

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Young Cheol BAE</td> <td>08/31/2010</td> </tr> <tr> <td>Thomas CARDOLACCIA</td> <td>09/07/2010</td> </tr> <tr> <td>Yi LIU</td> <td>08/30/2010</td> </tr> </tbody> </table>		Name	Execution Date	Young Cheol BAE	08/31/2010	Thomas CARDOLACCIA	09/07/2010	Yi LIU	08/30/2010		
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CORRESPONDENCE DATA											
<p>Fax Number: (508)787-4730</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: (508)787-4766</p> <p>Email: drivemider@dow.com</p> <p>Correspondent Name: Jonathan D. Baskin Rohm and Haas Electro</p> <p>Address Line 1: 455 Forest Street</p> <p>Address Line 4: Marlborough, MASSACHUSETTS 01752</p>											
ATTORNEY DOCKET NUMBER:	52978										
NAME OF SUBMITTER:	Jonathan D. Baskin										
<p>Total Attachments: 2</p> <p>source=52978_ASSIGNMENT#page1.tif</p> <p>source=52978_ASSIGNMENT#page2.tif</p>											

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REEL: 024963 FRAME: 0622

ASSIGNMENT

WHEREAS, I, Young Cheol BAE of Weston, Massachusetts, I, Thomas CARDOLACCIA of Needham, Massachusetts, I, Yi LIU of Wayland, Massachusetts, (hereinafter referred to as "Assignors"), have invented certain new and useful improvements in "SELF-ALIGNED SPACER MULTIPLE PATTERNING METHODS", for which an application for United States Letters Patent with the same title was filed with the United States Patent and Trademark Office on June 28, 2010 and assigned United States Non-Provisional Patent Application Serial No. 12/825,117, which application corresponds to and claims priority of United States Provisional Application Serial No. 61/269,600, filed June 26, 2009 and 61/281,681, filed November 19, 2009; and Application Serial No. 61/281,553, filed November 19, 2009, 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, re-examinations, 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.

The Assignors also hereby grant the Patent Law Department of Rohm and Haas Electronic Materials LLC the power to insert on this Assignment any further identification that 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 WITNESS WHEREOF, the Assignors have caused this Assignment to be executed.

Effective from the date of: June 26, 2009.

	Signatures	Date
1.	 _____ Young Cheol BAE	<u>8/31/2010</u>
2.	 _____ Thomas CARDOLACCIA	<u>9/7/2010</u>
3.	 _____ Yi LIU	<u>8/30/2010</u>