

PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
CONVEYING PARTY DATA															
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Jason B. Reppert</td><td>10/30/2008</td></tr><tr><td>Bevan C. Elliott</td><td>10/30/2008</td></tr><tr><td>Doyl E. Dickel</td><td>10/30/2008</td></tr><tr><td>Apparao M. Rao</td><td>10/30/2008</td></tr><tr><td>Jay B. Gaillard</td><td>10/29/2008</td></tr><tr><td>M. Pinar Menguc</td><td>10/29/2008</td></tr></tbody></table>	Name	Execution Date	Jason B. Reppert	10/30/2008	Bevan C. Elliott	10/30/2008	Doyl E. Dickel	10/30/2008	Apparao M. Rao	10/30/2008	Jay B. Gaillard	10/29/2008	M. Pinar Menguc	10/29/2008	
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Apparao M. Rao	10/30/2008														
Jay B. Gaillard	10/29/2008														
M. Pinar Menguc	10/29/2008														
RECEIVING PARTY DATA															
Name:	Clemson University														
Street Address:	Clemson														
City:	Clemson														
State/Country:	SOUTH CAROLINA														
Postal Code:	29631														
PROPERTY NUMBERS Total: 1															
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>12243402</td></tr></tbody></table>	Property Type	Number	Application Number:	12243402											
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Application Number:	12243402														
CORRESPONDENCE DATA															
Fax Number:	(864)233-7342														
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>															
Phone:	864-271-1592														
Email:	docketing@dority-manning.com														
Correspondent Name:	Dority & Manning, P.A.														
Address Line 1:	PO Box 1449														
Address Line 4:	Greenville, SOUTH CAROLINA 29602														
ATTORNEY DOCKET NUMBER:	CXU-563 (08-018)														
NAME OF SUBMITTER:	Christina L. Mangelsen														

OP \$40.00 12243402

PATENT

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REEL: 021776 FRAME: 0706

Total Attachments: 9

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ATTORNEY DOCKET NO: CXU-563 (08-018)

JOINT INVENTION ASSIGNMENT OF WORLDWIDE RIGHTS

WHEREAS, we, Jason B. Reppert, a citizen of The United States residing at 144 G University Village Drive, Central, SC 29630; Jay B. Gaillard, a citizen of The United States, residing at 1524 Booger Swamp Road, Yadkinville, NC 27055; Bevan C. Elliott, a citizen of The United States, residing at 2901 C. State Park Road, Greenville, SC 29634; Doyl E. Dickel, a citizen of The United States residing at 177 Tabor Street, Central, SC 29630; M. Pinar Mengüç, a citizen of The United States, residing at 619 Beaumont Avenue, Lexington, KY 40502; Apparao M. Rao, a citizen of The United States residing at 214 Dursely Drive, Anderson, SC 29621 as assignors have made an invention titled

Substrate Patterning by Electron Emission-Induced Displacement

as described in a patent application for U.S. Letters Patent, bearing U.S. Serial No. 12/243,402 which was filed in the U.S. Patent and Trademark Office on October 1, 2008; and

WHEREAS, Clemson University, Clemson, South Carolina 29631, as assignee, is desirous of securing the entire right, title and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW, THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) in hand paid and other good and valuable consideration the receipt of which from assignee is hereby acknowledged, we, as assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be

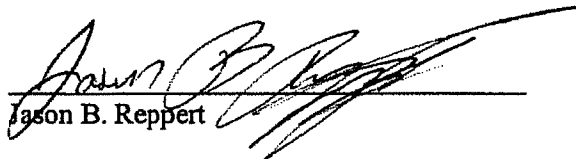
granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof, and we hereby authorize and request the Commissioner for Patents of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Agreement.

AND, WE HEREBY covenant that we have the full right to convey the interest assigned by this Assignment, and we have not executed, and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that we will, without further consideration, communicate with assignee, its successors and assigns, any facts known to us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title of this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

IN WITNESS WHEREOF, the Assignors have executed this document on the date


indicated below:


Jason B. Reppert


10/30/2008
Date

Jay B. Gaillard

Date


Bevan C. Elliott

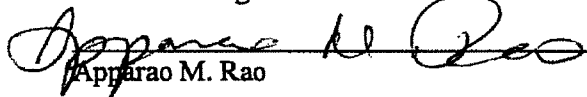
10/30/2008
Date


Doyl E. Dickel

10/30/2008
Date

M. Pinar Mengüç

Date


Apparao M. Rao

10/30/2008
Date

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granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof, and we hereby authorize and request the Commissioner for Patents of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Agreement.

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IN WITNESS WHEREOF, the Assignors have executed this document on the date
indicated below:

Jason B. Reppert

Jay B. Gaillard
Jay B. Gaillard

Date

October 29, 2008
Date

Bevan C. Elliott

Date

Doyl E. Dickel

Date

M. Pinar Mengüç

Date

Apparao M. Rao

Date

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Jason B. Reppert

Date

Jay B. Gaillard


Date

Bevan C. Elliott

Date

Doyl E. Dickel

Date



M. Pinar Mengüç

29 Oct, 2008

Date

Apparao M. Rao

Date