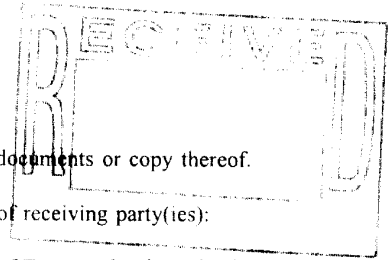


Client Code: STANF.105A

07-15-1998



HEET



7-6 98

TO THE ASSISTANT COMMISSIONER

100765507

original documents or copy thereof.

1. Name of conveying parties: (If multiple assignors, list numerically)

- 1. Michel J.F. Digonnet
- 2. H. John Shaw
- 3. Richard H. Pantell
- 4. Robert W. Sadowski

2. Name and address of receiving party(ies):

Name: The Board of Trustees for the Leland Stanford Junior University
Internal Address: Same as Street Address
Street Address:
City: Stanford **State:** California **ZIP:** 94305

Additional names of conveying parties attached?
 Yes No

Additional names of receiving parties attached?
 Yes No

3. Nature of conveyance:

- Assignment
- Merger
- Security Agreement
- Change of Name
- Other:

4. Application number or Patent number:

Application filed herewith Execution Date:

Patent Application No.: 09/000,939
 Filing Date: December 30, 1997

Patent No.
 Issue Date

Execution Date: (If multiple assignors, list execution dates in numerical order corresponding to numbers indicated in 1 above)

Additional numbers attached? Yes No

- 1. June 24, 1998
- 2. June 24, 1998
- 3. June 11, 1998
- 4. June 22, 1998

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Jerry T. Sewell
 KNOBBE, MARTENS, OLSON & BEAR, LLP
 Customer No. 20,995
Internal Address: Sixteenth Floor
Street Address: 620 Newport Center Drive
City: Newport Beach **State:** CA **ZIP:** 92660
Attorney's Docket No.: STANF.105A

7. Total fee (37 CFR 3.41): \$40.00 ^E

- Enclosed
- Authorized to be charged to deposit account if any additional fees are required, or to credit any overpayment

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.

6. Total number of applications and patents involved: 1

9. Statement and signature.

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.

Jerry T. Sewell
 Name of Person Signing
 31,567
 Registration No.

Jerry T. Sewell
 Signature

JUNE 30, 1998
 Date

Total number of pages including cover sheet, attachments and document: 5

Mail documents to be recorded with required cover sheet information to:

07/14/1998 JSHABAZZ 00000198 09000939

Assistant Commissioner for Patents
 Box Assignments
 Washington, D.C. 20231

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JTS-1360
19980630/2

KNOBBE, MARTENS, OLSON & BEAR, LLP PATENT
 620 NEWPORT CENTER DRIVE 16TH FLOOR NEWPORT BEACH, CA 92660
 (949) 762-4404 FAX (949) 762-4550

REEL: 9300 FRAME: 0352

ASSIGNMENT

WHEREAS, We, Michel J.F. Digonnet, a French citizen, residing at 2090 Cornell, Palo Alto, California 94306, H. John Shaw, a United States citizen, residing at 719 Alvarado Row, Palo Alto, California 94306, Richard H. Pantell, a United States citizen, residing at 170 North Balsamia Way, Menlo Park California 94025, and Robert W. Sadowski, a United States citizen, residing at 385th Signal Company, Camp Doha, Kuwait APO AE09889 have invented certain new and useful improvements in a STABLE NONLINEAR MACH-ZEHNDER FIBER SWITCH for which we have filed an application for Letters Patent in the United States, 09/000,939; filed December 30, 1997;

AND WHEREAS, The Board of Trustees for the Leland Stanford Junior University (hereinafter "ASSIGNEE"), a California Corporation, with its principal place of business at Stanford, California 94305, desires to acquire the entire right, title, and interest in and to the said improvements and the said Application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) each to us in hand paid, and other good and valuable consideration, 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 ASSIGNEE, 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 ASSIGNEE, 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 ASSIGNEE, 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 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 24TH day of JUNE, 1998.

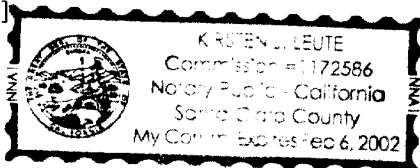
Michel J.F. Digonnet
Michel J.F. Digonnet

STATE OF CALIFORNIA }
COUNTY OF Santa Clara } ss

On June 24, 1998, before me, Kirsten J. Leute personally appeared Michel J.F. Digonnet, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

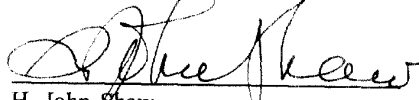
WITNESS my hand and official seal

[SEAL]



Kirsten J. Leute
Signature

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 24 day of June, 1998.

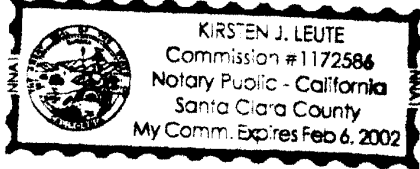

H. John Shaw

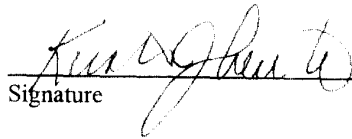
STATE OF CALIFORNIA }
COUNTY OF Santa Clara } ss.

On June 24, 1998, before me, Kirsten J. Leute personally appeared H. John Shaw, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

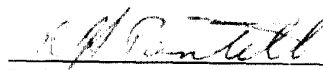
WITNESS my hand and official seal.

[SEAL]




Signature

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 11 day of June, 1998.

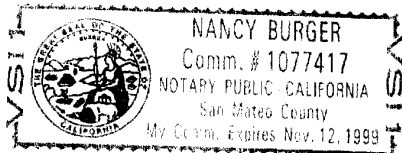

Richard H. Pantell

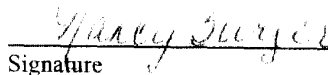
STATE OF CALIFORNIA }
COUNTY OF San Mateo } ss.

On June 11, 1998, before me, Nancy Burger personally appeared Richard H. Pantell, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]

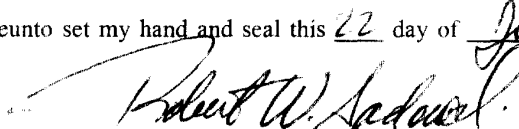



Signature

Application No.: 09/000,939
Filing Date: December 30, 1998

PATENT
Client Code: STANF.105A
Page 3

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 22 day of June, 1998.


Robert W. Sadowski

} ss.

On _____, before me, _____ personally appeared Robert W. Sadowski, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]

Signature

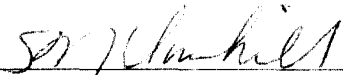
JTS-9614
19980605/2

PATENT
REEL: 9300 FRAME: 0355

WITH THE UNITED STATES ARMED FORCES

AT CAMP DOHA, THE EMIRATE OF KUWAIT

I, SSG STACIE J. THORNHILL, the undersigned official do hereby certify that the attached documents (**Patent Application; Number 09/000,939**), was subscribed and sworn before me this 22th day of June 1998, by **ROBERT W. SADOWSKI** who is known to me to be accompanying the Armed Forces of the United States currently stationed in Kuwait. I do further certify that I am, at the date of this certificate, a commissioned officer in the rank stated below, and that this certification is executed under the statutory authority of Title 10, United States Code, Section 936 and 1044a, and Army Regulation 27-55.


STACIE J. THORNHILL
SSG, U.S. Army
Legal NCO