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OMB No. 0651-0027 (exp. 6/30/2005)

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

- Name of conveying party(ies):
 - 1) Young-Bum KIM
- 4) Youn-Hyoung HEO
- 2) Yong-Jun KWAK
- 5) Joon-Young CHO
- 3) Ju-Ho LEE

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

- 3. Nature of conveyance:
 - Assignment
- Merger
- Security Agreement
- Change of Name

Other

NOVEMBER 15, 2005

4. Application number(s) or patent number(s):

2. Name and address of receiving party(ies)

Samsung Electronics Co., Ltd. Name:

Internal Address:

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

Suwon-si, Gyeonggi-do

City: State: KOREA Zip:

Execution Date:

Nov. 15, 2005 If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? Yes V No

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

John E. Holmes Name:

Internal Address:

Roylance, Abrams, Berdo & Goodman, LLP

Street Address:_ 1300 19th Street, N.W., Suite 600

City: Washington State: DC

Zip: 20036

- 6. Total number of applications and patents involved: 1
- 7. Total fee (37 CFR 3.41).....\$_40.00
 - √I Enclosed
 - ☐ Authorized to be charged to deposit account
- 8. Deposit account number:

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Christian C. Michel (Reg. No. 46,300)

Name of Person Signing

November 15, 2005

Date

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

Mail documents to be recorded with required cover sheet information to:

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PATENT REEL: 017224 FRAME: 0884

ASSIGNMENT

WHEREAS, Wc, (1) Young-Bum KIM; (2) Yong-Jun KWAK; (3) Ju-Ho LEE; (4) Youn-Hyoung HEO; and (5) Joon-Young CHO, all citizens of the Republic of Korea, residing respectively at (1) #302, Seongji Villa, 349-123, Sindang 3-dong, Jung-gu, Seoul, Republic of Korea; (2) #206-901, Sujinmaeul 2-danji Hyosung APT., Dongcheon-dong, Yongin-si, Gyconggi-do, Republic of Korea; (3) #730-304, Salgugol Hyundai APT., Yeongtong-dong, Yeongtong-gu, Suwon-si, Gyconggi-do, Republic of Korea; (4) #303, 1003-14, Yeongtong-dong, Yeongtong-gu, Suwon-si, Gyconggi-do, Republic of Korea; and (5) #124-802, Hwanggolmaeul 1-danji APT., Yeongtong-dong, Yeongtong-gu, Suwon-si, Gyconggi-do, Republic of Korea (hereinafter ASSIGNORS), have made a certain invention entitled "METHOD AND APPARATUS FOR TRANSMITTING AND RECEIVING DOWNLINK CONTROL INFORMATION IN A MOBILE COMMUNICATION SYSTEM SUPPORTING UPLINK PACKET DATA SERVICE" for which we are making application for Letters Patent of the United States, which application is being executed concurrently herewith; and

WHEREAS, Samsung Electronics Co., Ltd., a corporation duly organized under the laws of the Republic of Korea, located and doing business at 416, Mactan-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

ASSIGNMENT

PATENT REEL: 017224 FRAME: 0885 effective; and to perform the aforesaid communicating, executing and delivering, without any payment except expenses and to perform the aforesaid testifying for reasonable 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.

November .2005.	reunder set my hand and sear this 13chday of
	matta
1 m	Young-Burn KIM
Witness	-
IN WITNESS WHEREOF, I have he November , 2005.	reunder set my hand and seal this 15thday of
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Witness &	
IN WITNESS WHEREOF, I have I November , 2005.	nercunder set my hand and scal this 15thday of Jul-Ho LEE
Witness	
IN WITNESS WHEREOF, I have h	creunder set my hand and seal this 15thday of
Witness	Youn-Hyoung HEO
yy mucas	

ASSIGNMENT

Joon-Young CHO

Witness

ASSIGNMENT

RECORDED: 11/15/2005

PATENT