04-17-2002



RECORDATION FORM OF VER

APR 1 2 2002

U.S. Department of Commerce Patent and Trademark Office Attorney Docket No. 07033.0029 Attorney Customer Number: 22,852

	102058001	nts and Trademarks: (a. accuments or copy thereof		ATTN. BO	X ASSIGNMENT	S
1.	Name of conveying party(in Robert A. NORWOOD and	es):	ROEMA	Name and add	dress of receiving	party(ies):
		2-02	Name:	Photon-X,	înc.	
Addition		rty(ies) attached? ☐ Yes ☒ No	Internal	Address:		
3.	Nature of conveyance:		Street A	Address: 2	91 Great Valley F	Parkway
\boxtimes	Assignment	Merger	City:	Malvern		
	Security Agreement	Change of Name	State:	PA	Zip Code:	19355
	Other:		Additio	nal name(s) & A	.ddress(es) attacl	ned?
Execution	on Date: February 20, 20	002 & February 21, 2002		☐ Yes	⊠ No	
4.	Application number(s) or p the application:	eatent number(s): If this document	is being filed t	together with a r	new application, t	he execution da e
Д .	Patent Application Numbe	r(s):	В.	Patent Number	er(s):	
	09/994,722					
-		Additional numbers attached?	∫ ☐ Yes	⊠ No)	
5.	Name and address of part concerning document show	y to whom correspondence uld be mailed:	6.	Total number involved: [number]	of applications a	nd registrations
Name:	Jonathan A. Hack		7.	Total fee (37	CFR 3.41): \$40	
				Enclosed account)	l (Please charge	deficiency to depo
				Authorize	ed to be charged	to deposit accoun
Internal	I Address: FINNEGAN, H & DUNNER, L.	ENDERSON, FARABOW, GARRE L.P.	ETT			
Street A	Address: 1300 Street, I					
City:	Washington, D.C.					
State:	Zip	: 20005-3315	8.	Deposit Acco	unt No.: <u>06-0916</u>	3
9.	Statement and signature.					-
	best of my knowledge and b	pelief, the foregoing information is t	rue and corre	ct and any attac	April	e copy of the orig グ, 2のこ Date
	Total nu	mber of pages including cover she	et, attachmer	nts and docume	nts: 5	

ASSIGNMENT

WHEREAS I, the below named inventor, hereinafter referred to as Assignor, have made an invention entitled:

THIN FILM OPTICAL WAVEGUIDES

for which I executed an application for United States Letters Patent concurrently herewith or filed an application for United States Letters Patent on November 28, 2001 (Serial No. 09/994,722); and

WHEREAS, PHOTON-X, INC., a corporation of Pennsylvania whose post office address is 291 Great Valley Parkway, Malvern, Pennsylvania (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) in hand paid and other good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I, as Assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my entire right, title, and interest in and to this invention, provisional application No. 60/253,078, filed November 28, 2000, and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of this application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

AND, I HEREBY further covenant and agree that I will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to me respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

IN TESTIMONY WHEREOF. I have hereunto set our hands.

County of	Chester) ss.	Name: Address:	Robert A. NORWOOD 114 Waterwillow Road	
State of	Ponnovlyonia)	Dve	West Chester, PA 19380	
State of	Pennsylvania	.)	By: Date:	2/10/02	
Subscriber	d and sworn to before mo	e this <u>2014</u> day stary Public	of <i>Februal</i>	y , 20 <u>02</u>	
	NOTARIAL SEAL E J. SCHMIDT, Notary Public	1			
Malve	rn Boro, Chester County				

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SOLE/JOINT INVENTIO (Worldwide Rights)
Attorney Docket No. 07033.0029

IN TESTIMONY WHEREOF, I have hereunto set our hands.

County of)		Name:	Chia-Chi TENG	
)	SS.	Address:	1434 Greenwood Drive	
)			Piscataway, NJ 08854	
State of	Pennsylvania)		Ву:		
-		-		Date:		
Subscribed	d and sworn to before m , N	e this otary Pub	day lic	of	_, 20	

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ASSIGNMENT

WHEREAS I, the below named inventor, hereinafter referred to as Assignor, have made an invention entitled:

THIN FILM OPTICAL WAVEGUIDES

for which I executed an application for United States Letters Patent concurrently herewith or filed an application for United States Letters Patent on November 28, 2001 (Serial No. 09/994,722); and

WHEREAS, PHOTON-X, INC., a corporation of Pennsylvania whose post office address is 291 Great Valley Parkway, Malvern, Pennsylvania (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) in hand paid and other good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I, as Assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my entire right, title, and interest in and to this invention, provisional application No. 60/253.078 filed November 28, 2000, and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of the above provisional application (if any), as well as all rights to claim priority on the basis of this application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND. I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

AND, I HEREBY further covenant and agree that I will, without further consideration, communicate with Assignee its successors and assigns, any facts known to me respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

IN TESTIMONY WHEREOF, I have hereunto set our hands.

County of)	SS.		Robert A. NORWOOD 114 Waterwillow Road West Chester, PA 19380	
State of	Pennsylvania	,)		By: Date:	West Shots, Frx 1999	
Subscribed and sworn to before me this day of, 20, Notary Public						

282823 1 Page 1 of 2

SOLE/JOINT INVENTICIN (Worldwide Righ s) Attorney Docket No. 07033.00 29

IN TESTIMONY WHEREOF, I have hereunto set our hands.

County of	meddlesot)	Name:	Chia-Chi TENG	
•) ss.	Address:	1434 Greenwood Drive	
)		Piscataway, NJ 08854	
State of	P ennsylva nia)	Ву:	chest TY	
	new Jersey	-	Date:	2/21/2002	_
	d and sworn to before m		of Feb	_, 20 <u>0</u> 2	

MINNIE C. FANIA NOTARY PUBLIC OF NEW JERSEY My Commission Expires Feb. 8, 2003

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RECORDED: 04/12/2002