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Chang-Min Han	Name: Samsung Electronics Co., Ltd.
	Internal Address:
	27
Execution Date(s) December 21, 2005	Street Address: 416, Maetan-dong, Yeongtong-gu
Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No	
9. Nature of conveyance:	City: Suwon-si
Assignment	State: Gyeonggi-do
☐ Security Agreement ☐ Change of Name ☐ Government Interest Assignment	Country: Republic of Korea Zip: 442-742
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Other	Additional name(s) & address(es) attached? ☐ Yes ☒ No
4. Application or patent number(s):	his document is being filed together with a new application.
A. Patent Application No.(s)	B. Patent No.(s)
Additional numbers at	ached? 🗌 Yes 🛛 No
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
concerning document should be mailed:	involved: 1
Concerning document should be mailed: Name: Roylance, Abrams, Berdo & Goodman, L.L.P.	involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
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Name: Roylance, Abrams, Berdo & Goodman, L.L.P. Internal Address: Suite 600 Street Address: 1300 19 th Street, NW City: Washington State: D.C. Zip: 20036	involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ☐ 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
Name: Roylance, Abrams, Berdo & Goodman, L.L.P. Internal Address: Suite 600 Street Address: 1300 19 th Street, NW City: Washington State: D.C. Zip: 20036 Phone Number: (202) 659-9076	involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 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
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Concerning document should be mailed: Name: Roylance, Abrams, Berdo & Goodman, L.L.P. Internal Address: Suite 600 Street Address: 1300 19 th Street, NW City: Washington State: D.C. Zip: 20036 Phone Number: (202) 659-9076 Fax Number: (202) 659-9344 Email Address: 9. Signature: Maeng-Ho Shin, Reg. No. 53, 859	involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ☐ 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 18-2220 Authorized User Name John E. Holmes December 27, 2005 Date Total number of pages including cover 3
Concerning document should be mailed: Name: Roylance, Abrams, Berdo & Goodman, L.L.P. Internal Address: Suite 600 Street Address: 1300 19 th Street, NW City: Washington State: D.C. Zip: 20036 Phone Number: (202) 659-9076 Fax Number: (202) 659-9344 Email Address: 9. Signature: Maeng-Ho Shin, Reg. No. 53, 859 Name of Person Signing Documents to be recorded (Including cover shee	involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ☐ 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 18-2220 Authorized User Name John E. Holmes December 27, 2005 Date

12/29/2005 KBETEMA1 00000085 11316904

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PATENT REEL: 017542 FRAME: 0140

ASSIGNMENT

WHEREAS, I, Chang-Min HAN, a citizen of the Republic of Korea, residing at Hosu Maeul Apt. #108-2002, Choji-dong, Danwon-gu, Ansan-si, Gyeonggi-do, Republic of Korea (hereinafter ASSIGNOR), have made a certain invention entitled "APPARATUS AND METHOD FOR DATA COMMUNICATION" for which I am 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, 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 me by said ASSIGNEE, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, 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 I 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 I HEREBY covenant that I have the full right to convey the entire right, title and interest herein assigned and that I have not executed and will not execute any assignment or other instrument in conflict herewith;

AND I 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 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

ASSIGNMENT

PATENT REEL: 017542 FRAME: 0141 I 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 hereunder set my hand and seal this 21 day of DE CEMBER, 2005.

Chang-Min HAN

ASSIGNMENT

RECORDED: 12/22/2005

Witness