U.S. PTO 11/881978 07/30/2007

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	OMB No. 0651-0027 (exp. 6/30/200) 08 - 09 - 20	United States Patent and Trademark Office			
		1.201			
	To the Director of the U.S. Pat 1034352	74 ;hed documents or the new address(es) below.			
	1. Name of conveying party(ies)	2. Name and address of receiving party(ies)			
	Huaning NIU Pengfei XIA	Name: Samsung Electronics Co., Ltd.			
	Chiu NGO	Internal Address:			
	Additional name(s) of conveying party(ies) attached? Yes 🗸 No				
·	3. Nature of conveyance/Execution Date(s):	Street Address: 416, Maetan-Dong, Paldal-Gu			
	Execution Date(s) July 27, 2007				
	Assignment Merger				
	Security Agreement Change of Name	City: Suwon City			
	☐ Joint Research Agreement	State: Kyungki-do			
	Government Interest Assignment				
	Executive Order 9424, Confirmatory License	Country: Republic of Korea Zip:441-742			
	Other	Additional name(s) & address(es) attached? Yes Vo			
	4. Application or patent number(s):	document is being filed together with a new application.			
	A. Patent Application No.(s)	B. Patent No.(s)			
08/01/200					
05 FC:802	40.00 DP Additional numbers at	ached? Yes No			
	5. Name and address to whom correspondence	6. Total number of applications and patents			
	concerning document should be mailed:	involved: 1			
	Name: Kenneth L. Sherman	7. Total fee (37 CFR 1.21(h) & 3.41) \$_40,00			
	Internal Address: Myers Dawes Andras & Sherman, LLP	Authorized to be charged by credit card			
		Authorized to be charged to deposit account			
	Street Address: 19900 MacArthur Blvd., 11th Floor	✓ Enclosed			
		None required (government interest not affecting title)			
	City: Irvine	8. Payment Information			
	State: California Zip:92612	a. Credit Card Last 4 Numbers Expiration Date			
	Phone Number: (949) 223-9600				
	Fax Number: (949) 223-9610	b. Deposit Account Number 01-1960			
	Email Address: sherman@mdeslaw.com	Authorized User Name Myers Dawes Andras & Sher			
	9. Signature:	h.h. 20, 2007			
	Signature	July 30, 2007  Date			
	Kenneth L. Sherman, Reg. No 33,783	Total number of pages including cover sheet, attachments, and documents:			
	Name of Person Signing	ancet, 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

**PATENT** 

**REEL: 019702 FRAME: 0079** 

## ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS: <u>Huaning NIU, 359 E. Iowa Avenue, #1, Sunnyvale, California 94086 U.S.A.</u>, <u>Pengfei XIA, 2005 California Street, Apt. 25, Mountain View, California 94040 U.S.A. and Chiu NGO, 227 Monticello Street, San Francisco, California 94132 U.S.A.</u>, (hereinafter referred to as ASSIGNORS), have made a discovery or invention entitled:

## METHOD AND SYSTEM FOR ANALOG BEAMFORMING IN WIRELESS COMMUNICATION SYSTEMS

[X]	for which application for Letters Patent of the United States has been executed on even date herewith,
[]	for which application for Letters Patent of the United States has been filed on, under Serial No, and

WHEREAS: <u>SAMSUNG ELECTRONICS CO.</u>, <u>LTD.</u>, a Korean corporation, located at 416, <u>Maetan-Dong</u>, <u>Paldal-Gu</u>, <u>Suwon City</u>, <u>KYUNGKI-DO 441-742</u>, <u>KOREA</u> (hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

## NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that in consideration of the payment by ASSIGNEE to ASSIGNORS of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNORS hereby sell, assign and transfer to ASSIGNEE, its successors, legal representatives and assigns, the full and exclusive right, title and interest to said discovery or invention in the United States and its territorial possessions and in all foreign countries to be obtained for said invention by said application or any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted.

We, SAIDASSIGNORS, hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America whose duty it is to issue Letters Patent on applications as aforesaid, to issue all such Letters Patent for said discovery or invention to the ASSIGNEE, as assignee of the entire right, title and interest in, to an under the same, for the sole use and behalf of the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

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PATENT REEL: 019702 FRAME: 0080 We, SAID ASSIGNORS, hereby covenant that I have full right to convey the entire right, title and interest herein sold, assigned, transferred and set over; AND

We, SAID ASSIGNORS hereby further covenant and agree that the ASSIGNEE, its successors, legal representatives, or assigns, may apply for foreign Letters Patent on said discovery or invention and claim the benefits of the International Convention, and that I will, at any time, when called upon to do so by the ASSIGNEE, its successors, legal representatives, or assigns, communicate to the ASSIGNEE, its successors, legal representatives, or assigns, as the case may be, any facts known to me respecting said discovery or invention, and execute and deliver any and all lawful papers that may be necessary or desirable to perfect the title to the said discovery or invention, the said applications and the said Letters Patent in the ASSIGNEE, its successors, legal representatives and assigns, and that if reissues of the said Letters Patent or disclaimers relating thereto, or divisions, continuations, or refilings of the said applications, or any thereof, shall hereafter be desired by the ASSIGNEE, its successors, legal representatives, or assigns, I will, at any time, when called upon to do so by the ASSIGNEE its successors, legal representatives, or assigns, sign all lawful papers, make all rightful oaths, execute and deliver all such disclaimers and all divisional, continuation and reissue applications so desired, and do all lawful acts requisite for the application for such reissues and the procuring thereof and for the filing of such disclaimers and such applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention or discovery in all countries, all without further compensation but at the expense of the ASSIGNEE, its successors, legal representatives and assigns.

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Assignar's signature:	1		-127/27	
Assignar's signature:		Datade	0)/2//2/	

Huaning NIU

Citizenship:

People's Republic of China

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Assignor's signature:

Ki Dated: 07/27/07

Citizenship:

People's Republic of China

Docket No. SAM2B	PAU.112	PATENT
*******	************	*********************
Assignor's signature	Chiu NGO	Dated: $\frac{7/27/2007}{}$
Citizenship:	U.S.A.	
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**RECORDED: 07/30/2007** 

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