| Form PTO-1595 (Rev. 10/02) OMB No. 0651-0027 (exp. 6/30/ To the Honorable Commiss 1. Name of conveying party(ies): Rei YAMAMOTO Toshihiro KURODA Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance/ Execution Date: August 21, 2008. | APO2Rec'd PCT 28 AUG 200 12/24486 HEET U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office Attorney Docket No. 1498.49172X00 Line attached original documents or copy thereof. 2. Name and address of receiving party(ies) Name: Hitachi Chemical Company, Ltd. Address: 1-1, Nishi-Shinjuku 2-chome Shinjuku-ku, Tokyo 163-0449 JAPAN |
|---|---|
| | Additional name(s) & address(es) attached? ☐ Yes ☑ No |
| A. Patent Application No.(s) | This document is being filed together with a new application. B. Patent Registration No.(s) |
| Additional number(s) atta 5. Name and address of party to whom correspondence concerning document should be mailed: | 6. Total number of applications and patents involved 1 |

| concerning document should be mailed: | o. Total flambol of applications and patomo involved [1] | | | |
|---|---|--|--|--|
| Name: ANTONELLI, TERRY, STOUT & KRAUS, LLP Internal Address: | 7. Total fee (37 CFR 3.41) | | | |
| 1300 NORTH 17 TH STREET – SUITE 1800 | None required (government interest not affecting title) | | | |
| City: ARLINGTON State: VA Zip 22209 Phone Number: (703) 312-6600 Facsimile Number: (703) 312-6666 Email Address: email@antonelli.com | 8. Payment Information: a. Credit Card Last 4 numbers: 2097 Expiration date: 06/10 b. Deposit account number: 01-2135 | | | |
| DO NOT USE T | Authorized User Name: Gregory E. Montone THIS SPACE | | | |

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.

Alan E. Schiavelli, Reg#32,087

Name of Person Signing

Signature

08/28/2008

Date

Total number of pages including cover sheet, attachments, and document: 2

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

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PATENT REEL: 021482 FRAME: 0258

ASSIGNMENTAPOZROC'O POT 23 AUG 2008

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 . | SYSTEM | AND | METHOD | OF | MANUFACTURING | THE | SAME |
|-----------|--------|-----|--------|----|---------------|-----|------|
|-----------|--------|-----|--------|----|---------------|-----|------|

| X | for which an application for Letters Patent | to be filed in the | United States Patent and Trademark | COffice was executed on even date. |
|---|---|--|---------------------------------------|-------------------------------------|
| | for which U.S. Application Serial No. | | for Letters Patent was filed in the U | J.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.

RECORDED: 08/28/2008

| 201 | FULL NAME OF SOLE OR FIRST NAMED INVENTOR RCI YAMAMOTO | INVENTOR'S SIGNATURE Rei Yamamoto | August 21, 2008 |
|-----|--|--|-----------------|
| 202 | full name of second joint inventor Toshihiro KURODA | INVENTOR'S SIGNATURE FISHILLING KUNINA | August 21, 2008 |
| 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 REEL: 021482 FRAME: 0259