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SAMS05-16100

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)/Execution Date(s):

In-Soo Hwang  
Yung-Soo Kim  
Myeon-Kyun Cho

Execution Date(s) July 30, 2008, respectively

Additional name(s) of conveying party(ies) attached?  Yes  No

2. Name and address of receiving party(ies)

Name: Samsung Electronics Co., Ltd.

Internal Address: \_\_\_\_\_

Street Address: 416, Maetan-dong, Yeongtong-gu,

Suwon-si, Gyeonggi-do, 442-370

City: \_\_\_\_\_

State: \_\_\_\_\_

Country: Republic of Korea Zip: \_\_\_\_\_

Additional name(s) & address(es) attached?  Yes  No

3. Nature of conveyance:

- Assignment  Merger
- Security Agreement  Change of Name
- Government Interest Assignment
- Executive Order 9424, Confirmatory License
- Other \_\_\_\_\_

4. Application or patent number(s):

This document is being filed together with a new application.

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached?  Yes  No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Docket Clerk

Internal Address: \_\_\_\_\_

Street Address: P.O. Drawer 800889

City: Dallas

State: Texas Zip: 75380

Phone Number: 972-628-3600

Fax Number: 972-628-3616

Email Address: \_\_\_\_\_

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- Authorized to be charged by credit card
- Authorized to be charged to deposit account
- Enclosed
- None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers \_\_\_\_\_  
Expiration Date \_\_\_\_\_

b. Deposit Account Number 50-0208

Authorized User Name William A. Munck

9. Signature:

July 31, 2008

Signature

Date

William A. Munck, Reg. No 39,308

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 5

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PATENT  
REEL: 021385 FRAME: 0445

DOCKET NO. P16100 (SAMS05-16100)

PATENT

**ASSIGNMENT**

WHEREAS, We, In-Soo Hwang, resident of Gyeonggi-do, Republic of Korea, citizen of Republic of Korea, Yung-Soo Kim, resident of Gyeonggi-do, Republic of Korea, citizen of Republic of Korea and Myeon-Kyun Cho, resident of Gyeonggi-do, Republic of Korea, citizen of Republic of Korea, have invented certain new and useful improvements in a "APPARATUS AND METHOD FOR SUPPORTING A PLURALITY OF MIMO MODES IN A WIRELESS COMMUNICATION SYSTEM" disclosed in an application for United States Letters Patent (Application Serial No. \_\_\_/\_\_\_\_\_, filed on (date)\_\_\_\_\_, said application having been executed concurrently herewith;

WHEREAS, SAMSUNG ELECTRONICS CO., LTD, a corporation organized under the laws of the Republic of Korea, having a place of business at 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, 442-370, Republic of Korea (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring my entire right, title and interest in and to the invention, and in and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest in and to said invention and in and to said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, continuations-in-part and extensions thereof; We authorize William A. Munck or John T. Mockler of Munck Carter, P.C. to insert in the parenthesis above the application number and filing date of said application when known; and we hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as our interest is concerned, to the said ASSIGNEE of our entire right, title and interest.

We also hereby sell and assign to said ASSIGNEE, its successors, assigns and legal representatives the full and exclusive rights, title and interest to the invention disclosed in said application throughout the world, including the right to file applications and obtain patents, utility models, industrial models and designs for said invention in its own name throughout the world including all rights of priority, all rights to publish cautionary notices reserving ownership of said invention and all rights to register said invention in appropriate registries; and we further agree to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such rights, title and interest in ASSIGNEE, its successors, assigns and legal representatives.

We hereby further agree that we will communicate to said ASSIGNEE, or to its successors, assigns and legal representatives, any facts known to us respecting any improvements; and, at the expense of said ASSIGNEE, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, and make all lawful oaths, and generally do everything possible to vest title in said ASSIGNEE and to aid said ASSIGNEE, its successors, assigns and legal representatives to obtain and enforce proper protection for said invention in all countries.

Date: July 30, 2008 \_\_\_\_\_  
In-Soo Hwang  \_\_\_\_\_

Date: \_\_\_\_\_  
Yung-Soo Kim \_\_\_\_\_

Date: \_\_\_\_\_  
Myeon-Kyun Cho \_\_\_\_\_

We hereby further agree that we will communicate to said ASSIGNEE, or to its successors, assigns and legal representatives, any facts known to us respecting any improvements; and, at the expense of said ASSIGNEE, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, and make all lawful oaths, and generally do everything possible to vest title in said ASSIGNEE and to aid said ASSIGNEE, its successors, assigns and legal representatives to obtain and enforce proper protection for said invention in all countries.

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

\_\_\_\_\_  
In-Soo Hwang

Date: July 30, 2008

  
\_\_\_\_\_  
Yung-Soo Kim

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

\_\_\_\_\_  
Myeon-Kyun Cho