

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Won-Ik KIM	12/05/2011
Jae Sun CHA	12/05/2011
Sung Cheol CHANG	12/05/2011
Kwang Jae LIM	12/05/2011
Hyun-Jae KIM	12/05/2011
Sung Kyung KIM	12/05/2011
Chul Sik YOON	12/05/2011

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD
Street Address:	416, Maetan-dong, Yeongtong-gu
City:	Suwon-si, Gyeonggi-do
State/Country:	REPUBLIC OF KOREA

Name:	ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE
Street Address:	161, Gajeong-dong, Yuseong-gu
City:	Daejeon
State/Country:	REPUBLIC OF KOREA
Postal Code:	305-350

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13378456

CORRESPONDENCE DATA

Fax Number: (202)403-3587
 Phone: 202-293-0804
 Email: usdocketing@jeffersonip.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

PATENT

501757125

REEL: 027389 FRAME: 0882

OP \$40.00 13378456

via US Mail.

Correspondent Name: Jefferson IP Law, LLP
Address Line 1: 1130 Connecticut Ave., NW
Address Line 2: Suite 420
Address Line 4: Washington, DISTRICT OF COLUMBIA 20036

ATTORNEY DOCKET NUMBER:	0204-0137
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NAME OF SUBMITTER:	Raymond Persino
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Total Attachments: 4

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RECORDATION FORM COVER SHEET PATENTS ONLY

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)

1) Won-Ik KIM, 2) Jae Sun CHA, 3) Sung Cheol CHANG,
4) Kwang Jae LIM, 5) Hyun-Jae KIM, 6) Sung Kyung KIM, and
7) Chul Sik YOON

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

City: Suwon-city, Gyeonggi-do

State: _____

Country: Republic of Korea Zip: _____

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

3. Nature of conveyance/Execution Date(s):

Execution Date(s) December 5, 2011

- Assignment Merger
- Security Agreement Change of Name
- Joint Research Agreement
- 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)

13/378,456

B. Patent No.(s)

Additional numbers attached? Yes No

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

Name: Jefferson IP Law, LLP

Internal Address: Raymond B. Persino

Street Address: 1130 Connecticut Ave., NW, Suite 420

City: Washington

State: District of Columbia Zip: 20036

Phone Number: 202-293-0804

Fax Number: 202-403-3587

Email Address: usdocketing@jeffersonip.com

6. Total number of applications and patents involved: One

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

Authorized User Name _____

9. Signature:

_____/Raymond B. PERSINO/ Reg. #58,082
Signature

December 15, 2011
Date

Raymond B. Persino
Name of Person Signing

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

4

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Recordation of assignment

Additional name and address of receiving parties:

Name: **ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE**

Address: 161, Gajeong-dong, Yuseong-gu, Daejeon 305-350, Republic of Korea

Attorney Docket No.:
Client Docket No.:

Assignment

WHEREAS, the following inventors, namely

1) **KIM, Won-Ik** of 709-602, Yeolmae Maoul 7 Danji, Jijok-dong, Yuseong-gu, Daejeon 305-770, Republic of Korea; 2) **CHA, Jae Sun** of 703-402, Banseok maoul Apt., Banseok-dong, Yuseong-gu, Daejeon 305-150, Republic of Korea; 3) **CHANG, Sung Cheol** of 309-901, Expo Apt., Jeonmin-dong, Yuseong-gu, Daejeon 305-761, Republic of Korea; 4) **LIM, Kwang Jae** of 612-901, Unamneomia Apt., Gyuanpyeong-dong, Yuseong-gu, Daejeon 305-746, Republic of Korea; 5) **KIM, Hyun-Jae** of 709-1201, Samsan Town Jugong Apt., Samsan-dong, Bupyeong-gu, Incheon 403-090, Republic of Korea; 6) **KIM, Sung Kyung** of 402, Royal Valley, 385-15, Doryong-dong, Yuseong-gu, Daejeon, 305-340, Republic of Korea; 7) **YOON, Chul Sik** of 4-402, Samik Sunkyung Apt., Hage 1-dong, Nowon-gu, Seoul 139-777, Republic of Korea, (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

DEVICE AND METHOD FOR MANAGING BASE STATION AND TERMINAL

for which a United States Patent Application is being filed concurrently herewith or, if not being concurrently filed, was filed on December 15, 2011, and assigned Serial No. 13/378,456; and,

WHEREAS, **Samsung Electronics Co., Ltd.**, a corporation duly organized under the laws of the Republic of Korea, located and doing business at 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 442-742, Republic of Korea; and **Electronics and Telecommunications Research Institute**, a research institute duly organized under the laws of the Republic of Korea, located and doing business at 161, Gajeong-dong, Yuseong-gu, Daejeon 305-350, Republic of Korea (hereinafter called "Assignees"), is desirous of acquiring the entire right, title and interest therein;

NOW, THEREFORE, BE IT KNOWN that for and in good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors do hereby sell, assign and transfer unto said Assignees the entire and exclusive worldwide right, title and interest in and to all said inventions and discoveries disclosed in said application, and in and to said application, any and all substitutions, divisions, provisionals, conversions of provisionals and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals and reissues thereof; and the right to file any foreign application and/or claim priority under the provisions of any international treaty or convention arising from this application or any divisional, continuing, substitute or reissue application therefrom. The aforesaid assignment includes the right in and to all income, royalties, damages and payments, now or hereafter due or payable with respect to any Letters Patent which may be granted, and in and to all causes of action (either in law or in equity), and the right to sue, counterclaim, and recover for past, present and future infringement of the rights assigned or to be assigned under this Assignment, as fully and entirely as the same would have been held and enjoyed by Assignors if this sale, assignment and transfer had not been made.

Assignors covenant and agree, without further compensation to said Assignors but at Assignees' expense:

- a. to execute:
 - i. all papers to be used in connection with this application and any divisional, continuing, substitute or reissue application thereof, as the Assignees may deem necessary or expedient, and
 - ii. all papers in connection with any interference, litigation, mediation, arbitration or other proceeding relating to this application or any divisional, continuing, substitute or reissue application thereof, as may be necessary or expedient;
- b. to cooperate with the Assignees in every way possible in obtaining evidence and going forward in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof;
- c. to communicate to the Assignees any facts relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof, including evidence for

Attorney Docket No.:
Client Docket No.:

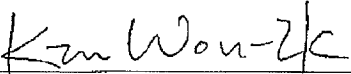
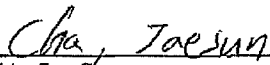

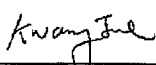
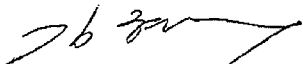
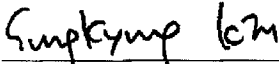

- any interference, litigation, mediation, arbitration or other proceeding relating to said invention, whenever requested;
- d. to testify in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof whenever requested; and
- e. to perform all other affirmative acts which may be necessary or desirable to secure full and complete protection of the inventions and discoveries or that may be necessary or desirable to vest in Assignees the complete title to the inventions and discoveries and Letters Patent hereby conveyed and to enable Assignees to record title.

Assignors hereby authorize and request the United States Patent and Trademark Office or any other issuing authority to issue any and all Letters Patent that may be granted upon this invention and/or this application or any divisional, continuing, substitute or reissue application thereof to the Assignees, their legal representatives, successors and assigns.

Assignors each hereby represent, covenant and warrant that he or she has the full right to convey the entire right, title and interest by this instrument, free of any encumbrances and that no other agreement has been or will be executed in conflict herewith.

The provisions of this Assignment are binding upon each Assignors' heirs, legal representatives and/or administrators and assigns.

Assignors hereby grant to the law firm of JEFFERSON IP Law, LLP of Washington, DC and their attorneys and agents as associated with Customer No. 68103 the authority and power to insert on this instrument any further identification which may be necessary or desirable for purposes of recordation in the United States Patent and Trademark Office or a Patent Office of any foreign country.

Signature of First Inventor:	<u></u>	Dec. 5, 2011
	KIM, Won-Ik	Date
Signature of Second Inventor:	<u></u>	Dec. 5, 2011
	CHA, Jae Sun	Date
Signature of Third Inventor:	<u></u>	Dec. 5, 2011
	CHANG, Sung Cheol	Date
Signature of Fourth Inventor:	<u></u>	Dec. 5, 2011
	LIM, Kwang Jae	Date
Signature of Fifth Inventor:	<u></u>	Dec. 5, 2011
	KIM, Hyun-Jae	Date
Signature of Sixth Inventor:	<u></u>	Dec. 5, 2011
	KIM, Sung Kyung	Date
Signature of Seventh Inventor:	<u></u>	Dec. 5, 2011
	YOON, Chul Sik	Date