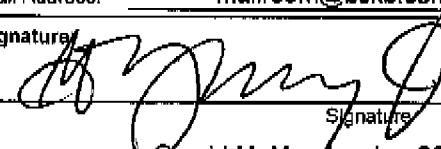


Form PTO-1595 (Rev. 03-05)  
OMB No. 0651-0027 (exp. 6/30/2005)

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

## RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

<b>1. Name of conveying party(ies):</b> Masaki OHASHI (06/12/2007) Takeshi KINSHO (06/12/2007) Takeru WATANABE (06/12/2007) Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>2. Name and address of receiving party(ies)</b> Name: <u>Shin-Etsu Chemical Co., Ltd.</u> Internal Address: _____ Street Address: _____  6-1, Ohtemachi 2-chome, Chiyoda-ku Tokyo JAPAN  City: _____ State: _____ Country: _____ Zip: _____ Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>3. Nature of conveyance/Execution Date(s):</b> Execution Date(s): in parentheses after inventor name <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Security Agreement <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____	<b>4. Application or patent number(s):</b> <input type="checkbox"/> This document is being filed together with a new application. A. Patent Application No.(s) 11/822,441 B. Patent No.(s)  Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>5. Name and address to whom correspondence concerning document should be mailed:</b> Name: <u>Gerald M. Murphy, Jr.</u> <u>BIRCH, STEWART, KOLASCH &amp; BIRCH, LLP</u> Internal Address: <u>Atty. Docket No.: 0171-1371PUS1</u> Street Address: <u>8110 Gatehouse Road</u> <u>Suite 100 East</u> <u>P.O. Box 747</u>  City: <u>Falls Church</u> State: <u>VA</u> Zip: <u>22040-0747</u> Phone Number: <u>(703) 205-8000</u> Fax Number: <u>(703) 205-8050</u> Email Address: <u>mailroom@bskb.com</u>	<b>6. Total number of applications and patents involved:</b> <span style="border: 1px solid black; padding: 2px 10px;">1</span>  <b>7. Total fee (37 CFR 1.21(h) &amp; 3.41)</b> \$ <u>40.00</u> <input type="checkbox"/> Authorized to be charged by credit card <input checked="" type="checkbox"/> Authorized to be charged to deposit account <input type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title)
<b>8. Payment Information</b> a. Credit Card Last 4 Numbers _____ Expiration Date _____ b. Deposit Account Number <u>02-2448</u> Authorized User Name <u>Gerald M. Murphy, Jr.</u>	
<b>9. Signature</b> <div style="text-align: center;">           _____          Signature       </div> <div style="text-align: right;">         _____          Date       </div> <div style="text-align: center;"> <u>Gerald M. Murphy, Jr. - 28,977</u>          Name of Person Signing       </div> <div style="text-align: right; margin-top: 10px;">         Total number of pages including cover sheet, attachments, and documents: <span style="border: 1px solid black; padding: 2px 10px;">3</span> </div>	

CH \$40.00 022448 11822441

U.S. PTO  
11/822441  
07/05/2007

Form PTO-1595 (Rev. 03-05)  
OMB No. 0651-0027 (exp. 6/30/2006)

07-16-2007

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



103426901

To the Director of the U.S. Patent and

and Trademark Office documents or the new address(es) below.

## 1. Name of conveying party(ies):

Masaki OHASHI (07/12/2007), Takeshi KINSHO  
(07/12/2007), and Takeru WATANABE  
(07/12/2007)

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

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

Name: Shin-Etsu Chemical Co., Ltd.

Internal Address:

Street Address:

6-1, Otemachi 2-chome, Chiyoda-ku,  
Tokyo  
JAPAN

City:

State:

Country:

Zip:

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

## 3. Nature of conveyance/Execution Date(s):

Execution Date(s): In parentheses after inventor name

☒ Assignment ☐ Merger ☐ Change of Name

☐ Security Agreement ☐ Joint Research Agreement

☐ Government Interest Assignment

☐ Executive Order 9424, Confirmatory License

☐ Other

## 4. Application or patent number(s):

A. Patent Application No.(s)

NEW

☒ This document is being filed together with a new application.

B. Patent No.(s)

11822441

Additional numbers attached? ☐ Yes ☒ No

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

Name: Gerald M. Murphy, Jr.  
BIRCH, STEWART, KOLASCH & BIRCH,  
LLP

Internal Address: Atty. Dkt.: 0171-1371PUS1

Street Address: 8110 Gatehouse Road  
Suite 100 East  
P.O. Box 747

City: Falls Church

State: VA Zip: 22040-0747

Phone Number: (703) 205-8000

Fax Number: (703) 205-8050

Email Address: mailroom@bskb.com

## 6. Total number of applications and patents involved:

1

## 7. Total fee (37 CFR 1.21(h) &amp; 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

Expiration Date

b. Deposit Account Number 02-2448

Authorized User Name Gerald M. Murphy, Jr.

## 9. Signature:

Signature

July 5, 2007

Date

Gerald M. Murphy, Jr. - 28,977

Name of Person Signing

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

3

07/13/2007 DBYRNE 00000272 022448 11822441

01 FC:8021

(40.00 DR)

**BIRCH, STEWART, KOLASCH & BIRCH, LLP**

**UNITED STATES PATENT RIGHTS, OR  
UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS**

ATTORNEY DOCKET NO.  
0171-1371PUS1

**ASSIGNMENT**

Application No. 11/822,441

Filed July 5, 2007

Insert Name(s) of Inventor(s) **⇒** WHEREAS, Masaki OHASHI, Takeshi KINSHO and Takeru WATANABE of  
Joetsu-shi, Niigata-ken, Japan, Joetsu-shi, Niigata-ken, Japan and  
Joetsu-shi, Niigata-ken, Japan

Insert Title of Invention **⇒** (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in \_\_\_\_\_  
Ester Compounds and Their Preparation, Polymers, Resist Compositions  
and Patterning Process

for which an application for Letters Patent of the United States of America has been executed by the undersigned (except in the case of a provisional application).

Insert Date of Signing of Application **⇒** on June 12, 2007; and

Insert Name of Assignee **⇒** WHEREAS, Shin-Etsu Chemical Co., Ltd.

Insert Address of Assignee **⇒** of 6-1, Otemachi 2-chome, Chiyoda-ku, Tokyo, Japan

CHECK BOX IF APPROPRIATE **⇒** ☐ its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and ☐ in any and all foreign countries.

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries;

and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

**PATENT**  
**REEL: 019700 FRAME: 0143**

Attorney Docket No. 0171-1371PUS1

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letter Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, 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 U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date <u>June 12, 2007</u>	Name of Inventor <u>Masaki Ohashi</u> (signature) <u>Masaki OHASHI</u>
Date <u>June 12, 2007</u>	Name of Inventor <u>Takeshi Kinsho</u> (signature) <u>Takeshi KINSHO</u>
Date <u>June 12, 2007</u>	Name of Inventor <u>Takeru Watanabe</u> (signature) <u>Takeru WATANABE</u>
Date _____	Name of Inventor _____ (signature)
Date _____	Name of Inventor _____ (signature)
Date _____	Name of Inventor _____ (signature)

**FAX TRANSMISSION****DATE:** AUG 15 2007**PTO IDENTIFIER:** Application Number 11/822,441-Conf. #5644  
Patent Number**Inventor:** Masaki OHASHI et al.**MESSAGE TO:** U.S. Patent and Trademark Office – Assignment Recordation Services**FAX NUMBER:** (571) 273-0140**FROM:** BIRCH, STEWART, KOLASCH & BIRCH, LLP  
Gerald M. Murphy, Jr.**PHONE:** (703) 205-8000**ATTORNEY  
DOCKET NO.:** 0171-1371PUS1**PAGES (Including Cover Sheet):** 9**CONTENTS:** Certificate of Transmission (1 page)  
Resubmission of Recording of Assignment (2 pages)  
Copy of Notice of Non-Recordation of Document (2 pages)  
Recordation Form Cover Sheet (1 page)  
Assignment (2 pages)

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**BIRCH, STEWART, KOLASCH & BIRCH, LLP**  
8110 Gatehouse Road, Suite 100 East, P.O. Box 747, Falls Church, Virginia 22040-0747  
**Telephone:** (703) 205-8000 **Facsimile:** (703) 205-8050

PTO/SB/97 (09-04)

Approved for use through 07/31/2006, OMB 0651-0031

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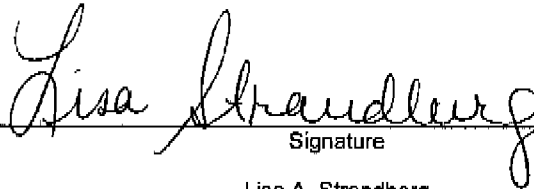
Application No. (if known): 11/822,441

Attorney Docket No.: 0171-1371PUS1

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Lisa A. Strandberg

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Recordation Form Cover Sheet (1 page)  
Assignment (2 pages)

Docket No.: 0171-1371PUS1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Masaki OHASHI et al.

Application No.: 11/822,441

Confirmation No.: 5644

Filed: July 5, 2007

Art Unit: Not Yet Assigned

For: ESTER COMPOUNDS AND THEIR  
PREPARATION, POLYMERS, RESIST  
COMPOSITIONS AND PATTERNING  
PROCESS

---

Examiner: Not Yet Assigned

**RESUBMISSION OF RECORDING OF ASSIGNMENT**

MS Assignment Recordation Services  
Director of the US Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The Document ID Number is: 103426901

Attached hereto are the following documents:

1. Copy of Notice of Non-Recordation of Document
2. Recordation Form Cover Sheet (including the Application Number); and
3. Assignment.

As the Assignment Branch will note, the Assignment Form and the Recordation Form Cover Sheet have been corrected to accurately reflect the filing date and the execution dates. Please proceed to record the attached Assignment and return the recorded Assignment to:

Application No.: 11/822,441

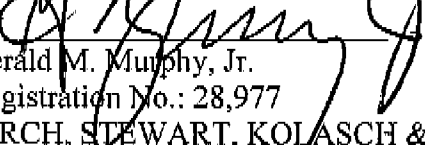
Docket No.: 0171-1371PUS1

BIRCH, STEWART, KOLASCH & BIRCH, LLP  
P. O. Box 747  
Falls Church, Virginia 22040-0747

The recording fee in the amount of \$40.00 was paid on July 5, 2007; therefore, no fee is necessary in connection with the present request. However, if necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 CFR § 1.16 or under § 1.17; particularly, extension of time fees.

Dated: AUG 15 2007

Respectfully submitted,

By   
Gerald M. Murphy, Jr.  
Registration No.: 28,977  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road, Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant

Attachments: New Recordation Form Cover Sheet  
Assignment





0171-1371 PUS1

## UNITED STATES PATENT AND TRADEMARK OFFICE

GMM

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

JULY 23, 2007

PTAS



\*103426901A\*

GERALD M. MURPHY, JR.  
BIRCH STEWART KOLASCH, ET AL.  
8110 GATEHOUSE ROAD, SUITE 100 EAST  
P.O. BOX 747  
FALLS CHURCH, VA 22040-0747

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8-22-07

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DOCUMENT ID NO.: 103426901

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THE ORIGINAL DATE OF FILING OF THIS ASSIGNMENT DOCUMENT WILL BE MAINTAINED IF RESUBMITTED WITH THE APPROPRIATE CORRECTION(S) WITHIN 30 DAYS FROM THE DATE OF THIS NOTICE AS OUTLINED UNDER 37 CFR 3.51. THE RESUBMITTED DOCUMENT MUST INCLUDE A STAMP WITH THE OFFICIAL DATE OF RECEIPT UNDER 37 CFR 3. APPLICANTS MAY USE THE CERTIFIED PROCEDURES UNDER 37 CFR 1.8 OR 1.10 FOR RESUBMISSION OF THE RETURNED PAPERS, IF THEY DESIRE TO HAVE THE BENEFIT OF THE DATE OF DEPOSIT IN THE UNITED STATES POSTAL SERVICE.

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571-272-3350.

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THERESA FREDERICK, EXAMINER  
ASSIGNMENT SERVICES BRANCH  
PUBLIC RECORDS DIVISION