506631781 04/27/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6678590

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
COURT E. ROSSMAN	04/22/2021
RONALD M. CARVALHO JR	04/22/2021
JOHN R. STUART III	04/21/2021
MATTHEW D. THOREN	04/23/2021
JOHN M. VEILLEUX	04/26/2021
ROSS J. WENDELL	04/21/2021

RECEIVING PARTY DATA

Name:	BAE SYSTEMS INFORMATION AND ELECTRONIC SYSTEMS INTEGRATION INC.
Street Address:	P.O. BOX 868, NHQ0-1-719
City:	NASHUA
State/Country:	NEW HAMPSHIRE
Postal Code:	03061-0868

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17240341

CORRESPONDENCE DATA

Fax Number: (603)782-4378

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 603-622-8456

Email: lunderhill@finchmaloney.com
Correspondent Name: FINCH & MALONEY PLLC

Address Line 1: GATEWAY ONE

Address Line 2: 50 COMMERCIAL STREET - SUITE 300
Address Line 4: MANCHESTER, NEW HAMPSHIRE 03101

ATTORNEY DOCKET NUMBER:	20-4577
NAME OF SUBMITTER:	PETER H. DYKSTRA, REG. NO. 69,520
SIGNATURE:	/Peter H. Dykstra/
DATE SIGNED:	04/27/2021

PATENT 506631781 REEL: 056054 FRAME: 0172

Total Attachments: 12 source=20-4577-FullyExecutedAssignment#page1.tif source=20-4577-FullyExecutedAssignment#page3.tif source=20-4577-FullyExecutedAssignment#page4.tif source=20-4577-FullyExecutedAssignment#page5.tif source=20-4577-FullyExecutedAssignment#page5.tif source=20-4577-FullyExecutedAssignment#page6.tif source=20-4577-FullyExecutedAssignment#page7.tif source=20-4577-FullyExecutedAssignment#page8.tif source=20-4577-FullyExecutedAssignment#page9.tif source=20-4577-FullyExecutedAssignment#page10.tif source=20-4577-FullyExecutedAssignment#page11.tif source=20-4577-FullyExecutedAssignment#page12.tif

For value received, I/We, the undersigned (each) hereby assign and transfer to BAE Systems Information And Electronic Systems Integration Inc. (hereinafter referred to as BAE), a Delaware corporation, having a place of business at Nashua, New Hampshire, in furtherance of my/our obligations to BAE, and its successors, and assigns, the entire right, title and interest, including the right of priority, in, and to and under an application for Letters Patent of the United States entitled:

ROTATABLE ANTENNA DESIGN FOR UNDERSEA VEHICLES

Filing date:	April 26, 2021	Application Number:	17/240,341	
		ne invention(s) and improvement t (CIPs), divisionals, and renev		•
application for	r said Letters Patent, and	d any and all Letters Patent of t	he United States and o	of countries

foreign thereto including the right of priority under the International Convention which may be granted

thereon or therefore; and any reissues, or reexaminations, or extensions of said Letters Patent.

I/We additionally authorize BAE to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by BAE, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this

assignment, and transfer not been made:

And I/we hereby covenant that I/we have a full right to convey the entire interest herein assigned, and that I/we have not executed and will not execute any agreement in conflict herewith, and I/we further covenant and agree that I/we will, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said invention(s) or improvement(s), said application and said Letters Patent to BAE, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to BAE, or to its nominee, all known facts respecting said invention(s) or improvement(s) said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisionals, continuations, CIPs, reissue and foreign applications, to make all rightful oaths and declarations, and generally to do everything possible to aid BAE, its successors, assigns, nominees and legal representatives to obtain and enforce, for its or their own benefit, proper patent protection for said invention(s) or improvements(s) in any and all countries;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to BAE, as assignee of the entire right, title and interest, any and all Letters Patent for said invention(s) or improvement(s), including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this Assignment.

I/we further authorize and direct BAE attorneys to insert the application number and filing date of said application now identified by the case number and title set forth above as soon as the same shall have been known to them by the United States Patent and Trademark Office.

Date Assignment Signed: Apr 22, 2021	Court E ROSSMan Court e Rossman Apor 22, 2023 98 87 EDT;
Date Assignment Signed. 1	Court E. Rossman
Date Assignment Signed:	Ronald M. Carvalho, Jr.
Date Assignment Signed:	John R. Stuart, III
Date Assignment Signed:	Matthew D. Thoren
Date Assignment Signed:	John M. Veilleux
Date Assignment Signed:	Ross J. Wendell

For value received, I/We, the undersigned (each) hereby assign and transfer to BAE Systems Information And Electronic Systems Integration Inc. (hereinafter referred to as BAE), a Delaware corporation, having a place of business at Nashua, New Hampshire, in furtherance of my/our obligations to BAE, and its successors, and assigns, the entire right, title and interest, including the right of priority, in, and to and under an application for Letters Patent of the United States entitled:

ROTATABLE ANTENNA DESIGN FOR UNDERSEA VEHICLES

Filing date:	April 26, 2021	Application Number: _	17/240,341	
		the invention(s) and improvem art (CIPs), divisionals, and rene	` '	,

application for said Letters Patent, and any and all Letters Patent of the United States and of countries foreign thereto including the right of priority under the International Convention which may be granted thereon or therefore; and any reissues, or reexaminations, or extensions of said Letters Patent.

I/We additionally authorize BAE to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by BAE, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, and transfer not been made;

And I/we hereby covenant that I/we have a full right to convey the entire interest herein assigned, and that I/we have not executed and will not execute any agreement in conflict herewith, and I/we further covenant and agree that I/we will, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said invention(s) or improvement(s), said application and said Letters Patent to BAE, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to BAE, or to its nominee, all known facts respecting said invention(s) or improvement(s) said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisionals, continuations, CIPs, reissue and foreign applications, to make all rightful oaths and declarations, and generally to do everything possible to aid BAE, its successors, assigns, nominees and legal representatives to obtain and enforce, for its or their own benefit, proper patent protection for said invention(s) or improvements(s) in any and all countries;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to BAE, as assignee of the entire right, title and interest, any and all Letters Patent for said invention(s) or improvement(s), including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this Assignment.

I/we further authorize and direct BAE attorneys to insert the application number and filing date of said application now identified by the case number and title set forth above as soon as the same shall have been known to them by the United States Patent and Trademark Office.

	Court E. Rossman		
Date Assignment Signed: Apr 22, 2021	Ronald M. Carvalho, Jr Poneld B. Carvalho, L. Carvalho, Jr. Ronald M. Carvalho, Jr.		
Date Assignment Signed:	John R. Stuart, III		
Date Assignment Signed:	Matthew D. Thoren		
Date Assignment Signed:	John M. Veilleux		
Date Assignment Signed:			

For value received, I/We, the undersigned (each) hereby assign and transfer to **BAE Systems Information And Electronic Systems Integration Inc.** (hereinafter referred to as BAE), a Delaware corporation, having a place of business at Nashua, New Hampshire, in furtherance of my/our obligations to BAE, and its successors, and assigns, the entire right, title and interest, including the right of priority, in, and to and under an application for Letters Patent of the United States entitled:

ROTATABLE ANTENNA DESIGN FOR UNDERSEA VEHICLES

·	
and executed on even date herewith the invention(s) and improvement(s) set forth therein, and any an	d
all continuations, continuations-in-part (CIPs), divisionals, and renewals of and substitutes for said	
application for said Letters Patent, and any and all Letters Patent of the United States and of countries	3

Application Number: 17/240.341

foreign thereto including the right of priority under the International Convention which may be granted thereon or therefore; and any reissues, or reexaminations, or extensions of said Letters Patent.

April 26, 2021

Filing date:

I/We additionally authorize BAE to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by BAE, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, and transfer not been made;

And I/we hereby covenant that I/we have a full right to convey the entire interest herein assigned, and that I/we have not executed and will not execute any agreement in conflict herewith, and I/we further covenant and agree that I/we will, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said invention(s) or improvement(s), said application and said Letters Patent to BAE, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to BAE, or to its nominee, all known facts respecting said invention(s) or improvement(s) said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisionals, continuations, CIPs, reissue and foreign applications, to make all rightful oaths and declarations, and generally to do everything possible to aid BAE, its successors, assigns, nominees and legal representatives to obtain and enforce, for its or their own benefit, proper patent protection for said invention(s) or improvements(s) in any and all countries;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to BAE, as assignee of the entire right, title and interest, any and all Letters Patent for said invention(s) or improvement(s), including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this Assignment.

I/we further authorize and direct BAE attorneys to insert the application number and filing date of said application now identified by the case number and title set forth above as soon as the same shall have been known to them by the United States Patent and Trademark Office.

Date Assignment Signed: _____

Date Assignment Signed: _____

John M. Veilleux

For value received, I/We, the undersigned (each) hereby assign and transfer to **BAE Systems Information And Electronic Systems Integration Inc.** (hereinafter referred to as BAE), a Delaware corporation, having a place of business at Nashua, New Hampshire, in furtherance of my/our obligations to BAE, and its successors, and assigns, the entire right, title and interest, including the right of priority, in, and to and under an application for Letters Patent of the United States entitled:

ROTATABLE ANTENNA DESIGN FOR UNDERSEA VEHICLES

Filing date: April 26, 2021 Application Number: 17/240,341

• — — …
and executed on even date herewith the invention(s) and improvement(s) set forth therein, and any and
all continuations, continuations-in-part (CIPs), divisionals, and renewals of and substitutes for said
that the state of

application for said Letters Patent, and any and all Letters Patent of the United States and of countries foreign thereto including the right of priority under the International Convention which may be granted thereon or therefore; and any reissues, or reexaminations, or extensions of said Letters Patent.

I/We additionally authorize BAE to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by BAE, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, and transfer not been made;

And I/we hereby covenant that I/we have a full right to convey the entire interest herein assigned, and that I/we have not executed and will not execute any agreement in conflict herewith, and I/we further covenant and agree that I/we will, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said invention(s) or improvement(s), said application and said Letters Patent to BAE, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to BAE, or to its nominee, all known facts respecting said invention(s) or improvement(s) said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisionals, continuations, CIPs, reissue and foreign applications, to make all rightful oaths and declarations, and generally to do everything possible to aid BAE, its successors, assigns, nominees and legal representatives to obtain and enforce, for its or their own benefit, proper patent protection for said invention(s) or improvements(s) in any and all countries;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to BAE, as assignee of the entire right, title and interest, any and all Letters Patent for said invention(s) or improvement(s), including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this Assignment.

I/we further authorize and direct BAE attorneys to insert the application number and filing date of said application now identified by the case number and title set forth above as soon as the same shall have been known to them by the United States Patent and Trademark Office.

Date Assignment Signed: _____

For value received, I/We, the undersigned (each) hereby assign and transfer to **BAE Systems Information And Electronic Systems Integration Inc.** (hereinafter referred to as BAE), a Delaware corporation, having a place of business at Nashua, New Hampshire, in furtherance of my/our obligations to BAE, and its successors, and assigns, the entire right, title and interest, including the right of priority, in, and to and under an application for Letters Patent of the United States entitled:

ROTATABLE ANTENNA DESIGN FOR UNDERSEA VEHICLES

Filing date: April 26, 2021 Application Number: 17/240,341

and executed on even date herewith the invention(s) and improvement(s) set forth therein, and any and
all continuations, continuations-in-part (CIPs), divisionals, and renewals of and substitutes for said

all continuations, continuations-in-part (CIPs), divisionals, and renewals of and substitutes for said application for said Letters Patent, and any and all Letters Patent of the United States and of countries foreign thereto including the right of priority under the International Convention which may be granted thereon or therefore; and any reissues, or reexaminations, or extensions of said Letters Patent.

I/We additionally authorize BAE to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by BAE, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, and transfer not been made;

And I/we hereby covenant that I/we have a full right to convey the entire interest herein assigned, and that I/we have not executed and will not execute any agreement in conflict herewith, and I/we further covenant and agree that I/we will, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said invention(s) or improvement(s), said application and said Letters Patent to BAE, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to BAE, or to its nominee, all known facts respecting said invention(s) or improvement(s) said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisionals, continuations, CIPs, reissue and foreign applications, to make all rightful oaths and declarations, and generally to do everything possible to aid BAE, its successors, assigns, nominees and legal representatives to obtain and enforce, for its or their own benefit, proper patent protection for said invention(s) or improvements(s) in any and all countries;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to BAE, as assignee of the entire right, title and interest, any and all Letters Patent for said invention(s) or improvement(s), including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this Assignment.

I/we further authorize and direct BAE attorneys to insert the application number and filing date of said application now identified by the case number and title set forth above as soon as the same shall have been known to them by the United States Patent and Trademark Office.

Date Assignment Signed: _____

For value received, I/We, the undersigned (each) hereby assign and transfer to BAE Systems Information And Electronic Systems Integration Inc. (hereinafter referred to as BAE), a Delaware corporation, having a place of business at Nashua, New Hampshire, in furtherance of my/our obligations to BAE, and its successors, and assigns, the entire right, title and interest, including the right of priority, in, and to and under an application for Letters Patent of the United States entitled:

ROTATABLE ANTENNA DESIGN FOR UNDERSEA VEHICLES

Filing date:	April 26, 2021	Application Number:	17/240,341	
and executed	d on even date herewith th	e invention(s) and improven	nent(s) set forth therein, a	and any an

d all continuations, continuations-in-part (CIPs), divisionals, and renewals of and substitutes for said application for said Letters Patent, and any and all Letters Patent of the United States and of countries foreign thereto including the right of priority under the International Convention which may be granted thereon or therefore; and any reissues, or reexaminations, or extensions of said Letters Patent.

I/We additionally authorize BAE to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by BAE, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, and transfer not been made:

And I/we hereby covenant that I/we have a full right to convey the entire interest herein assigned, and that I/we have not executed and will not execute any agreement in conflict herewith, and I/we further covenant and agree that I/we will, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said invention(s) or improvement(s), said application and said Letters Patent to BAE, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to BAE, or to its nominee, all known facts respecting said invention(s) or improvement(s) said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisionals, continuations, CIPs, reissue and foreign applications, to make all rightful oaths and declarations, and generally to do everything possible to aid BAE, its successors, assigns, nominees and legal representatives to obtain and enforce, for its or their own benefit, proper patent protection for said invention(s) or improvements(s) in any and all countries;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to BAE, as assignee of the entire right, title and interest, any and all Letters Patent for said invention(s) or improvement(s), including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this Assignment.

I/we further authorize and direct BAE attorneys to insert the application number and filing date of said application now identified by the case number and title set forth above as soon as the same shall have been known to them by the United States Patent and Trademark Office.

Date Assignment Signed:	
	Court E. Rossman
Date Assignment Signed:	Ronald M. Carvalho, Jr.
Date Assignment Signed:	John R. Stuart, III
Date Assignment Signed:	Matthew D. Thoren
Date Assignment Signed:	John M. Veilleux
Date Assignment Signed: Apr 21, 2021	Ross J. Wendell Ross J. Wendell

PATENT REEL: 056054 FRAME: 0185

RECORDED: 04/27/2021