

**PATENT ASSIGNMENT**

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Son-Kwan Hwang	09/11/2009
Keum-Hee Ma	09/11/2009
Seung-Woo Shin	09/11/2009
Min-Seung Yoon	09/14/2009
Jong-Ho Yun	09/11/2009
Ui-Hyoung Lee	09/14/2009
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Samsung Electronics Co., Ltd.
<b>Street Address:</b>	416 Maetan-dong, Yeongtong-gu
<b>Internal Address:</b>	Suwon-si
<b>City:</b>	Gyeonggi-do
<b>State/Country:</b>	REPUBLIC OF KOREA
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	12565969
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	5649-2522

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 REEL: 023277 FRAME: 0882**

NAME OF SUBMITTER:

Audra Wooten

Total Attachments: 7

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**ASSIGNMENT**

THIS ASSIGNMENT, made by us, **Son-Kwan Hwang**, citizen of the Republic of Korea, with a mailing address of Intellectual Property Team, SAMSUNG SEMICONDUCTOR, SAMSUNG ELECTRONICS CO., LTD., San #16, Banwol-Dong, Hwasung-City, Gyeonggi-Do, Republic of Korea,# 445-701; **KeumHee Ma**, citizen of the Republic of Korea, with a mailing address of Intellectual Property Team, SAMSUNG SEMICONDUCTOR, SAMSUNG ELECTRONICS CO., LTD., San #16, Banwol-Dong, Hwasung-City, Gyeonggi-Do, Republic of Korea,# 445-701; **Seungwoo Shin**, citizen of the Republic of Korea, with a mailing address of Intellectual Property Team, SAMSUNG SEMICONDUCTOR, SAMSUNG ELECTRONICS CO., LTD., San #16, Banwol-Dong, Hwasung-City, Gyeonggi-Do, Republic of Korea,# 445-701; **MinSeung Yoon**, citizen of the Republic of Korea, with a mailing address of Intellectual Property Team, SAMSUNG SEMICONDUCTOR, SAMSUNG ELECTRONICS CO., LTD., San #16, Banwol-Dong, Hwasung-City, Gyeonggi-Do, Republic of Korea,# 445-701; **Jong-Ho Yun**, citizen of the Republic of Korea, with a mailing address of Intellectual Property Team, SAMSUNG SEMICONDUCTOR, SAMSUNG ELECTRONICS CO., LTD., San #16, Banwol-Dong, Hwasung-City, Gyeonggi-Do, Republic of Korea,# 445-701; and **Ui-Hyoung Lee**, citizen of the Republic of Korea, with a mailing address of Intellectual Property Team, SAMSUNG SEMICONDUCTOR, SAMSUNG ELECTRONICS CO., LTD., San #16, Banwol-Dong, Hwasung-City, Gyeonggi-Do, Republic of Korea,# 445-701;

WITNESSETH: That,

WHEREAS, we are the joint inventors of certain new and useful improvements in **THROUGH-SILICON VIA STRUCTURES PROVIDING REDUCED SOLDER SPREADING AND METHODS OF FABRICATING THE SAME** 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. 12/565,969, filed 9/24/09) 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,

**PATENT**

**ASSIGNMENT – CONTINUED**

and in and to any and all Letters Patent of the United States of America and all foreign 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, I have hereunto set my hand and seal on this   11   day of   09  , 2009.

  Son Kwan Hwang   (SEAL)  
**Son-Kwan Hwang**

Witnessed by:

\_\_\_\_\_

Date: \_\_\_\_\_

**ASSIGNMENT - CONTINUED**

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 11 day  
of 09, 2009.

Keum Hee Ma (SEAL)  
**Keum-Hee Ma**

Witnessed by:

\_\_\_\_\_

Date: \_\_\_\_\_

**ASSIGNMENT - CONTINUED**

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this   //   day  
of   Sep  , 2009.

  Shin Seung-woo   (SEAL)  
**Seung-Woo Shin**

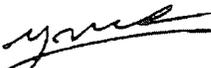
Witnessed by:

\_\_\_\_\_

Date: \_\_\_\_\_

**ASSIGNMENT - CONTINUED**

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 14 day  
of 9, 2009.

  
\_\_\_\_\_  
Min-Seung Yoon (SEAL)

Witnessed by:

\_\_\_\_\_

Date: \_\_\_\_\_

**ASSIGNMENT - CONTINUED**

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 11 day  
of September, 2009.

Jong-Ho Yun (SEAL)  
**Jong-Ho Yun**

Witnessed by:

\_\_\_\_\_

Date: \_\_\_\_\_

**ASSIGNMENT - CONTINUED**

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 14 day  
of 09, 2009.

Ui Hyoung Lee (SEAL)  
**Ui-Hyoung Lee**

Witnessed by:

\_\_\_\_\_

Date: \_\_\_\_\_