



11-30-2006



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U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

Attorney Docket No. 473.46718X00

Form PTO-1595
(Rev. 10/02)
OMB No. 0651-0027 (exp. 6/30/2005)

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Nobuo MIYADERA
Rei YAMAMOTO

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies)

Name: **Hitachi Chemical Company, Ltd.**

Street Address: **1-1, Nishi-Shinjuku 2-chome
Shinjuku-ku, Tokyo 163-0449,
JAPAN**

Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance/ Execution Date: **October 6, 2006, and
October 6, 2006**

- ☐ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License

☒ **Other: CORRECTED** - Please correct Receiving Party's name as noted in Box 2 above and as noted on the attached copies in red pencil. As this error was a typographical error on the part of Applicants, the required fee is enclosed herewith.

4. Application number(s) or patent number(s): ☐ This document is being filed together with a new application.

A. Patent Application No.(s)

11/546,253

B. Patent Registration No.(s)

Additional number(s) attached? ☐ Yes ☒ No

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

Name: **ANTONELLI, TERRY, STOUT & KRAUS, LLP**

Address: **1300 NORTH 17TH STREET, SUITE 1800**

City: **ARLINGTON** State: **VA** Zip **22209**

Phone Number: **703-312-6600**

Facsimile Number: **703-312-6666**

Email Address: **email@antonelli.com**

6. Total number of applications and patents involved 1

7. Total fee (37 CFR 3.41).....**\$40.00**

- ☒ Authorized to be charged by credit card
☐ Authorized to be charged to deposit account
☒ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information:

a. Credit Card Last 4 numbers: **1073**
Expiration date: **06/10**

b. Deposit account number 01-2135 (case 473.46718X00):
Any deficiencies.

Authorized User Name: **William I. Solomon**

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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.

William I. Solomon, Reg. #28,565

Name of Person Signing

Signature

November 27, 2006

Date

Total number of pages including cover sheet, attachments, and document: **7**

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

10-18-2006



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DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

Attorney Docket No. 473.46718X00

To the Honorable Commissioner of Patents and Trademarks

Attached original documents or copy thereof

1. Name of conveying party(ies):
Nobuo MIYADERA
Rei YAMAMOTO

2. Name and address of receiving party(ies)
Name: Hitachi Chemical Co., Ltd.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

Street Address: 1-1, Nishi-Shinjuku 2-chome
Shinjuku-ku, Tokyo 163-0449, Japan

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☐ Other .

City: State: Zip:

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Name: ANTONELLI, TERRY, STOUT & KRAUS, LLP

Internal Address:

1300 NORTH 17TH STREET - SUITE 1800

City: ARLINGTON State: VA Zip 22209

Phone Number: (703) 312-6600
Facsimile Number: (703) 312-6666
Email Address: email@antonelli.com

6. Total number of applications and patents involved 1

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

- ☒ Authorized to be charged by credit card
☐ Authorized to be charged to deposit account
☒ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information:

a. Credit Card Last 4 numbers: 1107
Expiration date: 06/10

b. Deposit account number: 01-2135

Authorized User Name: Paul J. Skierawski

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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.

William I. Solomon, Reg#28,565

Name of Person Signing

Signature:

10/12/2006

Date

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

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

10/13/2006 GWORDDF1 00000041 11546253

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PATENT

REEL: 018634 FRAME: 0204

ASSIGNMENT

ATTY. DOCKET NO.:

2005-014-WUS

WHEREAS the below named inventor (if only one inventor is named below) or inventors (if plural inventors are named below) hereinafter referred to as the ASSIGNOR invented a certain improvement relating to **Optical waveguide structure**

☒ for which an application for Letters Patent to be filed in the United States Patent and Trademark Office was executed on even date.

☐ for which U.S. Application Serial No. _____ for Letters Patent was filed in the U.S. Patent and Trademark Office on _____

☐ for which an International Application was filed on _____ as _____, designating the United States.

AND WHEREAS

Hitachi Chemical Company, Ltd., of 1-1, Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo, 1630449 Japan

hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, reexaminations and extensions thereof.

NOW, WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, and in and to any and all priority and/or convention rights or benefits accruing or to accrue with respect to the filing or securing of patents in the United States and/or any countries foreign thereto, SAID ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal representatives, in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and enjoyed the same, if the assignment had not been made.

AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States and foreign countries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to execute any other papers that may be needed in connection with filing said applications and securing Letters Patents thereon.

AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.

The undersigned hereby grant(s) the law firm of Antonelli, Terry, Stout, Kraus, LLP the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR.

201	FULL NAME OF SOLE OR FIRST NAMED INVENTOR Nobuo MIYADERA	INVENTOR'S SIGNATURE <i>Nobuo Miyadera</i>	DATE October 6, 2006
202	FULL NAME OF SECOND JOINT INVENTOR Rei YAMAMOTO	INVENTOR'S SIGNATURE <i>Rei Yamamoto</i>	DATE October 6, 2006
203	FULL NAME OF THIRD JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
204	FULL NAME OF FOURTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
205	FULL NAME OF FIFTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
206	FULL NAME OF SIXTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE

PATENT

RECORDED: 11/27/2006

REEL: 018634 FRAME: 0205