### 503011376 10/08/2014

EPAS ID: PAT3057976

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
FRANK W WISE	09/10/2014
ANDY CHONG	09/25/2014
WILLIAM RENNINGER	09/25/2014

#### **RECEIVING PARTY DATA**

Name:	CORNELL UNIVERSITY
Street Address:	CORNELL CENTER FOR TECHNOLOGY, ENTERPRISE & COMMERCIALIZATION ("CCTEC")
Internal Address:	395 PINE TREE ROAD, SUITE 310
City:	ITHACA
State/Country:	NEW YORK
Postal Code:	14850

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14377841

#### CORRESPONDENCE DATA

**Fax Number:** (858)720-5819

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:** (858)720-5700

**Email:** michellemelendez@perkinscoie.com

Correspondent Name: BING AI

Address Line 1: PERKINS COIE LLP

Address Line 2: PO BOX 1247

Address Line 4: SEATTLE, WASHINGTON 98111-1247

ATTORNEY DOCKET NUMBER: 078554-8009.US01

NAME OF SUBMITTER: MICHELLE MELENDEZ

SIGNATURE: /Michelle Melendez/

DATE SIGNED: 10/08/2014

**Total Attachments: 8** 

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PATENT REEL: 033915 FRAME: 0489

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PATENT REEL: 033915 FRAME: 0490

#### ASSIGNMENT

WHEREAS, We, Frank W. Wise, a United States citizen, residing at 142 Whitetail Drive, Ithaca, NY 14850, Andy Chong, a United States citizen, residing at 598 Shelbourne Lane, #102, Dayton, OH 45458, and William Renninger, a United States citizen, residing at 503 E. Buffalo Street, Ithaca, NY 14850, have invented certain new and useful improvements in BROADBAND SHORT PULSE FIBER LASERS CAPABLE OF GENERATING OUTPUT SPECTRA BROADER THAN GAIN BANDWIDTH for which an application for Letters Patent in the United States was filed as U.S. Serial No. 14/377,841 on August 8, 2014;

AND WHEREAS, Cornell University, with its principal place of business at Cornell Center for Technology, Enterprise & Commercialization ("CCTEC"), 395 Pine Tree Road, Suite 310, Ithaca, New York 14850 USA, is entitled to acquire the entire right, title and interest in and to the said improvements and the said Application:

NOW, THEREFORE, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said Cornell University, its successors, legal representatives and assigns, the entire right. title and interest throughout the world in, to and under the said improvements, and the said application and all divisions, renewals, and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said Cornell University, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we will communicate to the said Cornell University, its successors, legal representatives, and assigns, any facts known to us respecting said improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths and generally do everything possible to aid the said Cornell University, its successors, legal representatives, and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

Witness Signature Option

Frank W Wise

First Witness Signature

First Witness Printed Name

9/19/14 Date 9/11/14 Date

5814-03-US

Docket No.: 078554-8009,US01

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Second Witnes						
Notary Optio	n	;				
	IN.	TESTIMONY W , 2014	VHEREOF, I hereunt	set my han	d and seal this	day of
			***************************************			
***************************************			Fra	nk W. Wise		
STATE OF		:;				
COUNTY OF _	]	}				
above-named	Thi	sday of	to me ree will for the purpo	014, before ne personally k	ne personally on the in	ame the ndividual who
executed the s	ame	of his/her own/fi	ree will for the purpo	oses therein s	et forth.	
***************************************	***************************************	***************************************	***************************************			
***************************************				tary Public		
₹ <sub>e</sub> ,			Con	mmission expi	res on	

9/10/2014 Date

5814-03-US

Docket No.: 078554-8009.US01

## Witness Signature Option

A grant and a second	9/25/14
Andy Chong	Date
Andy Chong	3/15/49
First Witness Signature	Date
First Witness Printed Name  Second Witness Signature  Lagrage HARTL  Second Witness Printed Name	<u>9725/14</u> Date
Notary Option	
IN TESTIMONY V	WHEREOF, I hereunto set my hand and seal this day of  Andy Chong
STATE OF:	• •
COUNTY OF:	········
This day of	, 2014, before me personally came the to me personally known as the individual who free will for the purposes therein set forth.
above-namedexecuted the same of his/her own	free will for the purposes therein set forth.

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# **Witness Signature Option**

William Renninger	Date	
First Witness Signature	Date	
First Witness Printed Name		
Second Witness Signature	Date	
Second Witness Printed Name		
Notary Option		
IN TESTIMONY , 2014	WHEREOF, I here	unto set my hand and seal this day of
		William Renninger
STATE OF::		
COUNTY OF:		
This day of above-named executed the same of his/her ow	of, to n free will for the pu	, 2014, before me personally came the me personally known as the individual who proses therein set forth.
		Notary Public
		Commission expires on

ASSIGNMENT

10:0 statest Rot 76511 New Harry WHEREAS, We, Frank W. Wise, a United States citizen, residing at 142 Whitetail Drive, Ithaca, NY 14850, Andy Chong, a United States citizen, residing at 598 Shelbourne Lane, #102, Dayton, OH 45458, and William Renninger, a United States citizen, residing at 503 E. Buffato Street, Ithaca, NY 14850, have invented certain new and useful improvements in BROADBAND SHORT PULSE FIBER LASERS CAPABLE OF GÉNERATING OUTPUT SPECTRA BROADER THAN GAIN BANDWIDTH for which an application for Letters Patent in the United States was filed as U.S. Serial No. 14/377,841 on August 8, 2014;

> AND WHEREAS, Cornell University, with its principal place of business at Cornell Center for Technology, Enterprise & Commercialization ("CCTEC"), 395 Pine Tree Road, Suite 310, Ithaca, New York 14850 USA, is entitled to acquire the entire right, title and interest in and to the said improvements and the said Application:

> NOW, THEREFORE, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said Cornell University, its successors, legal representatives and assigns, the entire right, title and interest throughout the world in, to and under the said improvements, and the said application and all divisions, renewals, and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said Cornell University, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

> AND WE HEREBY covenant and agree that we will communicate to the said Cornell University, its successors, legal representatives, and assigns, any facts known to us respecting said improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths and generally do everything possible to aid the said Cornell University, its successors, legal representatives, and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

Frank W. Wise	Date	<del></del>
First Witness Signature	Date	
First Witness Printed Name		

LEGAL123161372.1

Witness Signature Option

Second Witness Printed Name

Notary Option

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_. 2014

Frank W. Wise

STATE OF \_\_\_\_\_ : \_\_\_\_

COUNTY OF \_\_\_\_ : \_\_\_\_\_

This\_\_\_ day of \_\_\_\_\_\_, 2014, before me personally came the above-named \_\_\_\_\_\_, to me personally known as the individual who executed the same of his/her own free will for the purposes therein set forth.

Notary Public \_\_\_\_\_\_.

# **Witness Signature Option**

Andy Chong	Date	<del></del>
First Witness Signature	Date	
First Witness Printed Name		
Second Witness Signature	Date	
Second Witness Printed Name		
Notary Option		
IN TESTIMON, 2014	Y WHEREOF, I hereun	to set my hand and seal this day of
	An	dy Chong
STATE OF::		
COUNTY OF:		
This day above-named executed the same of his/her ov	of, 2 , to move will for the purpo	014, before me personally came the e personally known as the individual who oses therein set forth.
	No	tary Public
	Co	mmission expires on

Witt	tess Signature Option		
R	am Renainger Witness Signature	$\frac{9/25/2}{\text{Date}}$ $\frac{9/25/2}{\text{Date}}$	014
Sector L	Van Belmini Witness Printed Name  Redent Shin  and Witness Signature  Leedenk Shin  and Witness Printed Name	9/25/2 Date	2014
	rx Option		
	IN TESTIMONY WI	HEREOF, I hereu	nto set my hand and seal this day of
		V	/illiam Renninger
STAT	TE OF:::::::	•••	•
COU	NTY OF;		
above exect	This day of e-named sted the same of his/her own fre	to note will for the purp	2014, before me personally came the ne personally known as the individual who poses therein set forth.
		N	otary Public
		C	ommission expires on

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**RECORDED: 10/08/2014**