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Attorney Docket No. 678-2136 (P13107)

Form PTO-1595 (Rev. 03/01)	
OMB No. 0651-0027 (exp. 5/31/200	_1030
Tab settings ⇔ ⇔ ♥	<u></u>
To the Honorable Commission	ner of Patents and

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	Please record the attached original documents or copy thereof.			
1. Name of conveying party(ies): 1. Jeong-Tae OH 2. Won-Il ROH 3. Kyung-Byoung KO 4. Seung-Joo MAENG 5. Jae-Ho JEON Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance:	Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies) Name: Samsung Electronics Co., Ltd. 416, Maetan-dong, Yeongtong-gu, Suwon-si			
Assignment	Gyeonggi-do, Republic of Korea			
Security Agreement				
Other				
Execution Date: 7/7/05	Additional name(s) & address(es) attached? 📮 Yes 🍱 No			
4. Application number(s) or patent number(s):				
If this document is being filed together with a new appli	cation, the execution date of the application is: 7/7/05			
A. Patent Application No.(s)	B. Patent No.(s)			
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Additional numbers attached? 📮 Yes 🌇 No				
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5. Name and address of party to whom correspondence	6. Total number of applications and patents involved:			
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:			
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Paul J. Farrell, Esq.	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41)\$\$\\$40.00\$			
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Paul J. Farrell, Esq. DILWORTH & BARRESE, LLP	6. Total number of applications and patents involved:			
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PATENT

REEL: 016771 FRAME: 0309

ASSIGNMENT

AS A BELOW NAMED INVENTOR, I, and each of us, Individually hereby declare that: IN CONSIDERATION of the sum of TEN (\$10.00) dollars or the equivalent thereof, and other good and valuable consideration, the receipt of which from the hereinafter named Assignee is hereby acknowledged, I do hereby sell, assign and forever grant and convey unto:

ASSIGNEE: Samsung Electronics Co., Ltd.

ADDRESS: 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korsa

Who is my Assignee, and to the successes and assigns of my Assignee, all my right, title and Interest, in and for the United States of America and all other countries, including all rights of priority, in and to the invention entitled:

TITLE: APPARATUS AND METHOD FOR TRANSMITTING PILOT SIGNAL IN A BWA COMMUNICATION SYSTEM USING TRANSMIT ANTENNAS

Invented by me (if only one inventor is named below) or us (if more than one inventor is named below) and described in an application for a United States patent the specification of which is either attached hereto or otherwise accompanies this Assignment or indicates an attorney docket no. <u>678-2136 (P13107)</u>, or is more particularly identified as:

executed on even d	ate herewith, or	
Serial No.	filed in the U.S. Patent & Tradomark Office on	
or		
executed on		

and in and to all United States patents which may be granted thereon and therefore, and in and to all certificates of corrections, divisions, continuations, continuations-in-part, relssued and re-examined patents, and to any extensions thereof, said interest being the entire ownership of the patent when granted, to be held and enjoyed by said **SAMSUNG ELECTRONICS CO., LTD.**, my Assignee, its successors, assigns or other legal representatives, to the full end of the term, terms, or any extension or renewal thereof, for which said patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment, sale and conveyance had not been made;

AND I hereby covenant and agree to sign and execute any further documents or instruments which may from time-to-time be either necessary, lawful, proper or requested by the Assignee, in the prosecution of the above-named application or in the preparation and prosecution of any certificate of correction, division, continuation, continuation-in-part, reissue, re-examination, in any amendment, extension, or interference proceeding, whether administrative or judicial, or otherwise, to secure the title hereto in said Assignee;

AND I do hereby authorize and request the Commissioner of Patents and Trademarks to issue sald Patent or Patents to the Assignee, and I hereby appoint as my, or our attorney, and authorize and request Peter G. Dilworth, Reg. No. 26,450 and Paul J. Farrell. Reg. No. 33,494, to insert on this Assignment any further Identification or to complete such identification which may be either necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

And I further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference. Itigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

1

PATENT REEL: 016771 FRAME: 0310 IN WITNESS WHEREOF, I and we have set our hands and seals on the dates written beside my and our respective names:

INVENTOR(S)	Date Signed	Witness(es)
1) <u>Jacong-Tae OH</u> (Seal)	July 7, 2005	(sh
2) Won-II ROH (Seal)	July 7, 2005	Sh
3) Kyun-Byoung Ko	July 7, 2005	- Oh
4) Seung-Joo MAENG (Seal)	July 7, 2005	18h
5) Jae-Ho JEON (Seal)	July 7, 2005	Sh
1 M	∌uly 7, 2005	Coh.
7) Pan-Yuri JOO (Seal)	July 7, 2005	Ush.
0	July 7, 2005	18h
9) Yunsurf Ryul (Seal) Sung-Ryul YUN	July 7, 2005	Oh

RECORDED: 07/07/2005