504268296 03/13/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4314976

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT	
CONVEYING PARTY D	ΑΤΑ			
		Name	Execution Date	
YIXING YANG			02/09/2017	
ALEXANDRE TITOV			03/07/2017	
JAKE HYVONEN			02/09/2017	
YING ZHENG			03/06/2017	
LEI QIAN			02/09/2017	
PAUL HOLLOWAY			03/06/2017	
RECEIVING PARTY DA	ТА			
Name:	NANO	NANOPHOTONICA		
Street Address:	5036 E	5036 DRIVE PHILLIPS BOULEVARD		
City:	ORLANDO			
	FLORIDA			
State/Country:	FLORI	IDA		
State/Country: Postal Code:	32819			
Postal Code: PROPERTY NUMBERS	32819			
Postal Code:	32819	1		
Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will b	32819 5 Total: 1 DATA	Number 15103680 (617)646-8646 o the e-mail address first; if that is unsu		
Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE E Fax Number: Correspondence will b using a fax number, if	32819 5 Total: 1 DATA	Number 15103680 (617)646-8646 o the e-mail address first; if that is unsud; if that is unsud; if that is unsud; if that is unsud; if that is unsuccessful, it will be sent		
Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will b	32819 5 Total: 1 DATA	Number 15103680 (617)646-8646 o the e-mail address first; if that is unsu d; if that is unsuccessful, it will be sent 6176468000		
Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone:	32819 5 Total: 1 DATA be sent to provideo	Number 15103680 (617)646-8646 o the e-mail address first; if that is unsud; if that is unsud; if that is unsud; if that is unsud; if that is unsuccessful, it will be sent		
Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE E Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1:	32819 5 Total: 1 DATA be sent to provideo	Number 15103680 (617)646-8646 o the e-mail address first; if that is unsu d; if that is unsuccessful, it will be sent 6176468000 patents_JHsi@wolfgreenfield.com WOLF GREENFIELD & SACKS, P.C. 600 ATLANTIC AVE.		
Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name:	32819 5 Total: 1 DATA be sent to provideo	Number 15103680 (617)646-8646 o the e-mail address first; if that is unsu d; if that is unsuccessful, it will be sent 6176468000 patents_JHsi@wolfgreenfield.com WOLF GREENFIELD & SACKS, P.C.		
Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE E Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1:	32819 5 Total: 1 DATA be sent to provide	Number 15103680 (617)646-8646 o the e-mail address first; if that is unsud; if that is unsuccessful, it will be sent with the sent sent withe sent with the sent with the sent withe sent		
Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	32819 5 Total: 1 DATA be sent to provide	Number 15103680 (617)646-8646 o the e-mail address first; if that is unsud; if that is unsuccessful, it will be sent with the sent sent withe sent with the sent with the sent withe sent		
Postal Code: PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE E Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NU	32819 5 Total: 1 DATA be sent to provide	Number 15103680 (617)646-8646 o the e-mail address first; if that is unsu d; if that is unsuccessful, it will be sent 6176468000 patents_JHsi@wolfgreenfield.com WOLF GREENFIELD & SACKS, P.C. 600 ATLANTIC AVE. BOSTON, MASSACHUSETTS 02210 : N0586.70001US01		

source=N058670001US01-ASI-JDH#page1.tif source=N058670001US01-ASI-JDH#page2.tif source=N058670001US01-ASI-JDH#page3.tif source=N058670001US01-ASI-JDH#page4.tif source=N058670001US01-ASI-JDH#page5.tif source=N058670001US01-ASI-JDH#page7.tif source=N058670001US01-ASI-JDH#page7.tif

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned Assignors, hereby:

Sell, assign and transfer to NanoPhotonica, a Florida Corporation having a place of 1 business at 5036 Drive Phillips Boulevard; Orlando, Florida 32819, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the application for United States Letters Patent, filed on June 10, 2016, as U.S. Application Serial No. 15/103,680, bearing Attorney Docket No. N0586.70001US01, and entitled A METHOD AND STRUCTURE OF PROMOTING POSITIVE EFFICIENCY AGING AND STABILIZATION OF QUANTUM DOT LIGHT-EMITTING DIODE, and in and to the application and all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea;

1. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;

2. Request the Director of the United States Patent and Trademark Office to issue the Letters Patent to the Assignee;

3. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation;

4. Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and

5. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

Attomey Docket No. N0586.70001US01

Page 1 of 8

4804196.1

PATENT REEL: 041551 FRAME: 0107 This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Atlomey Docket No. N0586.70601US01

4804196.1

PATENT REEL: 041551 FRAME: 0108

Page 2 of 8

02/09/2017 Date

Inventor Address:

Yixing Yang 3730 NW 26th Street Gainesville, Florida, 32605

P.R. China

Citizenship:

Florida STATE/COMMONWEALTH OF Alachua COUNTY OF day of February , zorF, before me, the undersigned notary public, On this ainth

personally appeared identification, which were

, proved to me through satisfactory evidence of **Yixing Yang**

2.9. 2017

PATENT REEL: 041551 FRAME: 0109

to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

SEAL

Notary Public

My commission expires:

Allowing Docket No. N0588 7000(US01

Page 3 of 8

48041953

03104 Date

Inventor: Alexandre Titov Address: 4728 NW 34th Place Gainesville, Florida 32606

Citizenship: USA.

Horida STATE/COMMONWEALTH OF COUNTY OF Alachua 'ஆறா, before me, the undersigned notary public, day of 🕎 On this , proved to me through satisfactory evidence of Alexandre Titov personally appeared # 7310-000-87-048-0 identification, which were Fidrivers 11 cense to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose. TINE BRUTON 2 MMISSION # GG40322 \$ 19, 2020 SEAL EXPIRES: Ociober **Votary Public**

19,2020

My commission expires:

Attorney Docket No. N0586 70001US01

4804196.1

Page 4 of 8

Gha an	
Date Inventor Jake Hyvonen //	
Address: 3523 NW 25th Terrace	
Gainesville, Florida 32605	
Citizenship: LLJ.A.	
STATE/COMMONWEALTH OF $forda$ COUNTY OF Alachua On this q^{+*} day of f_{achua} $doi 7$, before me, the undersigned notary public, personally appeared Jake Hyvonen , proved to me through satisfactory evidence of identification, which were $forda$ $f_{achuacs}$ $doi 7$, before me, the undersigned notary public, to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose. CHRISTINE BRUTON MY COMMISSION # 6040322 EXPIRES: October 19, 2020 Notary Public	
My commission expires:	

Attorney Docket No. N0586.70001US01

4804195.1

Page 5 of 8

03/06 /2017 Date	
Date	Inventor: Ying Zheng
	Address: 7110 SW 85th Terrace
	Gainesville, Florida 32608
Citi	zenship: China
STATE/COMMONWEALTH OF Washir	Mpan
	, <u>22</u> H, before me, the undersigned notary public, , proved to me through satisfactory evidence of
to be the person who signed the preceding or a	Illached document in my presence and swore or affirmed Ihful and accurate to the best of (his) (her) knowledow

SEAL

My commission expires:4 18 35 34 $\mathbf{\hat{x}}$

Notary Public State of Washington GRACE GUNARSO My Appointment Expires Sep 1, 2018

Allomey Docket No. N0586 70001LIS01

4804196.1

Page 6 of 8

02/09/2017 Date

Inventor. Lei Qian

Rian 10, Address: 9010-SW-76th-Lane

02/09/17

7979 SW 8044 Lane

Gainesville, Florida 32608 P.R. China Citizenship:

Florida STATE/COMMONWEALTH OF arhua COUNTY OF

day of $\frac{F(h)(uu)}{Lei Glan}$, $\frac{2017}{proved}$, before me, the undersigned notary public, On this ĸán proved to me through satisfactory evidence of personally appeared identification, which were

to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

SEAL

Notary Public

My commission expires:

Attorney Docket No. N0586.70901US01

Page 7 of 8

4804196.1

31612015 Date

Inventor: Paul H. Holloway Address:

5036 Dr. Phillips Blvd. Suite 319 Orlando, Florida 32819

Citizenship:

STATE/COMMONWEALTH OF Alarhaz COUNTY OF before me, the undersigned notary public, day of On this 20 M proved to me through satisfactory evidence of Paul H. Holloway personally appeared pensonall identification, which were to be the person who signed the preceding or etheched document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose. SEAL Cy A My commission expires: STA (Ingenerally) Page 8 of 8 Attorney Docket No. N0586.70001US01 4804196.1

RECORDED: 03/13/2017

PATENT REEL: 041551 FRAME: 0114