**PATENT ASSIGNMENT COVER SHEET**

**SUBMISSION TYPE:** NEW ASSIGNMENT

**NATURE OF CONVEYANCE:** ASSIGNMENT

**CONVEYING PARTY DATA**

<table>
<thead>
<tr>
<th>Name</th>
<th>Execution Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUNG-KWON LEE</td>
<td>10/15/2013</td>
</tr>
<tr>
<td>JUN-HYEUB SUN</td>
<td>10/15/2013</td>
</tr>
<tr>
<td>HO-JIN JUNG</td>
<td>10/15/2013</td>
</tr>
<tr>
<td>CHUN-HEE LEE</td>
<td>10/15/2013</td>
</tr>
</tbody>
</table>

**RECEIVING PARTY DATA**

- **Name:** SK hynix Inc.
- **Street Address:** 2091, Gyeongchung-daero, Bubal-eub
- **City:** Icheon
- **State/Country:** KOREA, REPUBLIC OF
- **Postal Code:** 467-734

**PROPERTY NUMBERS Total: 1**

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number</td>
<td>14062563</td>
</tr>
</tbody>
</table>

**CORRESPONDENCE DATA**

- **Fax Number:** (425)348-3299
- **Phone:** 425-348-3500
- **Email:** docketing@ampacc.com

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

- **Correspondent Name:** AMPACC LAW GROUP, PLLC
- **Address Line 1:** 6100 219TH ST. SW
- **Address Line 2:** SUITE 580
- **Address Line 4:** MOUNTLAKE TERRACE, WASHINGTON 98043

**ATTORNEY DOCKET NUMBER:** K100SS-042200US

**NAME OF SUBMITTER:** STEVE Y. CHO

---

**EPAS ID:** PAT2592250
<table>
<thead>
<tr>
<th>Signature:</th>
<th>/Steve Y. Cho/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td>10/25/2013</td>
</tr>
</tbody>
</table>

Total Attachments: 2
source=2013_10_25_ASSGMT_K100SS-042200US#page1.tif
source=2013_10_25_ASSGMT_K100SS-042200US#page2.tif
ASSIGNMENT OF PATENT APPLICATION

WHEREAS, the below named individual(s), hereinafter referred to as “Assignors,” are the inventor(s) of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: SEMICONDUCTOR DEVICE HAVING HARD MASK STRUCTURE AND FINE PATTERN AND FORMING METHOD THEREOF

Filing Date: October 24, 2013

Application No.: 14/062,563

WHEREAS, SK hynix Inc. of 2091, Gyeongchung-daero, Bupal-eub, Ichon-si, Gyeonggi-do, Republic of Korea, hereinafter referred to as “ASSIGNEE,” is desirous of acquiring ASSIGNORS’ interest in the said invention and application and in any U.S. Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the said Assignees, and Assignees’ successors and assigns, all their right, title and interest in and to the said invention and application including any corresponding foreign application, and in and to any Letters Patent which may hereafter be granted on the same in the United States and any corresponding foreign application, the said interest to be held and enjoyed by said Assignees as fully and exclusively as it would have been held and enjoyed by said Assignors had this Assignment and transfer not been made, to the full end and term of any Letters Patent which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, reversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee’s expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement, and to vest title thereto in Assignee, or Assignee’s successors and assigns.

Assignors hereby authorize and request AMPACC Law Group, PLLC, 6100 219th Street SW, Suite 560, Mountlake Terrace, WA 98043, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Date: October 15, 2013

Name: LEE, Sung-Kwon

Date: October 15, 2013

Name: SUN, Jun-Hyeub
Assignment
Attorney Docket No.: K10088-042200US
Page 2

Date: October 15, 2013

Name: JUNG Ho-Jin

Date: October 15, 2013

Name: LEE, Chun-Hee

Page 2 of 2