SMITH, Terry L.

KOCH, Barry J.

FAN, Xudong

Security Agreement

11/277769

☐ Yes 🛛 No

Assignment

Other:

ZHANG, Jun-Ying

Case No.: 61198US002 RECORDATION FORM COVER SHEET PATENTS ONLY To: The Director of the U.S. Patent and Trademark Office: Please record the attached document(s) or the new address(es) below. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies) Execution Date(s): 3M Innovative Properties Company May 30, 2006 P.O. Box 33427 May 30, 2006 St. Paul, Minnesota 55133-3427 HAASE, Michael A. May 30, 2006 May 30, 2006 WILSON, Robert W. June 5, 2006 Additional name(s) of receiving party(ies) attached? May 24, 2006 ☐ Yes 🛛 No Additional name(s) of conveying party(ies) attached? 3. Nature of conveyance: Merger Change of Name Government Interest Assignment Joint Research Agreement 4. Application or patent number(s) ☐ This document is being filed together with a new application. A. Patent Application No(s). B. Patent No(s). Additional Numbers Attached?

Yes

No 6. Total number of applications 5. Name and address to whom correspondence concerning document should be mailed: and patents involved: Name: Philip Y. Dahl Office of Intellectual Property Counsel 3M Innovative Properties Company Phone Number: 651-737-4029 7. Total fee (37 CFR §§ 1.21(h) & 3.41): \$40.00 Fax Number: 651-736-3833 Enclosed Authorized to be charged to deposit account 32692 8. Payment Information: Customer Number Deposit Account Number: 13-3723

9. Signature: Printed Name of Attorney/Agent: Philip Y. Dahl Date: June 9, 2006 Registration No.: 36,115

Pages: Total number of pages including COVER SHEET, attachments, and documents

9

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

PATENT

Authorized User Name: Philip Y. Dahl

700269581

REEL: 017767 FRAME: 0102

Case No.: 61198US002

ASSIGNMENT OF APPLICATION

Whereas I/we, the below named inventor(s), with residence and citizenship as indicated below, have made an invention in

	COUPLING LIGHT INTO MICRORESONATORS
	for which an application for a United States Patent is being filed on ;
	for which an application for a United States Patent is being filed contemporaneously herewith;
Ø	for which an application for a United States Patent identified as U.S. Patent Application No. 11/277,769; was filed on March 29, 2006;
П	which application is identified as PCT International Patent Application No.; filed;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, I/we have agreed to assign and transfer and do hereby assign and transfer unto the 3M INNOVATIVE PROPERTIES COMPANY, a wholly-owned subsidiary of 3M COMPANY, and a corporation of Delaware, having its principal office at Saint Paul, Minnesota, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in the said invention made by me or made jointly with others (provided any such improvement is made during, or within one year after the termination of, my employment with 3M COMPANY and any of its existing or future subsidiaries), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon the said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by me/us had this assignment and transfer not

I/We do further agree for myself/ourselves and for my/our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I/we lawfully may, that may be deemed necessary by said Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries; and

I/We do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

Case No.: 61198US002 Assignment Page 1 of 4

PATENT

In witness whereof, I/we have signed my/our name(s) on the day and year set forth below.

Given Name (first and middle [if any]): TERRY L.	Family Name or Surname: SMITH	
Inventor's Signature:	Date: \$\frac{5}{3}\text{0} 0	Citizenship;
Residence: Roseville, Minnesota	Country: / USA	Citizenship: United States of America
STATE OF MINNESOTA)) ss. COUNTY OF RAMSEY)		
	BOUL before me persona t, as said person's free act and	lly appeared the above-named I deed, on the day and year
(Seal) LACI MARIE BURHOP Notary Public Minnesota My Commission Expires January 31, 2010	Llui Buch Notary Public	Life
	,	
Given Name (first and middle [if any]): BARRY J,	Family Name or Surname: KOCH	
Inventor's Signature:	Date: 5/30/06	
Residence: Woodbury, Minnesota	Country: USA	Citizenship: United States of America
state of Minnesota)) ss. COUNTY OF RAMSEY) On this 20 day of		
(Seal) LACI MARIE BURHOP Notary Public Minnesota My Commission Explose January 31, 2010	LMi Buch Notary Public	

Given Name (first and middle [if any]): MICHAEL A.	Family Name or Surname:	
Inventor's Signature:	Date: 5/30/	106
Mulas Haar		
Residence:	Country:	Citizenship:
St. Paul, Minnesota	USA	United States of America
STATE OF MINNESOTA)	, , , , , , , , , , , , , , , , , , ,	
) ss. COUNTY OF RAMSEY)		
On this 30 day of Way	ans.	
On this day of \	, <u>coog</u> before me persona	ily appeared the above-named
aforesaid.	nem, as said person's nee act	and deed, on the day and year
9-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4	1 . 5	
(Seal) LACI MARIE BURHOP Notary Public	UM RUU Notary Public	UD
Minnesota	Notary Public	0
My Commission Expires January 31, 2010		
Given Name (first and middle [if any]):	Family Name or Surname:	
JUN-YING	ZHANG	
	Date:	
JUN-YING Inventor's Signature:	Date:	06
Inventor's Signature:	Date: 05/30/	O 6
	Date:	O () Citizenship: Great Britain
Inventor's Signature: Residence: St. Paul, Minnesota	Date: OS/30/	Citizenship:
Residence: St. Paul, Minnesota STATE OF MINNESOTA	Date: OS/30/	Citizenship:
Inventor's Signature: Residence: St. Paul, Minnesota STATE OF MINNESOTA)	Date: 05/30/ Country: USA	Great Britain
Inventor's Signature: Residence: St. Paul, Minnesota STATE OF MINNESOTA)	Date: 05/30/ Country: USA	Great Britain
Inventor's Signature: Residence: St. Paul, Minnesota STATE OF MINNESOTA)	Date: 05/30/ Country: USA	Great Britain
Residence: St. Paul, Minnesota STATE OF MINNESOTA	Date: 05/30/ Country: USA	Great Britain
Inventor's Signature: Residence: St. Paul, Minnesota STATE OF MINNESOTA) ss. COUNTY OF RAMSEY On this	Date: OS/30 Country: USA Date: OS/30 A person's free act are contained as said person's free act are contained.	Ily appeared the above-named ad deed, on the day and year
Inventor's Signature: Residence: St. Paul, Minnesota STATE OF MINNESOTA) ss. COUNTY OF RAMSEY On this Jun-YING ZHANG, and who executed the foregoing instrume aforesaid. PHYLLIS J. BOETTCHER Notary Public	Date: 05/30/ Country: USA	Ily appeared the above-named ad deed, on the day and year

Case No.: 61198US002

Given Name (first and middle [if any]): ROBERT W.	Family Name or Surname: WILSON		
Inventor's Signature:	Date:		
Residence: Austin, Texas	Country: USA	Citizenship: United States of America	
STATE OF TEXAS)) ss. COUNTY OF TRAVIS)			
On this day of,, before me personally appeared the above-named ROBERT W. WILSON, and who executed the foregoing instrument, as said person's free act and deed, on the day and year aforesaid.			
(Seal)	Notary Public		
		** ** *	
Given Name (first and middle [if any]): XUDONG	Family Name or Surname: FAN		
Inventor's Signature:	Date:		
Residence: Columbia, Missouri	Country: USA	Citizenship: China	
STATE OF MISSOURI)) ss. COUNTY OF BOONE)			
On this,, before me personally appeared the above-named XUDONG FAN, and who executed the foregoing instrument, as said person's free act and deed, on the day and year aforesaid.			
(Seal)	Notary Public		

Assignment Page 4 of 4 Case No.: 61198US002

Case No.: 61198US002

ASSIGNMENT OF APPLICATION

Whereas I/we, the below named inventor(s), with residence and citizenship as indicated below, have made an invention in

	COUPLING LIGHT INTO MICRORESONATORS
	for which an application for a United States Patent is being filed on ;
	for which an application for a United States Patent is being filed contemporaneously herewith;
×	for which an application for a United States Patent identified as U.S. Patent Application No. 11/277,769; was filed on March 29, 2006;
	which application is identified as PCT International Patent Application No.; filed;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, I/we have agreed to assign and transfer and do hereby assign and transfer unto the 3M INNOVATIVE PROPERTIES COMPANY, a wholly-owned subsidiary of 3M COMPANY, and a corporation of Delaware, having its principal office at Saint Paul, Minnesota, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in the said invention made by me or made jointly with others (provided any such improvement is made during, or within one year after the termination of, my employment with 3M COMPANY and any of its existing or future subsidiaries), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon the said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by me/us had this assignment and transfer not

I/We do further agree for myself/ourselves and for my/our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I/we lawfully may, that may be deemed necessary by said Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries; and

I/We do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

Case No,: 61198US002 Assignment Page 1 of 4

In witness whereof, I/we have signed my/our name(s) on the day and year set forth below.

Given Name (first and middle [if any]):	Family Name or Surname:		
TERRY L.	SMITH		
Inventor's Signature:	Date:		
Residence;	Country:	Citizenship:	
Roseville, Minnesota	USA	United States of America	
STATE OF MINNESOTA)		,,,	
) ss. COUNTY OF RAMSEY)			
On this day of	before me person	ally appeared the above-named	
TERRY L. SMITH, and who executed the foregoing instrum	nent, as said person's free act an	d deed, on the day and year	
aforesaid.			
(Seal)	Notary Public	· · · · ·	
	Notary Fublic	•	
Character (Early and add the fife and the	I E		
Given Name (first and middle [if any]): BARRY J.	Family Name or Surname: KOCH		
	B-1		
Inventor's Signature:	Date:		
		Law	
Residence: Woodbury, Minnesota	Country: USA	Citizenship: United States of America	
	UOA	Office States of Afficia	
STATE OF MINNESOTA)			
COUNTY OF RAMSEY)			
On this day of	. before me person	ally appeared the above-named	
BARRY J. KOCH, and who executed the foregoing instrument, as said person's free act and deed, on the day and year			
aforesaid.	•		
(Seal)	Notary Public		
	могату пиріїс		

Assignment Page 2 of 4 Case No.: 61198US002

Given Name (first and middle [if any]): MICHAEL, A.	Family Name or Surname: HAASE		
inventor's Signature:	Date:		
Residence: St. Paul, Minnesota	Country: USA	Citizenship: United States of America	
STATE OF MINNESOTA)) ss. COUNTY OF RAMSEY) On this day of,, before me personally appeared the above-named MICHAEL A. HAASE, and who executed the foregoing instrument, as said person's free act and deed, on the day and year aforesaid.			
(Seal)	Notary Public		
Given Name (first and middle [if any]): JUN-YING	Family Name or Surname: ZHANG		
Inventor's Signature:	Date:		
Residence: St. Paul, Minnesota	Country: USA	Citizenship: Great Britain	
STATE OF MINNESOTA)) ss. COUNTY OF RAMSEY) On this day of,, before me personally appeared the above-named JUN-YING ZHANG, and who executed the foregoing instrument, as said person's free act and deed, on the day and year			
aforesaid. (Seal)			
	Notary Public	······	

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Given Name (first and middle [if any]): ROBERT W.	Family Name or Surname: WILSON	
Inventor's Signature:	Date:	
hold w. min	6/5/2006	<i>,</i>
Residence: Austin, Texas	Country: USA	Citizenship: United States of America
	USA	Officed States of Afficia
STATE OF TEXAS) ss.		
COUNTY OF TRAVIS)		
On this5+\sum_ day of ROBERT W. WILSON, and who executed the foregoing instru	, <u>2004</u> , before me persona	lly appeared the above-named
ROBERT W. WILSON, and who executed the foregoing instru year aforesaid.	ument, as said person's free ac	t and deed, on the day and
THE PERSON TO COLUMN TO CO	λ, Λ	O Λ Λ ϵ
(Seal) THERESA T. COLLIER MY COMMISSION EXPIRES	Notary Public	Coller
November 16, 2008	Notary Public	
Given Name (first and middle [if any]):	Family Name or Surname:	
XUDONG	FAN	
Invento's Signature;	Date;	_
The you	05/24/2006	/ >
Residence:	Country:	Citizenship:
Cólumbia, Missouri	USA	China
STATE OF MISSOURI) ss.		
COUNTY OF BOONE) 33.		
On this <u>2⁴/</u> day of <u>\\\&\\</u> XUDONG FAN, and who executed the foregoing instrument, a	, <u>அல்</u> , before me persona	ly appeared the above-named
XUDONG FAN, and who executed the foregoing instrument, as a foresaid.	s said person's free act and de	ed, on the day and year
Willey Tilly		
(Seal) A OTAD	Dough of 10	- revie
So man ic	lotary Public (
Podulo		IAH Y. TURNER blic - State of Missouri
NOTARY	Co	ounty of Boone
SEAL ON	My Commis	sion Expires Feb. 5, 2008
COE WISHING		

Assignment

RECORDED: 06/09/2006

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