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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): 1. Jin-Kyu HAN 2. Hwan-Joon KWON 3. Dong-Hee KIM 4. Youn-Sun KIM Execution Date(s) January 11, 2006 Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance: Assignment Merger Security Agreement Change of Name Government Interest Assignment Executive Order 9424, Confirmatory License Other	2. Name and address of receiving party(ies) Name: Samsung Electronics Co., Ltd. Internal Address: Street Address: 416 Maetan-dong, Yeongtong-gu City: Suwon-si, Gyeonggi-do State: Country: Korea Zip: Additional name(s) & address(es) attached? Yes No	
A. Patent Application No.(s) 11/272,017 Additional numbers at		
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:	
Name: Roylance, Abrams, Berdo & Goodman, L.L.P. Internal Address:	7. Total fee (37 CFR 1.21(h) & 3.41) \$\frac{40.00}{}\$ Authorized to be charged by credit card Authorized to be charged to deposit account	
Street Address: 1300 19th Street, N.W. Suite 600	✓ Enclosed None required (government interest not affecting title)	
City: Washington	8. Payment Information	
State: D.C. Zip: 20036 Phone Number: (202) 659-9076 Fax Number: (202) 659-9344 Email Address:	a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number Authorized User Name	
9. Signature:	January 13, 2006	
Signature Stanislav Torgovitsky, Reg. No. 43,958	Date Total number of pages including cover 2	

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Name of Person Signing

01/17/2006 HALI11 00000123 11272017 01 FC:8021

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Total number of pages including cover

sheet, attachments, and documents:

ASSIGNMENT

WHEREAS, We, (1) Jin-Kyu HAN; (2) Hwan-Joon KWON; (3) Dong-Hee KIM; and (4) Youn-Sun KIM, all citizens of the Republic of Korea, residing respectively at (1) #305, 984-6, Yeongtong-dong, Yoengtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea; (2) #944-614, Byuckjeokgol 9-danji Lotte APT. Yeongtong-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea; (3) #124-1903, Sinbongmaeul LG Xi 1-cha APT., 873, Sinbong-dong, Yongin-si, Gyeonggi-do, Republic of Korea; and (4) #1008-1104, Mujigaemaeul Samsung APT., Gumi-dong, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea (hereinafter ASSIGNORS), have made a certain invention entitled "METHOD AND APPARATUS FOR ARRANGING PILOT TONES IN A MOBILE COMMUNICATION SYSTEM" which was filed with the United States Patent and Trademark Office and assigned a Serial No. 11/272,017 and filing date of November 14, 2005; 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 ASSIGNEE), is desirous of acquiring the entire right, title and interest in and to the aforementioned invention and the aforementioned application and any and all United States Letters Patent to be obtained on said invention and/or application;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN that for good and valuable consideration paid to us by said ASSIGNEE, the receipt and sufficiency of which is hereby acknowledged, we, the ASSIGNORS, by these presents do hereby sell, assign, set over and transfer unto the said ASSIGNEE, its successors, legal representatives or assigns, the entire right, title and interest in and to the aforesaid invention in and for the United States; and in, to and under the aforesaid United States application and any divisional, continuing, substitute or reissue applications or supplementary disclosures which may be filed on said invention in the United States; and our right to file said applications and claim priority under the provisions of any international treaty or convention; and in and to any Letters Patent of the United States issued or granted on said invention and/or said applications;

AND WE HEREBY authorize and request the U.S. Patent and Trademark Office or other issuing authority to issue any and all patents on said invention and/or said applications to said ASSIGNEE as sole assignee;

AND WE HEREBY covenant that we have the full right to convey the entire right, title and interest herein assigned and that we have not executed and will not execute any assignment or other instrument in conflict herewith;

AND WE HEREBY further covenant and agree to communicate to said ASSIGNEE, or its legal representatives, successors or assigns, any facts relating to said invention, including evidence for interference purposes or other proceedings, whenever requested, and to testify in any interference or in any other legal proceeding, when requested, and to execute and deliver on request all lawful papers required to make any of the foregoing provisions effective; and to perform the aforesaid communicating, executing and delivering, without any payment except expenses and to perform the aforesaid testifying for reasonable

ASSIGNMENT

compensation; and generally to do everything possible to aid the said ASSIGNEE, its successors, legal representatives or assigns to obtain and enforce proper patent protection on and for said invention in the United States, and likewise we make these provisions binding upon our heirs, legal representatives and/or administrators.

The undersigned hereby grant the firm of Roylance, Abrams, Berdo & Goodman, L.L.P. the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, I have her	eunder set my hand and seal this 11th day of
January, 2003	
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11	Jin-Kyu HAN
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