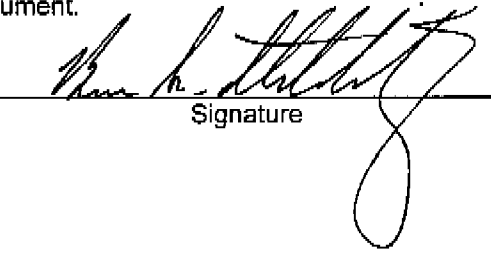


Client Code: STANF.151A

**RECORDATION FORM COVER SHEET
PATENTS ONLY**

To the Director, U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies): (List using letters or numbers for multiple parties)</p> <p>1. Michel J.F. Digonnet 2. Hyang Kyun Kim 3. Vinayak Dangui 4. Gordon S. Kino</p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies):</p> <p>Name: The Board of Trustees of the Leland Stanford Junior University City: Palo Alto State: CA ZIP: 94306</p> <p>Additional name(s) of receiving party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Security Agreement <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Other:</p> <p>Execution Date: (List as in section 1 if multiple signatures)</p> <p>1. June 2, 2009 2. June 10, 2009 3. June 19, 2009 4. June 2, 2009</p>	<p>4. US or PCT Application number(s) or US Patent number(s):</p> <p><input checked="" type="checkbox"/> Patent Application No.: 11/770,660 Filing Date: June 28, 2007</p> <p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>5. Party to whom correspondence concerning document should be mailed:</p> <p>Customer No. 20,995 Address: Knobbe, Martens, Olson & Bear, LLP 2040 Main Street, 14th Floor Irvine, CA 92614 Return Fax: (949) 760-9502 Attorney's Docket No.: STANF.151A</p>	<p>6. Total number of applications and patents involved: 1</p>
<p>7. Total fee (37 CFR 1.21(h)): \$40 <input checked="" type="checkbox"/> Authorized to be charged to deposit account</p>	<p>8. Deposit account number: 11-1410 Please charge this account for any additional fees which may be required, or credit any overpayment to this account.</p>
<p>9. Statement and signature.</p> <p>To the best of my knowledge and belief, the foregoing information is true and correct, and any attached copy is a true copy of the original document.</p> <p><u>Bruce S. Itchkawitz</u> Name of Person Signing</p> <p>47,677 Registration No.</p> <p> Signature</p> <p><u>7/29/09</u> Date</p> <p>Total number of pages including cover sheet, attachments and document: 7</p>	

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PATENT
REEL: 023024 FRAME: 0837

Application No.: 11/770,660
 Filing Date: June 28, 2007

PATENT
 Client Code: STANF.151A
 Page 1

ASSIGNMENT

WHEREAS, We, Michel J.F. Digonnet, a French citizen, residing at 1045 College Avenue, Palo Alto, California 94306, Hyang Kyun Kim, a Korean citizen, residing at 1960 Spanish Bay Ct., San Jose, California 95138, Vinayak Dangu, a French citizen, residing at 344 Olmstead Road, Apartment 259, Stanford, California 94305, and Gordon S. Kino, a United States citizen, residing at 867 Cedro Way, Stanford, California 94305, have invented certain new and useful improvements in an OPTICAL SENSOR UTILIZING HOLLOW-CORE PHOTONIC BANDGAP FIBER WITH LOW PHASE THERMAL CONSTANT for which we have filed an application for Letters Patent in the United States, Application No. 11/770,660, filed June 28, 2007;

AND WHEREAS, The Board of Trustees of the Leland Stanford Junior University, Palo Alto, California 94306 (hereinafter "ASSIGNEE"), desires to acquire the entire right, title, and interest in and to said improvements and said Application:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said inventors, do hereby sell, assign, transfer and set over, unto said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under said improvements, and said application including all provisional applications relating thereto (including but not limited to U.S. Provisional Application Nos. 60/837,891, filed August 14, 2006 and No. 60/817,514, filed June 29, 2006 (respectively if plural applications), 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 said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE DO HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND WE HEREBY covenant and agree that we will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me 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 said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 2nd day of JUNE, 2009

Michel J.F. Digonnet
 Michel J.F. Digonnet

Witnessed by:

[Signature] Signature
Hebeed Taina Printed name
121 N Capitol Residence address
San Jose CA 95127
6/2/2009 Date

Application No.: 11/770,660
Filing Date: June 28, 2007

PATENT
Client Code: STANF.151A
Page 2

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _____, 20__

Hyang Kyun Kim

Witnessed by:

Signature

Printed name

Residence address

Date

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _____, 20__

Vinayak Dangui

Witnessed by:

Signature

Printed name

Residence address

Date

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 2nd day of June, 2009

Gordon S. Kino

Gordon S. Kino

Witnessed by:

Heber Taina

Signature
Heber Taina

Printed name
121 N. Capitol

Residence address
San Jose, CA 95127

Date
June 2, 2009

7183337
052609

Application No.: 11/770,660
Filing Date: June 28, 2007

PATENT
Client Code: STANF.151A
Page 1

ASSIGNMENT

WHEREAS, We, Michel J.F. Digonnet, a French citizen, residing at 1045 College Avenue, Palo Alto, California 94306, Hyang Kyun Kim, a Korean citizen, residing at 1960 Spanish Bay Ct., San Jose, California 95138, Vinayak Dangui, a French citizen, residing at 344 Olmstead Road, Apartment 239, Stanford, California 94305, and Gordon S. Kino, a United States citizen, residing at 867 Cedro Way, Stanford, California 94305, have invented certain new and useful improvements in an OPTICAL SENSOR UTILIZING HOLLOW-CORE PHOTONIC BANDGAP FIBER WITH LOW PHASE THERMAL CONSTANT for which we have filed an application for Letters Patent in the United States, Application No. 11/770,660, filed June 28, 2007;

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IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _____, 20__

Michel J.F. Digonnet

Witnessed by:

Signature

Printed name

Residence address

Date

Application No.: 11/770,660
Filing Date: June 28, 2007

PATENT
Client Code: STANF.151A
Page 2

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _____, 20__.

Hyang Kyun Kim

Witnessed by:

Signature

Printed name

Residence address

Date

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 14th day of June, 2009.

Vinayak Dangui
Vinayak Dangui

Witnessed by:

Kiavash Zamani Signature
Kiavash Zamani Agbi Printed name
16 COMSTOCK CIR APT 105 Residence address
STANFORD CA
June 14/09 Date

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _____, 20__.

Gordon S. Kino

Witnessed by:

Signature

Printed name

Residence address

Date

7183337
052609

Application No.: 11/770,660
Filing Date: June 28, 2007

PATENT
Client Code: STANF.151A
Page 1

ASSIGNMENT

WHEREAS, We, Michel J.F. Digonnet, a French citizen, residing at 1045 College Avenue, Palo Alto, California 94306, Hyang Kyun Kim, a Korean citizen, residing at 1960 Spanish Bay Ct., San Jose, California 95138, Vinayak Dangu, a French citizen, residing at 344 Olmstead Road, Apartment 239, Stanford, California 94305, and Gordon S. Kino, a United States citizen, residing at 867 Cedro Way, Stanford, California 94305, have invented certain new and useful improvements in an OPTICAL SENSOR UTILIZING HOLLOW-CORE PHOTONIC BANDGAP FIBER WITH LOW PHASE THERMAL CONSTANT for which we have filed an application for Letters Patent in the United States, Application No. 11/770,660, filed June 28, 2007;

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AND WE HEREBY covenant and agree that we will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me 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 said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _____, 20__.

Michel J.F. Digonnet

Witnessed by:

Signature

Printed name

Residence address

Date

Application No.: 11/770,660
Filing Date: June 28, 2007

PATENT
Client Code: STANFLISA
Page 2

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 10 day of June, 2009

[Signature]
Hyang Kyun Kim

Witnessed by:

[Signature] Signature
Jang Gyeou Yang Printed name
1960 Spanish Bay Ct Residence address
SAN JOSE CA 95138
6/10/09 Date

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _____, 20__.

Vineyak Dungui

Witnessed by:

Signature

Printed name

Residence address

Date

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _____, 20__.

Gordon S. Kim

Witnessed by:

Signature

Printed name

Residence address

Date

7183337
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