

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

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>Milind S. Kulkarni</td> <td>07/01/2009</td> </tr> <tr> <td>Puneet Gupta</td> <td>07/14/2009</td> </tr> <tr> <td>Balaji Devulapalli</td> <td>07/10/2009</td> </tr> <tr> <td>Jameel Ibrahim</td> <td>07/06/2009</td> </tr> <tr> <td>Vithal Revankar</td> <td>07/14/2009</td> </tr> <tr> <td>Kwasi Foli</td> <td>07/14/2009</td> </tr> </tbody> </table>		Name	Execution Date	Milind S. Kulkarni	07/01/2009	Puneet Gupta	07/14/2009	Balaji Devulapalli	07/10/2009	Jameel Ibrahim	07/06/2009	Vithal Revankar	07/14/2009	Kwasi Foli	07/14/2009
Name	Execution Date														
Milind S. Kulkarni	07/01/2009														
Puneet Gupta	07/14/2009														
Balaji Devulapalli	07/10/2009														
Jameel Ibrahim	07/06/2009														
Vithal Revankar	07/14/2009														
Kwasi Foli	07/14/2009														
RECEIVING PARTY DATA															
<table border="1"> <tr> <td>Name:</td> <td>MEMC Electronic Materials, Inc.</td> </tr> <tr> <td>Street Address:</td> <td>501 Pearl Drive</td> </tr> <tr> <td>City:</td> <td>St. Peters</td> </tr> <tr> <td>State/Country:</td> <td>MISSOURI</td> </tr> <tr> <td>Postal Code:</td> <td>63376</td> </tr> </table>		Name:	MEMC Electronic Materials, Inc.	Street Address:	501 Pearl Drive	City:	St. Peters	State/Country:	MISSOURI	Postal Code:	63376				
Name:	MEMC Electronic Materials, Inc.														
Street Address:	501 Pearl Drive														
City:	St. Peters														
State/Country:	MISSOURI														
Postal Code:	63376														
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>13455483</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13455483										
Property Type	Number														
Application Number:	13455483														
CORRESPONDENCE DATA															
<p>Fax Number: (314)612-2307          Phone: 314-621-5070          Email: USpatents@armstrongteasdale.com  <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Richard A. Schuth (MEMC)          Address Line 1: Armstrong Teasdale LLP          Address Line 2: 7700 Forsyth Boulevard, Suite 1800          Address Line 4: St. Louis, MISSOURI 63105</p>															
ATTORNEY DOCKET NUMBER:	28744-3922 (070026.13)														

CH \$40.00 13455483

NAME OF SUBMITTER:

Richard A. Schuth

**Total Attachments: 8**

source=ParentAssignment-12771483-1#page1.tif

source=ParentAssignment-12771483-1#page2.tif

source=ParentAssignment-12771483-1#page3.tif

source=ParentAssignment-12771483-1#page4.tif

source=ParentAssignment-12771483-1#page5.tif

source=ParentAssignment-12771483-1#page6.tif

source=ParentAssignment-12771483-1#page7.tif

source=ParentAssignment-12771483-1#page8.tif

ASSIGNMENT

**WHEREAS,** We Milind S. Kulkarni of St. Louis, Missouri, Puneet Gupta of St. Louis, Missouri, Balaji Devulapalli of Chesterfield, Missouri, Jameel Ibrahim of Humble, Texas, Vithal Revankar of Seabrook, Texas, and Kwasi Foli of Columbia, Maryland, have invented an improvement in FLUIDIZED BED REACTOR SYSTEMS AND METHODS FOR REDUCING THE DEPOSITION OF SILICON ON REACTOR WALLS and have executed an application for a United States patent based thereon filed June 29, 2009, assigned Serial No. 12/494,006;

**AND, WHEREAS,** MEMC Electronic Materials, Inc. of St. Peters, Missouri, a corporation of the State of Delaware (hereinafter referred to as "ASSIGNEE") is desirous of acquiring certain rights thereunder;

**NOW, THEREFORE,** for one dollar and other good and valuable consideration, receipt of all of which is hereby acknowledged, we have agreed to and do hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said invention, said United States application, any other United States applications (including provisional, non-provisional, divisional, continuing, or reissue applications) based in whole or in part on said United States application or in whole or in part on said invention, any foreign applications based in whole or in part on any of the aforesaid United States applications or in whole or in part on said invention, and any and all patents (including extensions thereof) of any country which have been or may be granted on any of the aforesaid applications or on said invention or any part thereof;

**TO BE HELD AND ENJOYED** by said ASSIGNEE, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us had no sale and assignment of said interest been made;

**AND We** hereby authorize and request the Commissioner of Patents of the United States of America to issue any and all United States patents which may be granted upon said United States applications or any of them, or upon said invention or any part thereof, to said ASSIGNEE;

ASSIGNMENT

*Houston,*  
*Puneet Gupta*  
*7/14/2009*

*Texas*  
~~Missouri~~, We Milind S. Kulkarni of St. Louis, Missouri, Puneet Gupta of ~~St. Louis,~~  
 Missouri, Balaji Devulapalli of Chesterfield, Missouri, Jameel Ibrahim of Humble, Texas, Vithal  
 Revankar of Seabrook, Texas, and Kwasi Foli of Columbia, Maryland, have invented an  
 improvement in FLUIDIZED BED REACTOR SYSTEMS AND METHODS FOR REDUCING  
 THE DEPOSITION OF SILICON ON REACTOR WALLS and have executed an application  
 for a United States patent based thereon filed June 29, 2009, assigned Serial No. 12/494,006;

**AND, WHEREAS,** MEMC Electronic Materials, Inc. of St. Peters, Missouri, a  
 corporation of the State of Delaware (hereinafter referred to as "ASSIGNEE") is desirous of  
 acquiring certain rights thereunder;

**NOW, THEREFORE,** for one dollar and other good and valuable consideration, receipt  
 of all of which is hereby acknowledged, we have agreed to and do hereby sell, assign and  
 transfer unto said ASSIGNEE the entire right, title and interest in and throughout the United  
 States of America (including its territories and dependencies) and all countries foreign thereto in  
 and to said invention, said United States application, any other United States applications  
 (including provisional, non-provisional, divisional, continuing, or reissue applications) based in  
 whole or in part on said United States application or in whole or in part on said invention, any  
 foreign applications based in whole or in part on any of the aforesaid United States applications  
 or in whole or in part on said invention, and any and all patents (including extensions thereof) of  
 any country which have been or may be granted on any of the aforesaid applications or on said  
 invention or any part thereof;

**TO BE HELD AND ENJOYED** by said ASSIGNEE, its successors and assigns, as fully  
 and entirely as the same would have been held and enjoyed by us had no sale and assignment of  
 said interest been made;

**AND We** hereby authorize and request the Commissioner of Patents of the United States  
 of America to issue any and all United States patents which may be granted upon said United  
 States applications or any of them, or upon said invention or any part thereof, to said  
 ASSIGNEE;

AND We hereby jointly and severally agree for ourselves and for our respective heirs, executors and administrators, to execute without further consideration any further lawful documents and any further assurances, and any provisional, non-provisional, divisional, continuing, reissue, or other applications for patents of any country, that may be deemed necessary by said ASSIGNEE fully to secure to said ASSIGNEE its interest as aforesaid in and to said invention or any part thereof, and in and to said several patents or any of them;

AND We hereby jointly and severally covenant for ourselves and our respective legal representatives that we have granted no right or license to make, use or sell said invention, to anyone except said ASSIGNEE, that prior to the execution of this deed our right, title and interest in said invention had not been otherwise encumbered, and that we have not executed and will not execute any instrument in conflict herewith.

IN WITNESS WHEREOF, we have hereunto set our hands.

07/01/2009  
Date

Milind S. Kulkarni  
Milind S. Kulkarni

STATE OF Missouri }  
COUNTY OF St. Charles }

On this 1 day of July, 2009, before me, a Notary Public, personally appeared Milind S. Kulkarni to me known to be the person described in and who executed the foregoing assignment and acknowledged that he executed same as his free act and deed.

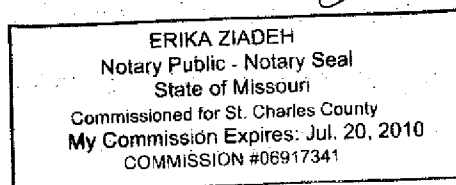
IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year last above written.

Notary Public

Erika Zadeh

My Commission Expires:

July 20, 2010



IN WITNESS WHEREOF, we have hereunto set our hands.

14<sup>th</sup> July, 2009  
Date

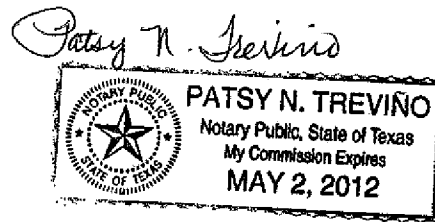
Puneet Gupta  
Puneet Gupta

STATE OF TEXAS )  
COUNTY OF HARRIS )

On this 14<sup>th</sup> day of July, 2009, before me, a Notary Public, personally appeared Puneet Gupta to me known to be the person described in and who executed the foregoing assignment and acknowledged that he executed same as his free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year last above written.

Notary Public



My Commission Expires: 5-2-12

IN WITNESS WHEREOF, we have hereunto set our hands:

07/10/09  
Date

Balaji Devulapalli  
Balaji Devulapalli

STATE OF Missouri }  
COUNTY OF St. Charles }

On this 10 day of July, 2009, before me, a Notary Public, personally appeared Balaji Devulapalli to me known to be the person described in and who executed the foregoing assignment and acknowledged that he executed same as his free act and deed.

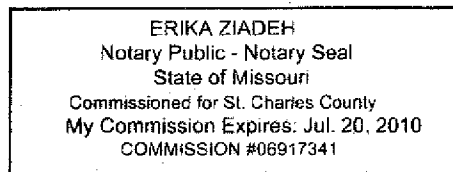
IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year last above written.

Notary Public

Erika Ziakeh

My Commission Expires:

July 20, 2010



IN WITNESS WHEREOF, we have hereunto set our hands.

X 07/06/09  
Date

X Jameel Ibrahim  
Jameel Ibrahim

STATE OF Texas

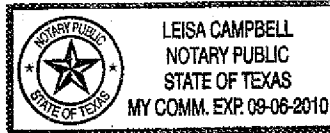
COUNTY OF Harris

On this 6<sup>th</sup> day of July, 2009, before me, a Notary Public, personally appeared Jameel Ibrahim to me known to be the person described in and who executed the foregoing assignment and acknowledged that he executed same as his free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year last above written.

Leisa Campbell  
Notary Public

My Commission Expires:  
9-6-10





IN WITNESS WHEREOF, we have hereunto set our hands.

X 7-14-09  
Date

x [Signature]  
Vithal Revankar

STATE OF Texas )  
COUNTY OF Harris )

On this 14<sup>th</sup> day of July, 2009, before me, a Notary Public, personally appeared Vithal Revankar to me known to be the person described in and who executed the foregoing assignment and acknowledged that he executed same as his free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year last above written.

[Signature]  
Notary Public

My Commission Expires:



IN WITNESS WHEREOF, we have hereunto set our hands.

7/14/2009  
Date

Kwasi Foli  
Kwasi Foli

STATE OF MARYLAND )  
COUNTY OF HOWARD )

On this 14<sup>th</sup> day of JULY, 2009, before me, a Notary Public, personally appeared Kwasi Foli to me known to be the person described in and who executed the foregoing assignment and acknowledged that he executed same as his free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year last above written.

Notary Public

AMANDA A RODGER

AMANDA A RODGER  
Notary Public, State of Maryland  
My Commission Expires November 23, 2010

My Commission Expires: