PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Sung-Oh KWON	06/12/2009
Neung-Hyung LEE	06/19/2009
Kyeong-In JEONG	06/19/2009
Jong-Hyung KWUN	06/19/2009
Jong-In KIM	06/19/2009
Ok-Seon LEE	06/19/2009
Hwa-Jin CHA	06/19/2009
Ho-Sun YOUM	06/19/2009

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

PROPERTY NUMBERS Total: 1

Property Typ	e	Number
Application Number:	1	12491022

CORRESPONDENCE DATA

Fax Number: (202)403-3587

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

Phone: 202-293-0804

Email: usdocketing@jeffersonip.com

Correspondent Name: Jefferson IP Law, LLP Address Line 1: 1730 M Street, NW

Address Line 2: Suite 807

500894780

Address Line 4: Washington, DISTRICT OF COLUMBIA 20036

ATTORNEY DOCKET NUMBER: 0202-0233

REEL: 022871 FRAME: 0343

P \$40.00 12491022

PATENT

NAME OF SUBMITTER:	Raymond B. Persino
Total Attachments: 4 source=0202-0233AssignmentAsFiled#paggsource=0202-023AssignmentAsFiled#paggsource=0202-023AssignmentAsFiled	e2.tif e3.tif

PATENT REEL: 022871 FRAME: 0344

RECORDATION FORM COVER SHEET PATENTS ONLY		
	se record the attached documents or the new address(es) below.	
Name of conveying party(ies)	2. Name and address of receiving party(ies)	
1) Sung-Oh KWON, 2) Neung-Hyung LEE, 3) Kyeong-In JEONG,	Name: Samsung Electronics Co., Ltd.	
4) Jong-Hyung KWUN, 5) Jong-In KIM, 6) Ok-Seon LEE,	Internal Address:	
7) Hwa-Jin CHA, and 8) Ho-Sun YOUM	Internal Address.	
Additional name(s) of conveying party(ies) attached? Yes 🗸 No	4	
3. Nature of conveyance/Execution Date(s):	Street Address: 416, Maetan-dong, Yeongtong-gu	
Execution Date(s) June 12, 2009; June 19, 2009		
✓ Assignment	2" 2 12	
Security Agreement Change of Name	City: Suwon-si, Gyeonggi-do	
Joint Research Agreement	State:	
Government Interest Assignment	2 miles a state of the state of	
Executive Order 9424, Confirmatory License	Country: Republic of Korea Zip:	
Other	Additional name(s) & address(es) attached? Yes Vo	
A. Patent Application No.(s) 12/491,022 Additional numbers att	B. Patent No.(s) tached? ☐ Yes ✓ No	
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: One	
Name: Jefferson IP Law, LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$	
Internal Address:Raymond B. Persino	Authorized to be charged by credit card	
	Authorized to be charged to deposit account	
Street Address: 1730 M Street, NW, Suite 807	Enclosed	
Silest Address. 1700 in Silost, 1111, Saits 55.	None required (government interest not affecting title)	
City: Washington	8. Payment Information	
State: DC Zip:20036	a. Credit Card Last 4 Numbers Expiration Date	
Phone Number: 202-293-0804	,	
Fax Number: 202-403-3587	b. Deposit Account Number	
Email Address: usdocketing@jeffersonip.com	Authorized User Name	
9. Signature: /Raymond B. PERSINO/ Reg.		
Signature	Date	
Raymond B. Persino Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:	

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Attorney Docket No.: 0202-0233 Client Docket No.: SP9111-US

<u>Assignment</u>

WHEREAS, the following inventors, namely 1) Sung-Oh KWON, 2) Neung-Hyung LEE, 3) Kyeong-In JEONG, 4) Jong-Hyung KWUN, 5) Jong-In KIM, 6) Ok-Seon LEE, 7) Hwa-Jin CHAand 8) Ho-SunYOUM, all citizens of the Republic of Korea and residing respectfully at 1) #108-1006, Hyundai Woosung APT, Hagye 2-dong, Nowon-gu, Seoul, Republic of Korea, 2) #203, BJ High hill, Daechi-dong 971-4, Gangnam-gu, Seoul, Republic of Korea, 3) #112-1302, Daewoo Purgio APT, Gisan-ri, Taean-eup, Hwaseong-si, Gyeonggi-do, Republic of Korea, 4) #911, LG Bundang Eclat, Seohyeon-dong 251-3, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea, 5) #202-2104, Imaechon Hanshin APT, Imae-dong, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea, 6) #1216, Sharmang Officetel, Ingye-dong 1119, Paldal-gu, Suwon-si, Gyeonggi-do, Republic of Korea, 7) #332-1207, Sangnok Maeul Woosung APT, Jeongja-dong, Bundang-gu, Seongnam-si, Gyeonggi-do, 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:

METHOD AND APPARATUS FOR IDENTIFYING BASE STATION IN WIRELESS COMMUNICATION SYSTEM.

for which a United States Patent Application is being filed concurrently herewith or, if not being concurrently filed, was filed on $\frac{\text{June } 24,\ 2009}{\text{June } 24,\ 2009}$, and assigned Serial No. $\frac{12/491,022}{\text{June } 24,\ 2009}$; 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, Republic of Korea (hereinafter called "Assignee"), 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 Assignee 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 Assignee's expense:

- a. to execute:
 - all papers to be used in connection with this application and any divisional, continuing, substitute or reissue application thereof, as the Assignee may deem necessary or expedient, and
 - 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;

1 .

PATENT REEL: 022871 FRAME: 0346 Attorney Docket No.: 0202-0233 Client Docket No.: SP9111-US

- to cooperate with the Assignee 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 Assignee any facts relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof, including evidence for 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 Assignee the complete title to the inventions and discoveries and Letters Patent hereby conveyed and to enable Assignee 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 Assignee, its 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 Assignor's heirs, legal representatives and/or administrators and assigns.

Assignors hereby grant to the law firm of Jefferson IP Law, LLP of Washington, DC and its 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:	Sung-Oh KWON	Date Date
Signature of Second Inventor:	新· 王行	6/19/2009
	Neung-Hyung LEE	Date
Signature of Third Inventor:	Kyeong-In JEONG	6/18 200 P Date
Signature of Fourth Inventor:	Denglying Know	6/19/2009
	Jong-Hyung KWUN	Date

Attorney Docket No.: 0202-0233 Client Docket No.: SP9111-US	N.W	
Signature of Fifth Inventor:		6/19/2009
	Jong-In KIM	Date
Signature of Sixth Inventor:		6/19/209 Date
•	Ok-Seon LEE	Date
Signature of Seventh Inventor:	Da	6/19/2009
	Hwa-Jin ČHA	Date
Signature of Eighth Inventor:	Journ Houn	6/19/2009
	Ho-SunYOUM	Date