504810672 03/08/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LUKE A AUSLEY	01/25/2018
CHRISTIAN K KEYSER	01/31/2018
CHAD M WELSH	01/30/2018

RECEIVING PARTY DATA

Name:	Government of the United States as Represented by the Secretary of the Air Force
Street Address:	2240 B. Street
Internal Address:	Building 11, Area B
City:	Wright-Patterson AFB
State/Country:	OHIO
Postal Code:	45433-7109

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15915573

CORRESPONDENCE DATA

Fax Number: (937)255-3733

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.

Email: pamela.kuns@us.af.mil

Correspondent Name: PAMELA KUNS
Address Line 1: 2240 B. STREET
Address Line 2: BUILDING 11, AREA B

Address Line 4: WRIGHT-PATTERSON AFB, OHIO 45433-7109

ATTORNEY DOCKET NUMBER:	AFD-1684
NAME OF SUBMITTER:	JASON SOPKO
SIGNATURE:	/Jason Sopko/
DATE SIGNED:	03/08/2018

Total Attachments: 3

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PATENT 504810672 REEL: 045145 FRAME: 0674

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PATENT REEL: 045145 FRAME: 0675

ASSIGNMENT (Government Inventor)

	COOACHINE	nr masnroi)	
invention described in inv to be filed as an application 8 March 2018, ar	rention disclosure AFD 1684 entitle on for Letters Patent of the United and I hereby authorize and request	d " MULTISPECTRAL States (Application S Air Force Patent Cou	
WHEREAS , the co United States as represen entire right, title and inter	ted by the Secretary of the Air For rest therein, including foreign right	ce, under Paragraph s;	as to entitle the Government of the 1(a) of Executive Order 10096, to the
NOW, THEREFORI other valuable considerat		t known that for and	in consideration of the premises and
the Government of the Ur in and to the aforesaid inv aforesaid invention, and t issuing thereon, and any o priority resulting from the HEREBY AUTHORI the Government of the Ur	nited States as represented by the vention described in the invention he resulting application for Letters continuations, continuations-in-paid filing of the aforesaid application IZE AND REQUEST any official who nited States, as represented by the	Secretary of the Air I disclosure, all subsect Patent of the United t, divisions, and reist for patent in the Uni se duty it is to issue Secretary of the Air	d States including all Letters Patent sues or extensions thereof; and all
and any continuations, co fully and entirely as the sa HEREBY ALSO GR. the option to take the ent countries or jurisdictions fo be filed, applications for Lithis grant of an option to to months of the first filing dimonths from the declassif option are left to me, subjin any patent which may is power to issue sublicenses foreign policies of the Unit	ntinuations-in-part, divisions and in the would have been held by me I ANT to the Government of the Uniter right, title and interest in the inforeign to the United States in white etters Patent, without payment to take foreign rights in the invention ate of any application for United States of the invention, whicheve ject to a nonexclusive, irrevocable, ssue on said invention in any counts for use on behalf of the Governmed States of America; and	eissues or extension had this Assignment in ted States, as represivention or all application the Government of me of any further comust be exercised but tates Letters Patent in its later, and that all royalty-free licensetry or jurisdiction for the United States and	s thereof are, or may be, granted as not been made; ented by the Secretary of the Air Force, ations for Letters Patent thereon in all of the United States may file, or cause to onsideration; provided, however, that by written notice to me within eight covering the invention or within eight I foreign rights not exercised under the to the Government of the United States eign to the United States, including the ates and/or in furtherance of the
to execute any papers whi	ich may be necessary or convenier	it for the preparation	d to furnish all data and documents and n, filing, or prosecution of such set expense relative to such action.
		L.	L.C. AUSLEY
SUBSCRIBED AND ACKNO	WLEDGED before me by Luke A. A		day of
<u>Sanvary</u>	$_$ 2018, at the city of $_$	<u>v: </u>	in the County of
<u> Okaloosa</u>	and State of <i>Florid&</i>		
	JARROD P. BROWN S MY COMMISSION * GGZ6839 S EXPIRES: September 05, 2020	Ju	Notary Public

PATENT REEL: 045145 FRAME: 0676

ASSIGNMENT (Government Inventor)

MINEDEAS I Cupierias V Vevero while employed by the Coverement of the United States made or contributed
WHEREAS, I, CHRISTIAN K. KEYSER, while employed by the Government of the United States, made or contributed to an invention described in invention disclosure AFD 1684 entitled "MULTISPECTRAL LADAR USING WAVEFORM"

SHAPING," to be filed as an application for Letters Patent of the United States (Application Serial Number 15915573 filed 8 March 2018) and I hereby authorize and request Air Force Patent Counsel to insert
, med , and thereby authorize and request Air Torce Fatelit Counser to insert
here in the above parentheses (Application Serial Number, filed) the filing date and application number of said
application when known; and
WHEREAS, the conditions under which said invention was made are such as to entitle the Government of the
United States as represented by the Secretary of the Air Force, under Paragraph 1(a) of Executive Order 10096, to the
entire right, title and interest therein, including foreign rights;
NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and
other valuable considerations, I, CHRISTIAN K. KEYSER:
HEREBY 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, my entire right, title, and interest,
in and to the aforesaid invention described in the invention disclosure, all subsequent information to support that
aforesaid invention, and the resulting application for Letters Patent of the United States including all Letters Patent
issuing thereon, and any continuations, continuations-in-part, divisions, and reissues or extensions thereof; and all
priority resulting from the filing of the aforesaid application for patent in the United States;
HEREBY AUTHORIZE AND REQUEST any official whose duty it is to issue patents, to issue any patent thereon to
the Government of the United States, as represented by the Secretary of the Air Force, and his successors, as assignee of
my entire right, title and interest in and to the same, for the sole use for the full term or terms for which said patents
and any continuations, continuations-in-part, divisions and reissues or extensions thereof are, or may be, granted as
fully and entirely as the same would have been held by me had this Assignment not been made;
HEREBY ALSO GRANT to the Government of the United States, as represented by the Secretary of the Air Force,
the option to take the entire right, title and interest in the invention or all applications for Letters Patent thereon in all
countries or jurisdictions 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 me 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 me within eight
months of the first filing date of any application for United States Letters Patent covering the invention or within eight
months from the declassification of the 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 Government of the United States
in any patent which may issue on said invention in any country or jurisdiction foreign to the United States, including the
power to issue sublicenses for use on behalf of the Government of the United States and/or in furtherance of the
foreign policies of the United States of America; and
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 or convenient for the preparation, filing, or prosecution of such
applications, except it is understood that I shall not be subject to any out-of-pocket expense relative to such action.
Charter V
JAMAN FAM
CHRISTIAN A. REISEN
- of regions
SUBSCRIBED AND ACKNOWLEDGED before me by Christian K. Keyser this 3/51 day of
January 2018, at the city of <u>Nice VIII e</u> in the County of
OKalobsa and State of Florida.
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JARRODP, BROWN S
MY COMMISSION # GGZ6839 & JUNEOU DEOTUN
EXPIRES: September 05, 2020 \$ Notary Public

PATENT REEL: 045145 FRAME: 0677

## ASSIGNMENT Government Inventor)

(posettunent magnitus)
WHEREAS, I, CHAD M. WELSH, while employed by the Government of the United States, made or contributed to an invention described in invention disclosure AFD 1684 entitled "MULTISPECTRAL LADAR USING WAVEFORM SHAPING," to be filed as an application for Letters Patent of the United States (Application Serial Number 15915573 filed 8 March 2018 ), and I hereby authorize and request Air Force Patent Counsel to inser here in the above parentheses (Application Serial Number, filed) the filing date and application number of said
application when known; and
WHEREAS, the conditions under which said invention was made are such as to entitle the Government of the
United States as represented by the Secretary of the Air Force, under Paragraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights;
NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and
other valuable considerations, I, Chap M. Welsh:  HEREBY 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, my entire right, title, and interest in and to the aforesaid invention described in the invention disclosure, all subsequent information to support that aforesaid invention, and the resulting application for Letters Patent of the United States including all Letters Patent issuing thereon, and any continuations, continuations-in-part, divisions, and reissues or extensions thereof; and all priority resulting from the filing of the aforesaid application for patent in the United States;
HEREBY AUTHORIZE AND REQUEST any official whose duty it is to issue patents, to issue any patent thereon to
the Government of the United States, as represented by the Secretary of the Air Force, and his successors, as assignee o
my entire right, title and interest in and to the same, for the sole use for the full term or terms for which said patents
and any continuations, continuations-in-part, divisions and reissues or extensions thereof are, or may be, granted as
fully and entirely as the same would have been held by me had this Assignment not been made;
HEREBY ALSO GRANT to the Government of the United States, as represented by the Secretary of the Air Force,
the option to take the entire right, title and interest in the invention or all applications for Letters Patent thereon in all
countries or jurisdictions 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 me 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 me within eight
months of the first filing date of any application for United States Letters Patent covering the invention or within eight
months from the declassification of the 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 Government of the United States
in any patent which may issue on said invention in any country or jurisdiction foreign to the United States, including the
power to issue sublicenses for use on behalf of the Government of the United States and/or in furtherance of the
foreign policies of the United States of America; and
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 or convenient for the preparation, filing, or prosecution of such
applications, except it is understood that I shall not be subject to any out-of-pocket expense relative to such action.
expense relative to such action.
that M Welsh
CHAD M. WELSH
SUBSCRIBED AND ACKNOWLEDGED before me by CHAD M. WELSH this 3040 day of
American de la companya del companya de la companya del companya de la companya d
it the county of
OKaleása and State of Florida
grown of the same
JARROD P. BROWN &
MY COMMISSION # GGZ6839 C LUILAN
EXPIRES: September 05, 2020 S Notary Public
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PATENT REEL: 045145 FRAME: 0678

**RECORDED: 03/08/2018**