PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------|----------------|
| Mark R. Winkle | 11/17/2011 |
| Avin V. Dhoble | 12/06/2011 |
| Kim S. Ho | 11/21/2011 |
| Michael K. Gallagher | 12/22/2011 |
| Xiang-Qian Liu | 12/06/2011 |
| David A. Fleming | 12/06/2011 |

RECEIVING PARTY DATA

| Name: | Rohm and Haas Electronic Materials LLC | |
|-----------------|--|--|
| Street Address: | 455 Forest Street | |
| City: | Marlborough | |
| State/Country: | MASSACHUSETTS | |
| Postal Code: | 01752 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13250226 |

CORRESPONDENCE DATA

Fax Number: 3022832144

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

302-456-6622 Phone: pconnell@dow.com Email: Correspondent Name: Patricia Connell Address Line 1: 451 Bellevue Road

Address Line 4: Newark, DELAWARE 19713

ATTORNEY DOCKET NUMBER: 71736

NAME OF SUBMITTER: Patricia Connell

REEL: 030135 FRAME: 0470

PATENT

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| Signature: | /patricia connell/ |
|--|--------------------|
| Date: | 04/02/2013 |
| Total Attachments: 7 source=71736Assignment#page1.tif source=71736Assignment#page3.tif source=71736Assignment#page4.tif source=71736Assignment#page5.tif source=71736Assignment#page6.tif source=71736Assignment#page7.tif | |

ASSIGNMENT

WHEREAS, I, Mark R. Winkle of Lansdale, Pennsylvania, Avin V. Dhoble of Waltham, Massachusetts, Kim S. Ho of Richboro, Pennsylvania, Michael K. Gallagher of Hopkinton, Massachusetts, Xiang-Qian Liu of Collegeville, Pennsylvania and David D. Fleming of Northborough, Massachusetts, (hereinafter referred to as "Assignors"), have invented certain new and useful improvements in "Polyamine, Caroxylic Acid Flux Composition And Method Of Soldering", for which an application for United States Letters Patent with the same title was filed with the United States Patent and Trademark Office on September 30, 2011 and assigned United States Non-Provisional Patent Application Serial No. 13/250,226; and

WHEREAS, Rohm and Haas Electronic Materials LLC, located at 455 Forest Street, Marlborough, Massachusetts 01752, (hereinafter referred to as the "Assignee"), is desirous of acquiring the entire right, title and interest in and to the same invention, and in and to the said application, and any Letters Patent that may issue thereon;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for the above consideration, the Assignors have assigned and transferred, and do hereby assign and transfer to the Assignee, its successors and assigns, their entire right, title and interest for the United States in and to the said invention and in and to the said application and all patents which may be granted therefore, and all divisions, reissues, substitutions, continuations, in whole or in part, reexaminations, and extensions thereof, and all applications claiming priority therefrom; and the Assignors hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as their interest is concerned, to the Assignee; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said invention may issue, to the same extent as the Assignors would hold and enjoy if this Assignment had not been made.

The Assignors also have assigned and transferred, and do hereby assign and transfer to the Assignee, its successors and assigns, their entire right, title and interest in and to the invention disclosed in said application, in all countries of the world foreign to the United States, including the right to file applications and obtain patents for said invention in its own name in said countries and including all rights of priority in said countries under the terms of any applicable international convention; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said invention may issue, to the same extent as the Assignors would hold and enjoy if this Assignment had not been made.

The Assignors further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights, and also agree, at the request of the Assignee, to testify in any legal proceedings, sign all lawful papers, make all lawful oaths, and generally do everything possible to aid said Assignee, its successors and assigns, to obtain, maintain and enforce patent protection for said invention in all countries.

IN WITNESS WHEREOF, the Assignors have caused this Assignment to be executed.

Effective from the date of: September 30, 2011.

| Signatures | | Date |
|----------------------------------|---|---------------|
| 1. Mark R. Winkle Mark R. Winkle | | Nov. 17, 2011 |
| 2Avin V. Dhoble | | |
| Avin V. Dhoble | | |
| 3. | | |
| 3. Kim S. Ho | | |
| 4 | | |
| Michael K. Gallagher | _ | |
| 5 | | |
| Xiang-Qian Liu | | |
| _ | | |
| 5 | | |
| David D. Fleming | | |

PATENT

REEL: 030135 FRAME: 0473

IN WITNESS WHEREOF, the Assignors have caused this Assignment to be executed.

Effective from the date of: September 30, 2011.

| Signatures | Date |
|----------------------|---------|
| 1Mark R. Winkle | _ |
| Mark R. Winkle | |
| 2. And Mobil | 12/6/11 |
| Avin V. Dhoble | |
| 3 | _ |
| Kim S. Ho | |
| 4 | |
| Michael K. Gallagher | |
| 5 | |
| Xiang-Qian Liu | |
| 5, | |
| David D. Fleming | |

IN WITNESS WHEREOF, the Assignors have caused this Assignment to be executed.

Effective from the date of: September 30, 2011.

| Signatures | Date |
|----------------------|-------------|
| 1 Mark R. Winkle | |
| 2. Avin V. Dhoble | |
| 3. Kim S. Ho | Nov 21, 201 |
| 4. | |
| Michael K. Gallagher | , |
| 5Xiang-Qian Liu | |
| 6 David D. Fleming | · . |

PATENT

REEL: 030135 FRAME: 0475

IN WITNESS WHEREOF, the Assignors have caused this Assignment to be executed.

Effective from the date of: September 30, 2011.

| Signatures | Date |
|--|------------|
| 1 Mark R. Winkle | |
| 2Avin V. Dhoble | |
| 3 Kim S. Ho | |
| 4. <u>Mast K. Ga</u> Michael K. Gallagher | 12/12/2011 |
| 5 Xiang-Qian Liu | |
| 6 David D. Fleming | |

IN WITNESS WHEREOF, the Assignors have caused this Assignment to be executed.

Effective from the date of: September 30, 2011.

| Signatures | Date |
|---------------------------------------|---------------------------------------|
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| Mark R. Winkle | , , |
| • | |
| Avin V. Dhoble | |
| • | · · · · · · · · · · · · · · · · · · · |
| Kim S. Ho | |
| | |
| Michael K. Gallagher | |
| Tranglian Liu | 12-06-201/ |
| Xiang-Qian Liu | |
| | |
| David D. Fleming | · |

PATENT

REEL: 030135 FRAME: 0477

IN WITNESS WHEREOF, the Assignors have caused this Assignment to be executed.

Effective from the date of: September 30, 2011.

| | Signatures | Date |
|----------------|--------------------|-----------|
| 1. <u>—</u> | ark R. Winkle | |
| 2. <u>Av</u> | vin V. Dhoble | |
| 3. <u>Ki</u> i | m S. Ho | |
| 4. <u>Mi</u> | chael K. Gallagher | |
| 5. <u>Xi</u> a | ang-Qian Liu | |
| 6. <u>N</u> | on a. Fleming | 12/6/2011 |

PATENT REEL: 030135 FRAME: 0478

RECORDED: 04/02/2013