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

Attorney Docket No. 1204.45467X00

To the Director of the U.S. Patent and Trade

103234399

Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies):

Ryoichi IKEZAWA, Naoki NARA, Hideyuki CHAKI  
Yoshihiro MIZUKAMI, Yoshinori ENDOU, Takaki KASHIHARA  
Fumio FURUSAWA, Masaki YOSHII, Shinsuke HAGIWARA  
Mitsuo KATAYOSE

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

2. Name and address of receiving party(ies)

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

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

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

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

Execution Date(s) September 12, 2005, September 12, 2005,  
September 12, 2005, September 12, 2005, September 12, 2005,  
September 12, 2005, September 12, 2005, September 12, 2005,  
September 12, 2005, September 12, 2005

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

4. Application or patent numbers(s):



This document is being filed together with a new application.

A. Patent Application No.(s)

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**

Internal Address:

**1300 NORTH 17<sup>TH</sup> STREET - SUITE 1800**

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

Phone Number: 703-312-6000

Fax 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 1065  
Expiration Date 06/06

b. Deposit account number: **01-2135**

Authorized User Name Alan E. Schiavelli

William I. Solomon, Reg#28,565

Name of Person Signing

DO NOT USE THIS SPACE

Signature

10/07/2005

Date

Total number of pages including cover sheet, attachments, and document: 3

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

# ASSIGNMENT

ATTY. DOCKET NO.:

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

ENCAPSULATING EPOXY RESIN MOLDING MATERIAL, AND SEMICONDUCTOR DEVICE

- ☐ 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 April 7, 2004 as PCT/JP2004/005004, designating the United States.

AND WHEREAS

HITACHI CHEMICAL CO., LTD.

1-1, Nishishinjuku 2-chome, Shinjuku-ku, Tokyo 163-0449 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<br><b>Ryoichi IKEZAWA</b> | INVENTOR'S SIGNATURE<br><i>Ryoichi Ikezawa</i>    | DATE<br>September 12, 2005 |
| 202 | FULL NAME OF SECOND JOINT INVENTOR<br><b>Naoki NARA</b>             | INVENTOR'S SIGNATURE<br><i>Naoki Nara</i>         | DATE<br>September 12, 2005 |
| 203 | FULL NAME OF THIRD JOINT INVENTOR<br><b>Hideyuki CHAKI</b>          | INVENTOR'S SIGNATURE<br><i>Hideyuki Chaki</i>     | DATE<br>September 12, 2005 |
| 204 | FULL NAME OF FOURTH JOINT INVENTOR<br><b>Yoshihiro MIZUKAMI</b>     | INVENTOR'S SIGNATURE<br><i>Yoshihiro Mizukami</i> | DATE<br>September 12, 2005 |
| 205 | FULL NAME OF FIFTH JOINT INVENTOR<br><b>Yoshinori ENDOU</b>         | INVENTOR'S SIGNATURE<br><i>Yoshinori Endou</i>    | DATE<br>September 12, 2005 |
| 206 | FULL NAME OF SIXTH JOINT INVENTOR<br><b>Takaki KASHIHARA</b>        | INVENTOR'S SIGNATURE<br><i>Takaki Kashiara</i>    | DATE<br>September 12, 2005 |
| 207 | FULL NAME OF SEVENTH JOINT INVENTOR<br><b>Fumio FURUSAWA</b>        | INVENTOR'S SIGNATURE<br><i>F. Furusawa</i>        | DATE<br>September 12, 2005 |

|     |   |  |                            |
|-----|---|--|----------------------------|
| 208 | FULL NAME OF EIGHTH JOINT INVENTOR<br><b>Masaki YOSHII</b>    | INVENTOR'S SIGNATURE<br><i>M. Yoshii</i>       | DATE<br>September 12, 2005 |
| 209 | FULL NAME OF NINTH JOINT INVENTOR<br><b>Shinsuke HAGIWARA</b> | INVENTOR'S SIGNATURE<br><i>S. Hagiwara</i>     | DATE<br>September 12, 2005 |
| 210 | FULL NAME OF TNETH JOINT INVENTOR<br><b>Mitsuo KATAYOSE</b>   | INVENTOR'S SIGNATURE<br><i>Mitsuo Katayose</i> | DATE<br>September 12, 2005 |

PATENT

REEL: 017834 FRAME: 0170

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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

**ENCAPSULATING EPOXY RESIN MOLDING MATERIAL, AND SEMICONDUCTOR DEVICE**

- ☐ 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 **April 7, 2004** as **PCT/JP2004/005004**, designating the United States.

**AND WHEREAS**  
**HITACHI CHEMICAL CO., LTD.**  
**1-1, Nishishinjuku 2-chome, Shinjuku-ku, Tokyo 163-0449 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.

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| 202 | FULL NAME OF SECOND JOINT INVENTOR<br><b>Naoki NARA</b>             | INVENTOR'S SIGNATURE<br><i>Naoki Nara</i>         | DATE<br><b>September 12, 2005</b> |
| 203 | FULL NAME OF THIRD JOINT INVENTOR<br><b>Hideyuki CHAKI</b>          | INVENTOR'S SIGNATURE<br><i>Hideyuki Chaki</i>     | DATE<br><b>September 12, 2005</b> |
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| 205 | FULL NAME OF FIFTH JOINT INVENTOR<br><b>Yoshinori ENDOU</b>         | INVENTOR'S SIGNATURE<br><i>Yoshinori Endou</i>    | DATE<br><b>September 12, 2005</b> |
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| 209 | FULL NAME OF NINTH JOINT INVENTOR<br><b>Shinsuke HAGIWARA</b> | INVENTOR'S SIGNATURE<br><i>S. Hagiwara</i>     | DATE<br>September 12, 2005 |
| 210 | FULL NAME OF TNETH JOINT INVENTOR<br><b>Mitsuo KATAYOSE</b>   | INVENTOR'S SIGNATURE<br><i>Mitsuo Katayose</i> | DATE<br>September 12, 2005 |