504517673 08/24/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4564378

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MATT EICHENFIELD	07/13/2017
THOMAS A. FRIEDMAN	07/11/2017
MICHAEL WIWI	07/31/2017
ROY H. OLSSON	08/18/2017
CAMILLE PADILLA	07/11/2017
JAMES KENNETH DOUGLAS	07/11/2017
KHALID MIKHIEL HATTAR	07/11/2017

RECEIVING PARTY DATA

Name:	NATIONAL TECHNOLOGY & ENGINEERING SOLUTIONS OF SANDIA, LLC
Street Address:	P.O. BOX 5800, MS-0161
City:	ALBUQUERQUE
State/Country:	NEW MEXICO
Postal Code:	87185

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15614105

CORRESPONDENCE DATA

Fax Number: (505)844-9955

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: 505-844-7283 Email: dcates@sandia.gov

Correspondent Name: SANDIA NATIONAL LABORATORIES

Address Line 1: P.O. BOX 5800, MS-0161

Address Line 4: ALBUQUERQUE, NEW MEXICO 87185

ATTORNEY DOCKET NUMBER:	SD13460/S139669
NAME OF SUBMITTER:	DIANA SCHANNING
SIGNATURE:	/Diana Schanning/
DATE SIGNED:	08/24/2017

PATENT 504517673 REEL: 043662 FRAME: 0557

Total Attachments: 6 source=SD13460_S139669_FullyExecuted_Assignments#page1.tif source=SD13460_S139669_FullyExecuted_Assignments#page2.tif source=SD13460_S139669_FullyExecuted_Assignments#page3.tif source=SD13460_S139669_FullyExecuted_Assignments#page4.tif source=SD13460_S139669_FullyExecuted_Assignments#page5.tif source=SD13460_S139669_FullyExecuted_Assignments#page6.tif

PATENT REEL: 043662 FRAME: 0558

ASSIGNMENT

WHEREAS. Matt Eichenfield, Jeremy Moore, Thomas A. Friedmann, of Albuquerque, NM, Roy H. Olsson of Arlington, VA, Michael Wiwi, Camille Padilla, James Kenneth Douglas, Khalid Mikhiel Hattar, of Albuquerque, NM (hereinafter "Inventor(s)") has(have) made an invention relating to SECOND HARMONIC GENERATION IN RESONANT OPTICAL STRUCTURES in the course of the work authorized by Contract DE-NA0003525 between NATIONAL TECHNOLOGY & ENGINEERING SOLUTIONS OF SANDIA, LLC ("NTESS") and the UNITED STATES DEPARTMENT OF ENERGY, said invention being disclosed and claimed in Application Serial No. 15/614,105 for United States patent, filed June 6, 2017 and identified as DOE Docket No: S-139669duly executed by said inventor(s); and

WHEREAS Inventor(s), in consideration of employment by NTESS, has(have) assigned to NTESS, its successors and assigns, all of Inventor(s) rights to inventions, discoveries, or improvements made or conceived in the course of their employment; and

WHEREAS, title to the above-identified invention vests in the Government of the United States, as represented by the U.S. Department of Energy, as governed by 42 U.S.C. 5908; and

WHEREAS, the Government of the United States, as represented by the U.S. Department of Energy has granted a waiver of Government rights in the above-identified invention to NTESS; and

THEREFORE, Inventor(s) hereby sells, assigns, and transfers unto NTESS their entire right, title, and interest in and to said invention in the United States of America and all foreign countries, including, without limitation, said invention as described in the aforesaid application, and in and to any United States Letters Patent therefor, when issued together with all improvements thereon and betterments thereof, all related applications including, but not limited to, utilities, divisions, continuations, continuations-in-part, reissues and reexaminations thereof and substitutions of or for said application, and all foreign rights including the right to make application for Letters Patent for said invention in any and all foreign countries and the right to claim priority as to the filing date under the International Convention on the basis for the aforesaid application for United States Letters Patent, to the extent that Inventor(s) right, title, and interest in and to said invention has(have) not already been sold, assigned, or transferred to NTESS Corporation by Inventor(s) in consideration of Inventor(s) employment by NTESS. Inventor(s) hereby authorizes and requests the Commissioner of Patents to issue all Letters Patent issuing therefrom to NTESS, for its interest as NTESS, its successors and assigns.

Inventor(s) covenants with NTESS that, except for the rights, if any, of the Government, his/her interest in the rights and property herein conveyed is free and clear of any encumbrance and that they have full right to convey the same as herein expressed. Inventor(s) agrees, at the request of NTESS, to make, execute, and deliver to NTESS, the Government, or other party prosecuting patent applications on

Page 1 of 3

this invention, any and all papers, documents, affidavits, applications, statements or other instruments relating to said invention, take all rightful oaths and do all acts as may reasonably be required of them in or incident to the prosecution of any or all U.S. and foreign applications on said invention or in the adjustment or settlement of any interferences or other actions or proceedings that said applications or patents thereon may encounter or in which they may become involved.

Signed at Albuquerque, New Mexico.

Matt STA	7/13/20
Matt Eichefjeld	Date
Thom, O. Grid	7/11/2017
Thomas A. Friedman	Date
11/2/1/2 ·	7/31/2017
Michael Wiwi	Date
Caulo Padio	7/11/17
Camille Padilla	Date
	7/11/17
James Kenneth Douglas	Date
theld Auton	July 11 7017
Khalid Mikhiel Hattar	Date
STATE OF NEW MEXICO)	

On the above dates, personally appeared before me, Diana Schanning, Notary Public, Matt Eichenfield, Thomas A. Friedmann, Michael Wiwi, Camille Padilla, James Kenneth Douglas, Khalid Mikhiel Hattar, to me known to be the individual(s) described in and who executed the foregoing instrument, and who acknowledged to me that they executed the same.

Osan Slain Notary Public

COUNTY OF BERNALILLO)

) ss:



Approved and consented by:

NATIONAL ENGINEERING

TECHNOLOGY SOLUTIONS

& OF

SANDIA, LLC

Kerry Kampschmidt

Chief IP Counsel

Legal Technology Transfer Center

STATE OF NEW MEXICO)

38:

COUNTY OF BERNALILLO)

On the above date, personally appeared before me, Diana Schanning, Notary Public, Kerry Kampschmidt, to me known to be the individual described in and who executed the foregoing instrument, and who acknowledged to me that he executed the same.

Notary Public X

OFFICIAL SEAL
Diana Schanning
NOTARY PUBLIC
STATE OF YEW MEXICS
My Commission Expires:

ASSIGNMENT

WHEREAS, Matt Eichenfield, Jeremy Moore, Thomas A. Friedmann, of Albuquerque, NM, Roy H. Olsson of Arlington, VA, Michael Wiwi, Camille Padilla, James Kenneth Douglas, Khalid Mikhiel Hattar, of Albuquerque, NM (hereinafter "Inventor(s)") has(have) made an invention relating to SECOND HARMONIC GENERATION IN RESONANT OPTICAL STRUCTURES in the course of the work authorized by Contract DENA0003525 between NATIONAL TECHNOLOGY & ENGINEERING SOLUTIONS OF SANDIA, LLC ("NTESS") and the UNITED STATES DEPARTMENT OF ENERGY, said invention being disclosed and claimed in Application Serial No. 15/614,105 for United States patent, filed June 6, 2017 and identified as DOE Docket No: S-139669duly executed by said inventor(s); and

WHEREAS Inventor(s), in consideration of employment by NTESS, has(have) assigned to NTESS, its successors and assigns, all of Inventor(s) rights to inventions, discoveries, or improvements made or conceived in the course of their employment; and

WHEREAS, title to the above-identified invention vests in the Government of the United States, as represented by the U.S. Department of Energy, as governed by 42 U.S.C. 5908; and

WHEREAS, the Government of the United States, as represented by the U.S. Department of Energy has granted a waiver of Government rights in the above-identified invention to NTESS; and

THEREFORE, Inventor(s) hereby sells, assigns, and transfers unto NTESS their entire right, title, and interest in and to said invention in the United States of America and all foreign countries, including, without limitation, said invention as described in the aforesaid application, and in and to any United States Letters Patent therefor, when issued together with all improvements thereon and betterments thereof, all related applications including, but not limited to, utilities, divisions, continuations, continuations-in-part, reissues and reexaminations thereof and substitutions of or for said application, and all foreign rights including the right to make application for Letters Patent for said invention in any and all foreign countries and the right to claim priority as to the filing date under the International Convention on the basis for the aforesaid application for United States Letters Patent, to the extent that Inventor(s) right, title, and interest in and to said invention has(have) not already been sold, assigned, or transferred to NTESS Corporation by Inventor(s) in consideration of Inventor(s) employment by NTESS. Inventor(s) hereby authorizes and requests the Commissioner of Patents to issue all Letters Patent issuing therefrom to NTESS, for its interest as NTESS, its successors and assigns.

Inventor(s) covenants with NTESS that, except for the rights, if any, of the Government, his/her interest in the rights and property herein conveyed is free and clear of any encumbrance and that they have full right to convey the same as herein expressed. Inventor(s) agrees, at the request of NTESS, to

Page 1 of 3

make, execute, and deliver to NTESS, the Government, or other party prosecuting patent applications on this invention, any and all papers, documents, affidavits, applications, statements or other instruments relating to said invention, take all rightful oaths and do all acts as may reasonably be required of them in or incident to the prosecution of any or all U.S. and foreign applications on said invention or in the adjustment or settlement of any interferences or other actions or proceedings that said applications or patents thereon may encounter or in which they may become involved.

Ry 21. CAMITE 08/18/2017

COUNTY OF Arlington

COMMONWEALTH OF VIRGINIA

The foregoing instrument was subscribed and sworn before me this $\frac{1}{2}$ day of $\frac{2}{2}$, $\frac{20}{7}$ by Roy H. Olsson.

Dan / Lin' > Notary Public

Notary Registration Number: <u>28349</u>5

My Commission Expires: 01/31/2021

(official scal)

Barry C. Kinney Commonwealth of Virginia Notary Public Commission No. 263496 My Commission Expires 1/81/20_6

Approved and consented by:

NATIONAL TECHNOLOGY & ENGINEERING SOLUTIONS OF SANDIA, LLC

Kerry Kampschmidt Chief IP Counsel

Legal Technology Transfer Center

STATE OF NEW MEXICO)

88.

COUNTY OF BERNALILLO)

On the above date, personally appeared before me, Diana Schanning, Notary Public, Kerry Kampschmidt, to me known to be the individual described in and who executed the foregoing instrument, and who acknowledged to me that he executed the same.

Notary Public

OFFICIAL SEAL

Diana Schanning

NOTARY PUBLIC
STATE OF NEW MEXICO

My Commission Expires:

Page 3 of 3

PATENT REEL: 043662 FRAME: 0564