PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
THOMAS A BOWEN	07/19/2019
ERIC J. PLUMMER	08/13/2019
JAMES M. MANN	08/13/2019

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:	BLDG 11, RM AFMCLO/JAZ
City:	WRIGHT-PATTERSON AFB
State/Country:	OHIO
Postal Code:	45433

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16546706

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

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DEPARTMENT OF THE AIR FORCE AFMCLO/JAZ **Correspondent Name:**

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ATTORNEY DOCKET NUMBER:	AFD 1947
NAME OF SUBMITTER:	JAMES F. MCBRIDE
SIGNATURE:	/James F. McBride/
DATE SIGNED:	08/21/2019

Total Attachments: 3

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PATENT REEL: 050117 FRAME: 0473 505632454

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PATENT REEL: 050117 FRAME: 0474

ASSIGNMENT

(Government Inventor)
WHEREAS, I, THOMAS A. BOWEN, while employed by the Government of the United States, made or contributed to an invention described in invention disclosure AFD 1947 entitled "Single Crystalline CS2U4O12 and Processes of Making and Using Same," to be filed as an application for Letters Patent of the United States (Application Serial Number $\frac{16546706}{\text{here in the above parentheses (Application Serial Number, filed) the filing date and application number of said application when known;}$
WHEREAS, The above-identified application for Letters Patent was made or authorized to be made by me; WHEREAS, I believe that I am an original joint inventor of a claimed invention in the application; WHEREAS, I hereby acknowledge that any willful false statement made in this Declaration/Assignment is punishable under 18 U.S.C. § 1001 by fine, imprisonment of not more than five (5) years, or both; 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, THOMAS A. BOWEN:
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 a
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.
THOMAS A. BOWER WATER SUBSCRIBED AND ACKNOWLEDGED before me by THOMAS A. BOWEN this
July 2019, at the city of Marscille in the Countral
Républic of France City of Marseille SS Consulate General of the United States of America Not fry Public Not fry Public

PATENT REEL: 050117 FRAME: 0475

Russell Zailzniak

ASSIGNMENT (Government Inventor)

(Government Inventor)
WHEREAS, I, James M. Mann, while employed by the Government of the United States, made or contributed to an invention described in invention disclosure AFD 1947 entitled "Single Crystalline CS2U4O12 and Processes of Making and Using Same," to be filed as an application for Letters Patent of the United States (Application Serial Number $\frac{16546706}{1000}$, filed $\frac{21 \text{ August 2019}}{1000}$), and I hereby authorize and request Air Force Patent Counsel to insert
here in the above parentheses (Application Serial Number, filed) the filing date and application number of said application when known; WHEREAS, The above-identified application for Letters Patent was made or authorized to be made by me; WHEREAS, I believe that I am an original joint inventor of a claimed invention in the application; WHEREAS, I hereby acknowledge that any willful false statement made in this Declaration/Assignment is
punishable under 18 U.S.C. § 1001 by fine, imprisonment of not more than five (5) years, or both; 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, JAMES M. MANN: 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.
JAMES M. Mann
SUBSCRIBED AND ACKNOWLEDGED before me by James M. Mann this day of and State of
** AREN C GULLEY, Notary Public ** KAREN C GULLEY, Notary Public ** In and for the State of Gills ** My Commission Expires July 27, 2021 ** Notary Public ** Notary Publi

PATENT REEL: 050117 FRAME: 0476

ASSIGNMENT

(Government inventor)
WHEREAS, I, ERIC J. PLUMMER, while employed by the Government of the United States, made or contributed to an invention described in invention disclosure AFD 1947 entitled "SINGLE CRYSTALLINE CS2U4O12 AND PROCESSES OF MAKING AND USING SAME," to be filed as an application for Letters Patent of the United States (Application Serial Number 16546706 , filed 21 August 2019), and I hereby authorize and request Air Force Patent Counsel to insert here in the above parentheses (Application Serial Number, filed) the filing date and application number of said
application when known; WHEREAS, The above-identified application for Letters Patent was made or authorized to be made by me; WHEREAS, I believe that I am an original joint inventor of a claimed invention in the application; WHEREAS, I hereby acknowledge that any willful false statement made in this Declaration/Assignment is punishable under 18 U.S.C. § 1001 by fine, imprisonment of not more than five (5) years, or both; 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, ERICJ. PLUMMER: 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
ERIC J. Plummer
SUBSCRIBED AND ACKNOWLEDGED before me by Eric J. Plummer this

PATENT

REEL: 050117 FRAME: 0477