

PATENT ASSIGNMENT

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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>Jin-Ho Park</td> <td>01/14/2010</td> </tr> <tr> <td>Gil-Heyun Choi</td> <td>01/14/2010</td> </tr> <tr> <td>Byung-Lyul Park</td> <td>01/14/2010</td> </tr> <tr> <td>Jong-Myeong Lee</td> <td>01/15/2010</td> </tr> <tr> <td>Zung-Sun Choi</td> <td>01/14/2010</td> </tr> <tr> <td>Hye-Kyung Jung</td> <td>01/14/2010</td> </tr> </tbody> </table>		Name	Execution Date	Jin-Ho Park	01/14/2010	Gil-Heyun Choi	01/14/2010	Byung-Lyul Park	01/14/2010	Jong-Myeong Lee	01/15/2010	Zung-Sun Choi	01/14/2010	Hye-Kyung Jung	01/14/2010
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RECEIVING PARTY DATA															
Name:	Samsung Electronics Co., Ltd.														
Street Address:	416 Maetan-dong														
Internal Address:	Yeongtong-gu														
City:	Suwon-si, Gyeonggi-do														
State/Country:	KOREA, REPUBLIC OF														
Postal Code:	000														
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>12687987</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12687987										
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Application Number:	12687987														
CORRESPONDENCE DATA															
Fax Number:	(919)854-1401														
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>															
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ATTORNEY DOCKET NUMBER:	5649-2888														

CH \$40.00 12687987

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**PATENT
 REEL: 023794 FRAME: 0047**

NAME OF SUBMITTER:

Anthony DeRosa

Total Attachments: 7

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ASSIGNMENT

THIS ASSIGNMENT, made by us, **Jin-Ho PARK**, a citizen of the Republic of Korea, residing at 2608-202 Baekhyeon Maeul SecheaGrangbi, Dongbaek-dong, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea; **Gi-Heyun CHOI**, a citizen of the Republic of Korea, residing at 15-802 Cheongsil Apt., Daechi 1-dong, Gangnam-gu, Seoul, Republic of Korea; **Byung-Lyul PARK**, a citizen of the Republic of Korea, residing at 218-108 Daechi Apt., Gaepo-dong, Gangnam-gu, Seoul, Republic of Korea; **Jong-Myeong LEE**, a citizen of the Republic of Korea, residing at 414-102 SaetbyeolMaeul Sambu Apt., Bundang-dong, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea; **Zung-Sun CHOI**, a citizen of the Republic of Korea, residing at Suite 1102 Yangjae SK Hubfreemo-APT; 953-1, Dogok-dong, Gangnam-gu, Seoul, Republic of Korea; and **Hye-Kyung JUNG**, a citizen of the Republic of Korea, residing at 305-707 Woosung 3 Cha Apt., Singil 6-dong, Yeongdeungpo-gu, Seoul, Republic of Korea;

WITNESSETH: That,

WHEREAS, we are the joint inventors of certain new and useful improvements in **METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE**, for which an application for United States Letters Patent has been filed, or is being filed concurrently, in the United States Patent and Trademark Office. We hereby authorize and request Myers Bigel Sibley & Sajovec, P.A., to insert here in parentheses (Application No. 12/687,987, filed JAN, 15, 2010) the filing date and application number of said application when known or to file this Assignment concurrently with the application, and

WHEREAS, **Samsung Electronics Co., Ltd.**, a Korean corporation having a principal place of business at 416 Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, hereinafter referred to as assignee, is desirous of acquiring the entire right, title and interest in and to said invention as described in said application, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we have sold and by these presents do hereby sell, assign, transfer and convey unto the said assignee, its successors and assigns, the entire right, title and interest in and to the said invention and application, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign

ASSIGNMENT – CONTINUED

countries or reissues thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with the right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same 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 if this assignment and sale had not been made.

We hereby request that said Letters Patent be issued in accordance with this assignment.

We further covenant and agree that, at the time of the execution and delivery of these presents, we possess full title to the invention and application above-mentioned, and that we have the unencumbered right and authority to make this assignment.

We further covenant and agree to bind our heirs, legal representatives and assigns, promptly to communicate to said assignee or its representatives any facts known to us relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the assignee, its representatives, successors or assigns to secure patent or similar protection for the said invention in all countries and to vest in the assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said assignee, its successors, assigns and other legal representatives.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this 14 day of January, 20 10.


Jin-Ho PARK

ASSIGNMENT - CONTINUED

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this 14-----
day of January, 20 10.

Gil-Heyun CHOI
Gil-Heyun CHOI

ASSIGNMENT - CONTINUED

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this 1st
day of / , 20 10.

Park, Byung-Lyul
Byung-Lyul PARK

ASSIGNMENT – CONTINUED

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this 15
day of Jan., 20 10.

Jong Myeong Lee
Jong-Myeong LEE

ASSIGNMENT -- CONTINUED

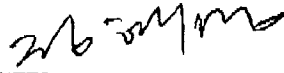
IN WITNESS WHEREOF, we have hereunto set our hands and seals on this 14-----
day of 1, 20 10.



Zung-Sun CHOI

ASSIGNMENT - CONTINUED

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this 14
day of 1, 20 10.



Hye-Kyung JUNG