PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Mun Geon KYEONG	11/26/2010
Won Cheol LEE	11/26/2010
Woo Yong LEE	11/26/2010
Kapseok CHANG	11/26/2010
Seung Eun HONG	11/26/2010
Hyung Min CHANG	11/26/2010

RECEIVING PARTY DATA

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Street Address:	161 Gajeong-dong, Yuseong-gu,	
City:	Daejeon	
State/Country:	REPUBLIC OF KOREA	
Postal Code:	305-700	

Name:	SOONGSIL UNIVERSITY RESEARCH CONSORTIUM TECHNOPARK	
Street Address:	511 Sangdo-dong, Dongjak-gu,	
City:	Seoul	
State/Country:	REPUBLIC OF KOREA	
Postal Code:	156-743	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12969135

CORRESPONDENCE DATA

Fax Number: (202)434-1501

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PATENT 501380599 REEL: 025508 FRAME: 0666

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ATTORNEY DOCKET NUMBER: 2117.1061

NAME OF SUBMITTER: J. Randall Beckers

Total Attachments: 4

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RABIN & BERDO, P.C., Washington, D.C.

Attorney Reference ______ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS KYEONG, Mun Geon of Daejeon, Republic of Korea; LEE, Won Cheol of Seoul, Republic of Korea; LEE, Woo Yong of Daejeon, Republic of Korea; CHANG, Kapseok of Daejeon, Republic of Korea; and HONG. Seung Eun of Daejeon, Republic of Korea; CHANG, Hyung Min of Seoul, Republic of Korea hereinafter referred to collectively as the assignor, have invented a certain improvement relating to

nereinatter referred to collectively as the assignor, in	ave invented a certain improvement relating to
SEQUENTIAL TRANSMISSION MULTI-BEAMFO HADAMARD MATRIX	RMING METHOD WITH LOW COMPLEXITY USING
instrument; said application to be filed in the United S [] said application having been filed in the United SI , authorization being hereb Berdo, Jr. and Allen Wood of RABIN & BERDO, P.	being executed concurrently with the execution of this States Patent and Trademark Office; tates Patent and Trademark Office on by given to my attorneys, Steven M. Rabin, Robert H. C., 1101 14th Street, N.W., Washington, D.C. 20005, to the application serial number of
Yuseong-gu, Daejeon 305-700, Republic of Korea a park of 511 Sangdo-dong, Dongjak-gu, Seoul 156 assignee, is desirous of acquiring the entire right.	nications Research Institute of 161 Gajeong-dong, and Soongsil University Research Consortium techno- 5-743. Republic of Korea, hereinafter referred to as the little and interest in and to said application, including any and to said invention and any and all patents which may be ssues and prolongations thereof;
valuable consideration paid by said assignee to said said assignor hereby assigns, sells and transfers assigns, the full and exclusive right, title and interest and continuations thereof, and in and to said invention including any and all renewals, reissues and prosuccessors and assigns, to have, hold, exercise and and continuations thereof, and the said invention a including any and all renewals, reissues and prolon advantages in anywise arising from or appertaining such patents when granted, including any and all read benefit of said assignee, and said assignee's manner as the said assignor might or could have he	ensideration of One Dollar (\$1.00), and other good and disassignor, the receipt of which is hereby acknowledged, to said assignee, and said assignee's successors and it in and to said application, including any and all divisions on and any and all patents which may be granted therefor, longations thereof; said assignee, and said assignee's dienjoy the said application, including any and all divisions and any and all patents which may be granted therefor, gations thereof, with all the rights, powers, privileges and interest, for and during the term or terms of any and all enewals, reissues and prolongations thereof, for the use successors and assigns, in as ample and beneficial all dand enjoyed the same, if this assignment had not been
successors or assigns, any and all acts relating to t	he Commissioner of Patents and Trademarks to issue all divisions and continuations thereof,
EXECUTED, this 26th day of	November , 2010.
WITNESSES:	ASSIGNOR:
Signature:	Signature
Name:	Name KYEONG, Mun Geon
Address:	
the state of the s	

PATENT REEL: 025508 FRAME: 0668

ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

Page 2 of 2

WITNESSES:	ASSIGNOR:
Signature:	ASSIGNOR: Signature: Name: LEE, Won Cheol
Name:	Name. LEC, Won Cheor
Address	
WITNESSES:	ASSIGNOR:
Signature:	Signature:
Name:	Name: LEE, Woo Yong
Address	
7000000000000000000000000000000000000	
WITNESSES:	ASSIGNOR:
Signature:	Signature:
Name:	Name: CHANG, Kapseok
Address	
WITH FOOTO	ASSIGNOR:
WITNESSES:	_
Signature: Name:	Signature:Name: HONG, Seung Eun
Address	
WITNESSES:	ASSIGNOR:
	Signature: 78 40
Signature:	Name: CHANG, Hyung Min
Address	

1/08

Attorney Reference

ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS KYEONG, Mun Geon of Daejeon, Republic of Korea; LEE, Won Cheol of Seoul, Republic of Korea; LEE, Woo Yong of Daejeon, Republic of Korea; CHANG, Kapseok of Daejeon, Republic of Korea; and HONG, Seung Eun of Daejeon, Republic of Korea; CHANG, Hyung Min of Seoul, Republic of Korea hereinafter referred to collectively as the assignor, have invented a certain improvement relating to

OFFICIAL TRANSMISSION MULTI BEAMFORMING METHOD WITH LOW COMPLEYITY LISING

HADAMARD MATRIX	DRMING METHOD WITH LOW COMPLEXITY USING
HADAMARD MATRIX	
instrument; said application to be filed in the United [] said application having been filed in the United S authorization, being bere	States Patent and Trademark Office on By given to my attorneys. Steven M. Rabin, Robert H.
Berdo, Jr. and Allen Wood of RABIN & BERDO, P	C., 1101 14th Street, N.W., Washington, D.C. 20005, to the application serial number of
Yuseong-gu, Daejeon 305-700, Republic of Korea a park of 511 Sangdo-dong, Dongjak-gu, Seoul 15 assignee is desirous of acquiring the entire right.	unications Research Institute of 161 Gajeong-dong, and Soongsil University Research Consortium techno- 6-743, Republic of Korea, hereinafter referred to as the title and interest in and to said application, including any and to said invention and any and all patents which may be ssues and prolongations thereof;
valuable consideration paid by said assignee to sa said assignor hereby assigns, sells and transfers assigns, the full and exclusive right, title and interest and continuations thereof, and in and to said inventincluding any and all renewals, reissues and prosuccessors and assigns, to have, hold, exercise an and continuations thereof, and the said invention including any and all renewals, reissues and prolon advantages in anywise arising from or appertainin such patents when granted, including any and all and benefit of said assignee, and said assignee'	onsideration of One Dollar (\$1.00), and other good and id assignor, the receipt of which is hereby acknowledged, is to said assignee, and said assignee's successors and st in and to said application, including any and all divisions ion and any and all patents which may be granted therefor, olongations thereof; said assignee, and said assignee's id enjoy the said application, including any and all divisions and any and all patents which may be granted therefor, ingations thereof, with all the rights, powers, privileges and g thereto, for and during the term or terms of any and all renewals, reissues and prolongations thereof, for the use is successors and assigns, in as ample and beneficial a eld and enjoyed the same, if this assignment had not been
AND said assignor hereby agrees to perform successors or assigns, any and all acts relating to any and all renewals, reissues and prolongations the	the Commissioner of Patents and Trademarks to issue
to said assignee, and said assignee's successors a	and assigns, in accordance herewith.
EXECUTED, this 30th day of	November , 2010.
WITNESSES:	ASSIGNOR:
Signature:	Signature
Name:	Name: KYEONG, Mun Geon
Address:	

RABIN & BERDO, P.C., Washington, D.C.

PATENT

REEL: 025508 FRAME: 0670

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ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT Page 2 of 2

ASSIGNOR:

WITNESSES:	ASSIGNOR:
Signature:Name:	
Address	
WITNESSES: Signature: Name:Address	Name: <u>LEE, Woo Yong</u>
WITNESSES: Signature:Name:Address	Name: <u>CHANG, Kapseok</u>
WITNESSES: Signature:Name:Address	Name: <u>HONG, Seuing/Eun</u>
WITNESSES: Signature: Name:	Name: <u>CHANG, Hyung Min</u>

PATENT REEL: 025508 FRAME: 0671

RECORDED: 12/16/2010