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	5 Staas & Hasa LLP		
Tot	he Director of the U.S. Page it and i 10.	3618787	cument
1	Name of conveying party(ies) Ji Hyung KIM Wooram SHIN Dong Seung KWON Choongil YEH Een Kee HONG		
2.	Name and Address of receiving party(ies)		
	Electronics and Telecommunications Rough 161, Gajeong-dong, Yuseong-gu, Daejeon 305-350, Republic of Korea	esearch Institute	
	Industry Academic Cooperation Founda #1, Seocheon-dong, Giheung-gu Yonginsi, Gyeonggi-do, 446-701 Republic of Korea	ation of Kyunghee	e University
3	Nature of conveyance X	Merger Change of N	ame
	Execution Date(s) February 10, 2011		
4	Application number(s) or patent number(s) This document is being filed after filing (a) Patent Application No(s) 13/058,93		<u>4, 2011</u> , or
5	Name and address of party to whom corres STAAS & HALSEY LLP Attention <u>J Randall Beckers</u> 1201 New York Ave , N W , 7th Floor Washington, D C 20005	spondence concerr Our Docket	
6	Total number of applications and patents in	volved 1	
7	Total fee (37 CFR 3 41) (\$ 40 ☐ Enclosed ☐ Authorized to be charged to depose	·	oplication in Assignment)
8	Deposit Account No 19-3935 (Any unde Account)	rpayment is author	rized to be charged to this Deposit
	(Attach duplicate copy of this page if paying	by deposit accour	nti
	- dell Deelesse Deer No. 20 258	///////////////////////////////////////	0 03701/2011 KNGUYEN1 300000002/193935
J. Ra	ndall Beckers, Reg No. 30,358		P (TO) A 1/ CATT KHOO I CUT TO BE CONDAND A 101-

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Revised January, 2005

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Docket No.

U.S. ASSIGNMENT

SAH 1000
IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by
(Insert Name(s) & Address(es) of ASSIGNEE(S))

ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE

161, Gajeong-dong, Yuseong-gu, Daejeon 305-350, Republic of Korea

INDUSTRY ACADEMIC COOPERATION FOUNDATION OF KYUNGHEE UNIVERSITY

#1, Seocheon-dong, Giheung-gu, Yongin-si, Gyeonggi-do, 446-701, Republic of Korea (hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled (Title of Invention)

METHOD TO GENERATE BEAMFORMING VECTOR AND PROVIDE THE INFORMATION FOR

	ting to International Patent Application attion for Letters Patent of the United Si	PCT/KR2009/004560 and/or for which tates was executed on even date herewith or, if not so executed, was	
(a)	executed on ,	(Insert date of execution of application, if not concurrent)	
(b)	filed on ,	Any registered attorney of STAAS & HALSEY LLP, 1201	
Serial No ,		New York Avenue, N.W., Suite 700 Washington, D.C. 2000s (202/434-1500) is hereby authorized to insert in (b) the specified data, when known	

ne application(s) and Letters Patent(s)")

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing swom testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s)

1)	(Typed Name & Signature of Inventor(s)) Ti Mymg ffm	(Date) February 10, 2011	(Typed Name & Signature of Witness(es))
2)	Vocany Shi	February 10, 2011	
3)	Wooram SHIN Nong Seung	February 10, 2011	
4)	Dong Seung KWON Choongil YEH	February 10, 2011	
5)	Een Kee HONG		

PATENT REEL: 025890 FRAME: 0365

Docket No.

U.S. ASSIGNMENT

S&H 1000
IN CONSIDERATION of the sum of One Dollar (\$1 00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by (Insert Name(s) & Address(es) of ASSIGNEE(S))

ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE

161, Gajeong-dong, Yuseong-gu, Daejeon 305-350, Republic of Korea

INDUSTRY ACADEMIC COOPERATION FOUNDATION OF KYUNGHEE UNIVERSITY

#1, Seocheon-dong, Gıheung-gu, Yongın-sı, Gyeonggı-do, 446-701, Republic of Korea

(hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled

METHOD TO GENERATE BEAMFORMING VECTOR AND PROVIDE THE INFORMATION FOR GENERATING BEAMFORMING VECTOR						
relating to International Patent Application application for Letters Patent of the United Stat	PCT/KR2009/00456 tes was executed on eve					
(a) executed on ;	(Insert date of ex	ecution of application, if not concurrent)				
(b) filed on , Serial No ;	New York Avenu (202/434-1500)	Any registered attorney of STAAS & HALSEY LLP, 1201 New York Avenue, N.W., Suite 700 Washington, D C. 20005 (202/434-1500) is hereby authorized to insert in (b) the specified data, when known.				
and to said application and all Letters Patent(s division, renewal, substitute, reissue or reexam said Letters Patent(s) may be granted and application(s) and Letters Patent(s)")	ination application based	thereon, for the full term or terms for which the				
The ASSIGNOR agree(s), when requested by a ASSIGNEE, to do all acts which the ASSIGNEE and enforcing protection for said invention, inclusion and enforcing protection for said invention, inclusion and control in the said invention in the feature of said Letters Patent(s), in any interfeating all proceeding which may a limited to executing all papers, including separate sworn testimony, and obtaining and producing IN WITNESS WHEREOF, the undersigned inventions in the said in the sai	may deem necessary, of uding in the preparation erence, reissue, reexam inse or be declared in relate assignments and decended.	desirable or expedient, for securing, maintaining and prosecution of said application(s) and the ination, or public use proceeding, and in any lation to same, such acts to include but not be clarations, taking all rightful oaths, providing				
(Typed Name & Signature of Inventor(s))		(Typed Name & Signature of Witness(es))				
Ji Hyung KiM						
2) Wooram SHIN						
Dong Seung KWON						
Choongil YEH						
5) Een Kee HONG	2010,02,10					

PATENT REEL: 025890 FRAME: 0366

RECORDED: 02/25/2011