to the Government, any and all papers, documents, affidavits, statements or other instruments that may be necessary in the prosecution of the application and any continuation, division or substitution of the application, or any application for reissue or extension of said Letters Patent, and to assist the Government in every way in protecting the invention as may be requested, provided that any expense arising through such efforts will be paid by the Government.

IN TESTIMONY WHEREOF, we have set our hands and affixed our seals.

11/21/05 11/21/05

RECORDED: 01/03/2006

PATENT **REEL: 017159 FRAME: 0605**