

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>Sung-Hoon Jung</td> <td>07/10/2013</td> </tr> <tr> <td>Petri Raisanen</td> <td>07/10/2013</td> </tr> <tr> <td>Eric Jen Cheng Liu</td> <td>07/10/2013</td> </tr> <tr> <td>Mike Schmotzer</td> <td>07/11/2013</td> </tr> </tbody> </table> | | Name | Execution Date | Sung-Hoon Jung | 07/10/2013 | Petri Raisanen | 07/10/2013 | Eric Jen Cheng Liu | 07/10/2013 | Mike Schmotzer | 07/11/2013 |
| Name | Execution Date | | | | | | | | | | |
| Sung-Hoon Jung | 07/10/2013 | | | | | | | | | | |
| Petri Raisanen | 07/10/2013 | | | | | | | | | | |
| Eric Jen Cheng Liu | 07/10/2013 | | | | | | | | | | |
| Mike Schmotzer | 07/11/2013 | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | |
| <table border="1"> <tr> <td>Name:</td> <td>ASM IP Holding B.V.</td> </tr> <tr> <td>Street Address:</td> <td>Versterkerstraat 8</td> </tr> <tr> <td>City:</td> <td>Almere</td> </tr> <tr> <td>State/Country:</td> <td>NETHERLANDS</td> </tr> <tr> <td>Postal Code:</td> <td>1322 AP</td> </tr> </table> | | Name: | ASM IP Holding B.V. | Street Address: | Versterkerstraat 8 | City: | Almere | State/Country: | NETHERLANDS | Postal Code: | 1322 AP |
| Name: | ASM IP Holding B.V. | | | | | | | | | | |
| Street Address: | Versterkerstraat 8 | | | | | | | | | | |
| City: | Almere | | | | | | | | | | |
| State/Country: | NETHERLANDS | | | | | | | | | | |
| Postal Code: | 1322 AP | | | | | | | | | | |
| 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>13941134</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13941134 | | | | | | |
| Property Type | Number | | | | | | | | | | |
| Application Number: | 13941134 | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | |
| Fax Number: 6023826070 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: 602-382-6000 Email: msmith@swlaw.com Correspondent Name: Snell & Wilmer LLP Address Line 1: 400 E. Van Buren Street Address Line 2: One Arizona Center Address Line 4: Phoenix, ARIZONA 85004 | | | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 53358.03900 | | | | | | | | | | |
| NAME OF SUBMITTER: | Cynthia L. Pillote | | | | | | | | | | |
| Signature: | /Cynthia L. Pillote/ | | | | | | | | | | |

PATENT

Date:

07/12/2013

Total Attachments: 2

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ASSIGNMENT

WHEREAS WE, the below-named inventors (hereinafter "Assignors"), have made an invention entitled: "METHOD AND SYSTEM TO REDUCE OUTGASSING IN A REACTION CHAMBER" for which an application for United States Letters Patent is being or has been filed; and

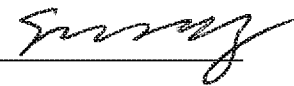
WHEREAS, ASM IP Holding B.V., (hereinafter "Assignee"), having a principal place of business at Versterkerstraat 8, 1322 AP Almere, The Netherlands, is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention, as well as all applications related to this application now or hereafter filed anywhere in the world and all Letters Patents granted from any of the foregoing applications;

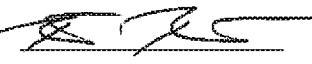
NOW THEREFORE, be it known that for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, we, as Assignors, have sold, assigned, and transferred unto the Assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention, and this application, and all divisions, continuations, and continuations-in-part thereof, and all Letters Patent of the United States which may be granted thereon, and all reexaminations certificates and reissues thereof, as well as all rights to claim priority on the basis of this application, and all applications for Letters Patent which may now or 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 in any country; and we hereby authorize and request the United States Patent and Trademark Office and any official of any foreign country whose duty it is to issue Letters Patent 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 Assignment;

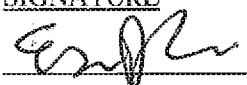
AND, WE HEREBY covenant that we have the full right to convey the interest assigned by this Assignment, and we have not executed and will not execute any agreement in conflict with this Assignment;

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 to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, continuation-in-part 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 TESTIMONY WHEREOF, we have hereunto set our hands.

| <u>INVENTOR'S NAME</u> | <u>HOME ADDRESS</u> | <u>SIGNATURE</u> | <u>DATE</u> |
|------------------------|---|--|------------------|
| Sung-Hoon Jung | <u>6139 W. Megan St.</u> <u>Chandler, AZ 85226</u> |  | <u>7-10-2013</u> |

| <u>INVENTOR'S NAME</u> | <u>HOME ADDRESS</u> | <u>SIGNATURE</u> | <u>DATE</u> |
|------------------------|---|--|------------------|
| Petri Raisanen | <u>930 S. Silverado St.</u> <u>Gilbert, AZ 85296</u> |  | <u>7-10-2013</u> |

| <u>INVENTOR'S NAME</u> | <u>HOME ADDRESS</u> | <u>SIGNATURE</u> | <u>DATE</u> |
|------------------------|---|--|------------------|
| Eric Jen Cheng Liu | <u>183 W Dawn Dr.</u> <u>Tempe, AZ 85284</u> |  | <u>7-10-2013</u> |

INVENTOR'S NAME

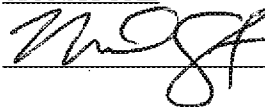
HOME ADDRESS

SIGNATURE

DATE

Mike Schmotzer

8787 E Mountain View Rd #2002



7-11-2013

Scottsdale, AZ 85258