PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CARLOS M. TORRES	05/17/2018
JAMES R. ADLEMAN	05/17/2018
RYAN P. LU	05/17/2018
AYAX D. RAMIREZ	05/16/2018

RECEIVING PARTY DATA

Name:	United States of America as represented by the Secretary of the Navy	
Street Address:	One Liberty Center, 875 North Randolph Street, Suite 1425	
Internal Address:	Office of Naval Research	
City:	Arlington	
State/Country:	VIRGINIA	
Postal Code:	22203-1995	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15987479

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	106251
NAME OF SUBMITTER:	KYLE EPPELE
SIGNATURE:	/Kyle Eppele/
DATE SIGNED:	05/23/2018

Total Attachments: 2

PATENT REEL: 045885 FRAME: 0672 source=106251_asn_ramirez_signed_uspto#page1.tif source=106251_asn_torres_adleman_lu_signed_uspto#page1.tif

> PATENT REEL: 045885 FRAME: 0673

Navy Case No. 106251

Inventors: Carlos M. Torres, Jr., James R. Adleman, Ryan P. Lu and Ayax D. Ramirez

ASSIGNMENT

WHEREAS, we, Carlos M. Torres, Jr., of San Diego, CA, James R. Adleman of San Diego, CA, Ryan P. Lu of San Diego, CA, and Ayax D. Ramirez of Chula Vista, CA, while employed by the Government of the United States, have invented certain new and useful improvements in:

Voltage-Tunable Wavelength-Agile 2D Material-Based Light-Emitting Transistors

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identified as Navy Case No.106251, described in application for Letter 5/17, BESPECTIVE (P	rs Patent of the United States of America executed by us on 018; and
WHEREAS, the Government of the United States, represented by the Government, is desirous of acquiring an assignment of the invention of granted; and	Secretary of the Navy and hereinafter referred to as the
WHEREAS, the conditions under which the invention was made are so Order 10096, to the entire right, title and interest therein, including for	uch as to entitle the Government under Paragraph I(a) of Executive eign rights; and
WHEREAS, as to foreign rights, it is the policy of the Government to	obtain an option to exercise such rights;
NOW, THEREFORE, in consideration of the promises and other good acknowledged, we hereby assign and transfer to the Government the extensive States of America, its territories and possessions, and the entire continuation, division or substitution thereof, and such Letters Patent to Letters Patent may be granted, as fully and entirely as the same would	entire right, title and interest in and to said invention within the pright, title and interest in and to said application and any to be held by the Government to the end of the term for which said
We do hereby also grant unto the Government, the option to take the e applications or other forms of protection thereon in all countries foreig to be filed, applications for Letter Patent or other forms of protection, a grant of an option to take foreign rights in the invention, or application only as to such applications filed in foreign countries within eight mon Patent covering the invention, or within eight months from the declass rights not exercised under the option are left to us subject to a nonexclipatent or other form of protection which may issue on said invention in use in behalf of the Government and/or in furtherance of the foreign power of the foreign protection which may be necessary in the prosecution of the application instruments that may be necessary in the prosecution of the application	in to the United States in which the Government may file, or cause without payment of any consideration; provided, however that this is or other forms of protection thereon, shall have force and effect of the filing date of any application for United States Letter diffication of the invention, whichever is later, and that all foreign usive, irrevocable, royalty-free license to the Government in any in any foreign country, including the power to issue sublicenses for officies of the Government.
or any application for reissue or extension of said Letters Patent, and to may be requested, provided that any expense arising through such effe	assist the Government in every way in protecting the invention as its will be paid by the Government.
IN TESTIMONY WHEREOF, we have set our hands and affixed our	seals.
Name /Date Carlos M. Torres, Jr. (signature & Date)	Name/Date James R. Adleman (signature & Date)
Name /Date Ryan P. Lu (signature & Date)	Name/Date Whit Panue 5/16/2018 Ayay D. Ramirez (signature & Date)

PATENT REEL: 045885 FRAME: 0674 Navy Case No. 106251

Inventors: Carlos M. Torres, Jr., James R. Adleman, Ryan P. Lu and Ayax D. Ramirez

ASSIGNMENT

identified as Navy Case No.106251, described in application for Letters Patent of the United States of America executed by us on

WHEREAS, we, Carlos M. Torres, Jr., of San Diego, CA, James R. Adleman of San Diego, CA, Ryan P. Lu of San Diego, CA, and Ayax D. Ramírez of Chula Vista, CA, while employed by the Government of the United States, have invented certain new and useful improvements in:

Voltage-Tunable Wavelength-Agile 2D Material-Based Light-Emitting Transistors

3/1/	2018; and
WHEREAS, the Government of the United States, represente Government, is desirous of acquiring an assignment of the invegranted; and	ed by the Secretary of the Navy and hereinafter referred to as the vention disclosed in said application and other rights and benefits herein
WHEREAS, the conditions under which the invention was made order 10096, to the entire right, title and interest therein, inch	ade are such as to entitle the Government under Paragraph $I(a)$ of Executive uding foreign rights; and
WHEREAS, as to foreign rights, it is the policy of the Govern	unent to obtain an option to exercise such rights;
acknowledged, we hereby assign and transfer to the Governm- United States of America, its territories and possessions, and t continuation, division or substitution thereof, and such Letters	ther good and valuable consideration the receipt of which is hereby sent the entire right, title and interest in and to said invention within the the entire right, title and interest in and to said application and any a Patent to be held by the Government to the end of the term for which said se would have been held by us had this assignment not been made.
applications or other forms of protection thereon in all countri- to be filed, applications for Letter Patent or other forms of pro- grant of an option to take foreign rights in the invention, or ap- only as to such applications filed in foreign countries within ei- Patent covering the invention, or within eight months from the rights not exercised under the option are left to us subject to a	ake the entire right, title and interest in the invention and all patent ies foreign to the United States in which the Government may file, or cause dection, without payment of any consideration; provided, however that this plications or other forms of protection thereon, shall have force and effect ight months of the filing date of any application for United States Letter edeclassification of the invention, whichever is later, and that all foreign nonexclusive, irrevocable, royalty-free license to the Government in any tention in any foreign country, including the power to issue sublicenses for oreign policies of the Government.
We hereby further agree to make, execute, and deliver to the C instruments that may be necessary in the prosecution of the ap-	Sovernment, any and all papers, documents, affidavits, statements, or other oplication and of any continuation, division or substitution of the application, at, and to assist the Government in every way in protecting the invention as
IN TESTIMONY WHEREOF, we have set our hands and affi	ixed our seals.
Name /Date Ab M. J. 5/17/18 Carlos M. Vorres, Jr. (signature & Date)	Name/Date June/ L. Auleman (signature & Date)
Name /Date 2 5/17/18 Ryan P. Lu (sionature & Date)	Name/Date

PATENT REEL: 045885 FRAME: 0675

RECORDED: 05/23/2018