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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Donghwan Ahn	11/03/2005
Jifeng Liu	11/03/2005
Jurgen Michel	11/03/2005
Lionel C. Kimerling	11/03/2005

RECEIVING PARTY DATA

Name:	Massachusetts Institute of Technology	
Street Address:	77 Massachusetts Avenue	
City:	Cambridge	
State/Country:	MASSACHUSETTS	
Postal Code:	02139	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	11269354	

CORRESPONDENCE DATA

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Boston, MASSACHUSETTS 02109 Address Line 4:

ATTORNEY DOCKET NUMBER: MIT-174C NAME OF SUBMITTER: Natasha Us

Total Attachments: 3

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PATENT REEL: 018854 FRAME: 0090

JOINT ASSIGNMENT

WHEREAS, We, **Donghwan Ahn**, **Jifeng Liu**, **Jurgen Michel**, and **Lionel C. Kimerling**, have invented one or more inventions described in an application for Letters Patent of the United States entitled:

INTEGRATED WAVEGUIDE PHOTODETECTOR APPARATUS WITH MATCHING PROPAGATION CONSTANTS AND RELATED COUPLING METHODS

identified by

\boxtimes		4C, executed by me on even date herewith and about to be ent and Trademark Office, and/or
	Application Serial NoOffice on	filed in the United States Patent and Trademark ; and

WHEREAS, Massachusetts Institute of Technology (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 77 Massachusetts Avenue, Cambridge, MA 02139, desires to acquire an interest therein, in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such Letters Patent, and any right, title and interest we may have in provisional applications to which said application claims priority; said invention(s), applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all of our rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all Letters Patent to ASSIGNEE in its own name as assignee of our entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional, substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications;

PATENT REEL: 018854 FRAME: 0091 AND, we hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, we hereby authorize ASSIGNEE or its attorneys or agents to insert the correct serial number and filing date into this assignment, if none is indicated on the date of our execution of this assignment;

AND, we hereby authorize and request the Director of the United States Patent and Trademark Office to issue such Letters Patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals on the date(s) set forth below.

		2 2
	Inventor:	Shalle
		Donghwan Ahn
Commonwealth of Massachusetts		
County of Middlesey		
On this 03 day of November 2005, 8	pefore me, the	e undersigned Notary Public, personally
appeared Donghwan Ahn, proved to me through sa	itistactory evi	idence of identification, which was/were
ma hiteral, to be the person who	se name is si	gned on the preceding or attached
document, and who swore or affirmed to me that the	ne contents of	f the document are truthful and accurate
to the best of his/her knowledge and belief.		
~ 0 .		(a 1)
Maner Mi aff		(Seal)
Notary Public		
My Commission Expires: Feb 07, 2011		
	Inventor:	Jyy L Jifeng Liu
C 141 634 1		
Commonwealth of Massachusetts		
County of Middlesey		
On this <u>03</u> day of <u>Normber</u> , 2005, I appeared Jifeng Liu, proved to me through satisfac	ctory evidence	e of identification, which was/were
Chinese Cossport, to be the person who		
document, and who swore or affirmed to me that the	he contents of	t the document are truthful and accurate

Grances Mage (Seal)
Notary Public

to the best of his/her knowledge and belief.

Joint Assignment to MIT Attorney Docket No. MIT-174C Page 3 of 3	
My Commission Expires: Jeb 07, 2011	
,	Inventor: Jurgen Michel
Commonwealth of Massachusetts County of Middlesey	V
appeared Jurgen Michel, proved to me through sa MA highest, to be the person who	before me, the undersigned Notary Public, personally tisfactory evidence of identification, which was/were ose name is signed on the preceding or attached the contents of the document are truthful and accurate
Grances Mil age Notary Public	(Seal)
My Commission Expires: Och 17, 2011	
	Inventor: Lionel C. Kimerling
Commonwealth of Massachusetts County of <i>M. J. M. S. W.</i>	
On this <u>//3</u> day of// <i>vember</i> 2005, appeared Lionel C. Kimerling, proved to me throu	before me, the undersigned Notary Public, personally ugh satisfactory evidence of identification, which person whose name is signed on the preceding or

attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

RECORDED: 02/05/2007

(Seal)

Wranca Mage
Notary Public

My Commission Expires: Jeb 07, 2011

PATENT REEL: 018854 FRAME: 0093