		PATENTS ONLY	
TO: The Comm Submission		ks: Please record the attached origin	al document(s) or copy(ies).
X New	Туре	Conveyance Type	y Agreement
Resubmis	sion (Non-Recordation)		e of Name
Document	n of PTO Error		
Reel #	Frame #	Merger Other U.S. Gover (For Use ONLY by U.S. Go	nment
Reel #	Frame #	Departmental File	
Conveying P	arty(ies)	Mark if additional names of convey	ing parties attached Execution Date Month Day Year
Name (line 1)	HERUP, ERIC		02 17 199
Name (line 2)			Execution Date
Second Party Name (line 1)	HUYBRECHTS, STE	IVEN	Month Day Yea 0217199
Name (line 2)			•
Receiving Pa	arty	Mark if additional n	ames of receiving parties at the
Name (line 1)	Government of the Un	ited States of America	If document to the n
		rieu states of America,	is an assignment and
-		ecretary of the Air For	receiving part is not ce. the domiciled in the onit
- //19188.686%3&c 2)05	049406 010465 te00326456 he Se		receiving party imo
//1989a609VaSe 200 ::581 40 Address (line 1)	000000 010065 te00326050 he Se 00 CH SAF/GCQ	ecretary of the Air For	receiving parts inno domiciled in the official States, an appentmen of a domestic representative is attac (Designation must be separate document fro
7/1988 6000 200 1:581 40 40 Address (line 1) 1 Address (line 2) 1	Added d19465 t 606326456 he Se DO CH SAF/GCQ 1500 Wilson BLVD Sui	ecretary of the Air For	receiving parts inno domiciled in the Unitu States, an appaintmer of a domestic " representative is attac (Designation must be
7/1989:60045.e 200 1989:60045.e 200 1980:60045.e 200 Address (line 2) Address (line 3)	AGAGA GIOGS teog326956 he Se DO CH SAF/GCQ 1500 Wilson BLVD Sui ARLINGTON City	ecretary of the Air Ford ite 304 VA State/Country	receiving parts inno domiciled in the official States, an appentmen of a domestic representative is attac (Designation must be separate document fro
7/1989:60045.e 200 1989:60045.e 200 1980:60045.e 200 Address (line 2) Address (line 3)	AGE OF CH SAF/GCQ 1500 Wilson BLVD Sui ARLINGTON	ecretary of the Air Ford ite 304 VA State/Country	receiving parts innot domiciled in the Onitu States, an appentimer of a domestic representative is attac (Designation must be separate document from Assignment.)
7/1989:60045.e 200 1989:60045.e 200 1980:60045.e 200 Address (line 2) Address (line 3)	AGAGA GIOGS teog326956 he Se DO CH SAF/GCQ 1500 Wilson BLVD Sui ARLINGTON City	ecretary of the Air Ford Lite 304 VA State/Country	receiving parts innot domiciled in the Onitu States, an appentimer of a domestic representative is attac (Designation must be separate document from Assignment.)
//1989a fille 200 i:581 40 Address (line 1) Address (line 2) Address (line 3) Domestic Re	AGAGA GIOGS teog326956 he Se DO CH SAF/GCQ 1500 Wilson BLVD Sui ARLINGTON City	ecretary of the Air Ford Lite 304 VA State/Country	receiving parts innot domiciled in the Onitu States, an appentimer of a domestic representative is attac (Designation must be separate document from Assignment.)
2/1989a 600 Vise 200 1381 40 Address (line 1) Address (line 2) Address (line 3) Domestic Re Name	AGAGA GIOGS teog326956 he Se DO CH SAF/GCQ 1500 Wilson BLVD Sui ARLINGTON City	ecretary of the Air Ford Lite 304 VA State/Country	receiving parts innot domiciled in the Onitu States, an appentimer of a domestic representative is attac (Designation must be separate document from Assignment.)
2/1989a fi309Vi3.e 200 2:581 40 Address (line 1) 1 Address (line 2) 1 Address (line 3) 1 Domestic Re Name Name 1	AGAGA GIOGS teog326956 he Se DO CH SAF/GCQ 1500 Wilson BLVD Sui ARLINGTON City	ecretary of the Air Ford Lite 304 VA State/Country	receiving parts innot domiciled in the Onitu States, an appentimer of a domestic representative is attac (Designation must be separate document from Assignment.)
//1989a (ij)@VijSe 200 2:581 40 Address (line 1) 1 Address (line 2) 1 Address (line 3) 1 Domestic Re Name Address (line 1) 1 Address (line 2) 1 Address (line 2) 1 Address (line 2) 1	AGAGA GIOGS teog326956 he Se DO CH SAF/GCQ 1500 Wilson BLVD Sui ARLINGTON City	ecretary of the Air Ford Lite 304 VA State/Country	receiving parts innot domiciled in the Onitu States, an appentimer of a domestic representative is attac (Designation must be separate document from Assignment.)
//1989a (ij)@VijSe 200 2:581 40 Address (line 1) 1 Address (line 2) 1 Address (line 3) 1 Domestic Re Name Address (line 1) 1 Address (line 2) 1 Address (line 2) 1 Address (line 2) 1 Address (line 2) 1 Address (line 3) 1	ARLINGTON city presentative Name and A	ecretary of the Air Ford Lte 304 VA State/Country ddress Enter for the first Receive	receiving parts innot domiciled in the Onitu States, an appentimer of a domestic representative is attac (Designation must be separate document from Assignment.)
//1989a (ij)@VijSe 200 2:581 40 Address (line 1) 1 Address (line 2) 1 Address (line 3) 1 Domestic Re Name Address (line 1) 1 Address (line 2) 1 Address (line 2) 1 Address (line 2) 1 Address (line 2) 1 Address (line 3) 1	ARLINGTON city presentative Name and A	ecretary of the Air Ford Lite 304 VA State/Country	receiving parts innot domiciled in the Onitu States, an appentimer of a domestic representative is attac (Designation must be separate document from Assignment.)

FORM PTO-1619B Expires 06/30/99 OMB 0651-0027	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT
Correspondent Name and Addres	S Area Code and Telephone Number	505 846-1542
Name Callahan, Kennet	h_E	
Address (line 1) 377 ABW/JAN		
Address (line 2) 2251 Maxwell SE		
Address (line 3) Kirtland AFB, NM	87117	
Address (line 4)		
Pages Enter the total number or including any attachment	f pages of the attached conveyance docunts.	iment # 2
Application Number(s) or Patent N		f additional numbers attached
Enter either the Patent Application Number or Patent Application Number(s)	the Patent Number (DO NOT ENTER BOTH number	rs for the same property). nt Number(s)
If this document is being filed together with a <u>new</u> signed by the first named executing inventor.	Patent Application, enter the date the patent applica	tion was <u>Month Day Year</u> シューフ 1999
Patent Cooperation Treaty (PCT)	PCT PCT	
Enter PCT application number <u>only if</u> a U.S. Application Num has not been assigned.		
Number of Properties	e total number of properties involved.	#
Fee Amount Fee Amou	Int for Properties Listed (37 CFR 3.41):	\$ 4000
Method of Payment: E	nclosed Deposit Account X	
	additional fees can be charged to the account.) Deposit Account Number:	# 01-0465
	Authorization to charge additional fees:	Yes X No
Statement and Signature		
	l belief, the foregoing information is true ne original document. Charges to deposi	
Keneeth E. Callahan	Jennett E Callaban Signature	4 June 1999
Name of Person Signing	Signatura	Date

1

PATENT REEL: 010030 FRAME: 0267

FORM PTO-1619C Expires 06/30/99 OMB 0651-0027	
---	--

RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce Patent and Trademark Office PATENT

Conveying Pa		Execution Date
Enter additional C	onveying Parties	Month Day Year
Name (line 1)	GRIFFIN, STEVEN	02 17 1999
Name (line 2)		Execution Date Month Day Year
Name (line 1)		
Name (line 2)		Execution Date Month Day Year
Name (line 1)		
Name (line 2)]
Receiving Pa	rty(ies) Mark if additional names of receiving part	ties attached
-	Receiving Party(ies)	
Name (line 1)		If document to be recorded is an assignment and the
Name (line 2)		receiving party is not domiciled in the United States, an appointment
Address (line 1)		of a domestic representative is attached. (Designation must be a separate
Address (line 2)		document from Assignment.)
Address (line 3)	City State/Country Zip Co	ode
Name (line 1)		If document to be recorded is an assignment and the receiving party is not
Name (line 2)		domiciled in the United States, an appointment of a domestic representative is
Address (line 1)		attached. (Designation must be a separate document from
Address (line 2)		Assignment.)
Address (line 3)	City State/Country Zip	o Code
Application N	Iumber(s) or Patent Number(s) Mark if additional numbers attached	d
Enter either the	e Patent Application Number or the Patent Number $(DO NOT ENTER BOTH numbers for the s$	same property).
Pa	atent Application Number(s) Patent Num	nber(s)

PATENT REEL: 010030 FRAME: 0268

ASSIGNMENT

WHEREAS, WE, <u>Eric Herup, Steven Huybrechts, and Steven Griffin</u>, while employed by the Government of the United States, made an invention jointly with <u>Stephen Tsai</u> entitled <u>Composite</u> <u>ChamberCore Sandwich-type Structure with Inherent Acoustic Attenuation</u>, and described in application for Letters Patent of the United States executed by us on the $\underline{12}$ day of $\underline{Fe6}$, 1999; on the $\underline{12}$ day of $\underline{Fe6}$, 1999; and on the $\underline{12}$ day of $\underline{Fe6}$, 1999; 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 in Government employees inventions, including foreign rights; and

WHEREAS, as to 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 promises and other valuable considerations, we, Eric Herup, Steven Huybrechts, and Steven Griffin, joint inventors with Stephen Tsai have sold, assigned and transferred and by these presents do sell, assign and transfer unto the Government of the United States of America as represented by the Secretary of the Air Force, our undivided right, title and interest throughout the United States of America, its territories and dependencies, in and to the aforesaid 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 and Trademarks to issue said Letters Patent to the Government of the United States of America, as represented by the Secretary of the Air Force, and his/her successors, as assignee of our undivided right, title and interest in and to the same throughout the United States of America, 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, had this assignment not been made; and we do hereby also grant unto the Government of the United States as represented by the Secretary of the Air Force, the option to take our undivided right, title and interest in said invention or all applications for Letters Patent thereon in all countries foreign to the United States in which the Government of the United States 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 joint invention, or application for Letters Patent thereon, shall have force and effect only as to such applications filed in foreign countries within six months of the filing date of any application for United States Letters Patent covering said joint invention, or within six months from the declassification of said invention, whichever is later, and that all foreign rights in said undivided interest not exercised under the option are left to us subject to a nonexclusive, irrevocable, royalty-free license to the Government of the United States in our undivided interest in any patent which may issue on said invention in any foreign country, including the power to issue sublicenses for use in behalf of the Government of the United States and/or in furtherance of the foreign policies of the Government of the United States any papers which may be necessary for the preparation of filing of such domestic applications, or for the Government to exercise its option granted

hereunder, except that it shall be understood that we shall not be subject to any out-of-pocket expense relative to such action

Telative to such action.	
Inv	ventor Erie Herup
	Erie Herun
STATE OF: NEW MEXICO	
COUNTY OF: BERNALILLO	SS:
Before me, a Notary Public in and for the co	ounty of BERNALILLO and state of
NEW MEXICO, on this 17 t	ounty of <u>BERNALILLO</u> and state of th day of <u>February</u> , 1999 personally appeared
FRIC HERUP, who being duly sw	rorn did say that he is the inventor who signed the above
Assignment and acknowledged said Assign	
	P. W. W. W.
(Seal)	L'uby D. Warts Notary Public
	U Notary Public
My Commission Expires: 31 May 2001	
Inventor	STAD
	Steven Huybrechts
STATE OF: NEW MEXICO	
	SS:
COUNTY OF: BERNALILLO	
Before me. a Notary Public in and for the co	ounty of BERNALILLO and state of
NEW MEXICO	n day of February . 1999 personally appeared
STEVEN HUYBRECHTS , who being duly sw	ounty of <u>BERNALILLO</u> and state of and state of <u>February</u> , 199,9 personally appeared form did say that he is the inventor who signed the above
Assignment and acknowledged said Assign	ment to be his free act and deed.
	S'a MILLOOT
(Seal)	Siber J. Wate
Nu Commission Euripees	\vee Notary Public

My Commission Expires: 31 May 2001

Inventor C	Ĺ	C-C	
····	Steven Griffi	n	- C

STATE OF: <u>NEW MEXICO</u>

COUNTY OF: BERNALILLO

Before me, a Notary Public in and for the county of
NEW MEXICOBERNALILLOand state ofNEW MEXICO, on this
17th17thday of
February, 1999, personally appeared STEVEN GRIFFIN, who being duly sworn did say that he is the inventor who signed the above Assignment and acknowledged said Assignment to be his free act and deed.

ss:

(Seal)

Liby D. Wate

My Commission Expires: 31 May 2001

Page 2 of 2

PATENT REEL: 010030 FRAME: 0270

ľ

ASSIGNMENT

WHEREAS, WE, <u>Eric Herup</u>, <u>Steven Huybrechts</u>, and <u>Steven Griffin</u>, while employed by the Government of the United States, made an invention jointly with <u>Stephen Tsai</u> entitled <u>Composite</u> <u>ChamberCore Sandwich-type Structure with Inherent Acoustic Attenuation</u>, and described in application for Letters Patent of the United States executed by us on the 17 day of <u>F-66</u>, 1999; on the 17 day of <u>F-66</u> 1999; 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 in Government employees inventions, including foreign rights; and

WHEREAS, as to 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 promises and other valuable considerations, we, Eric Herup, Steven Huybrechts, and Steven Griffin, joint inventors with Stephen Tsai have sold, assigned and transferred and by these presents do sell, assign and transfer unto the Government of the United States of America as represented by the Secretary of the Air Force, our undivided right, title and interest throughout the United States of America, its territories and dependencies, in and to the aforesaid 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 and Trademarks to issue said Letters Patent to the Government of the United States of America, as represented by the Secretary of the Air Force, and his\her successors, as assignee of our undivided right, title and interest in and to the same throughout the United States of America, 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, had this assignment not been made; and we do hereby also grant unto the Government of the United States as represented by the Secretary of the Air Force, the option to take our undivided right, title and interest in said invention or all applications for Letters Patent thereon in all countries foreign to the United States in which the Government of the United States 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 joint invention. or application for Letters Patent thereon, shall have force and effect only as to such applications filed in foreign countries within six months of the filing date of any application for United States Letters Patent covering said joint invention, or within six months from the declassification of said invention, whichever is later, and that all foreign rights in said undivided interest not exercised under the option are left to us subject to a nonexclusive, irrevocable, royalty-free license to the Government of the United States in our undivided interest in any patent which may issue on said invention in any foreign country, including the power to issue sublicenses for use in behalf of the Government of the United States and/or in furtherance of the foreign policies of the Government of the United States any papers which may be necessary for the preparation of filing of such domestic applications, or for the Government to exercise its option granted

PATENT REEL: 010030 FRAME: 0271

1

hereunder, except that it shall be understood that we shall not be subject to any out-of-pocket expense relative to such action.

Inventor_	En Mart
_	Erje Herup
SS:	

STATE OF: <u>NEW MEXICO</u>

COUNTY OF: BERNALILLO

Before me, a Notary Public in and for the county of <u>BERNALILLO</u> and state of <u>NEW MEXICO</u>, on this <u>17th</u> day of <u>February</u>, <u>1999</u> personally appeared <u>FRIC HERUP</u>, who being duly sworn did say that he is the inventor who signed the above Assignment and acknowledged said Assignment to be his free act and deed.

(Seal)

Liby D. Warts

My Commission Expires: 31 May 2001

Inventor Steven Huybrechts

STATE OF: NEW MEXICO

COUNTY OF: BERNALILLO

Before me, a Notary Public in and for the county of <u>BERNALILLO</u> and state of <u>NEW MEXICO</u>, on this <u>17th</u> day of <u>February</u>, 19<u>9</u>, personally appeared STEVEN HUYBRECHTS, who being duly sworn did say that he is the inventor who signed the above Assignment and acknowledged said Assignment to be his free act and deed.

ss:

(Seal)

My Commission Expires: 31 May 2001

Live y H. Warts Notary Public Inventor Steven Griffin

STATE OF: __ NEW MEXICO

COUNTY OF: BERNALILLO

Before me, a Notary Public in and for the county of <u>BERNALILLO</u> and state of <u>NEW MEXICO</u>, on this <u>17th</u> day of <u>February</u>, 1999, personally appeared STEVEN <u>GRIFFIN</u>, who being duly sworn did say that he is the inventor who signed the above Assignment and acknowledged said Assignment to be his free act and deed.

SS:

(Seal)

Liby D. Warts

My Commission Expires: 31 May 2001

Page 2 of 2

PATENT 'REEL: 010030 FRAME: 0272

RECORDED: 06/04/1999