

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT2810737

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the OMISSION OF THE FOURTH AND FIFTH INVENTORS/ASSIGNORS previously recorded on Reel 020861 Frame 0169. Assignor(s) hereby confirms the FIVE INVENTORS/ASSIGNORS ARE INCLUDED IN THE EPAS COVERSHEET.

CONVEYING PARTY DATA

Name	Execution Date
SUNG JIN KIM	03/20/2008
BRUNO CLERCKX	03/20/2008
SEUNG YOUNG PARK	03/25/2008
DAVID J. LOVE	03/20/2008
IL HAN KIM	03/24/2008

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.
Street Address:	416, MAETAN-DONG, YEONGTONG-GU, SUWON-SI, GYEONGGI-DO
City:	SUWON-SI
State/Country:	KOREA, REPUBLIC OF
Name:	PURDUE RESEARCH FOUNDATION
Street Address:	3000 KENT AVENUE, WEST LAFAYETTE, IN 47906-1075
City:	WEST LAFAYETTE
State/Country:	INDIANA
Postal Code:	47906-1075

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11972397

CORRESPONDENCE DATA

Fax Number: (202)315-3758

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.

Phone: 2024290020

Email: pto@nsiplaw.com

Correspondent Name: NSIP LAW

Address Line 1: P.O. BOX 65745

Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20035

PATENT

ATTORNEY DOCKET NUMBER:	012052.0299
NAME OF SUBMITTER:	DAVID W. WARD
SIGNATURE:	/David W. Ward/
DATE SIGNED:	04/11/2014

Total Attachments: 19

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RECORDATION FORM COVER SHEET

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying parties:

Sung Jin KIM
Bruno CLERCKX
Seung Young PARK

2. Name and Address of receiving parties:

SAMSUNG ELECTRONICS CO., LTD.
416, Maetan-dong, Yeongtong-gu
Suwon-si, Gyeonggi-do
Republic of Korea

PURDUE RESEARCH FOUNDATION
3000 Kent Avenue
West Lafayette, IN 47906-1075
United States of America

3. Nature of conveyance:

☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other: _____

Execution Date(s): March 20, 2008; March 25, 2008

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

☐ This document is being filed together with a new application:

(a) The execution date(s) of the application is/are:

(b) The title is: METHOD FOR CODEBOOK DESIGN AND BEAMFORMING VECTOR
SELECTION IN PER-USER UNITARY RATE CONTROL (PU2RC) SYSTEM
OR

☒ This document is being filed after filing of the application:

(a) Patent Application No(s). 11/972,397, filed January 10, 2008; or

(b) Patent No(s). , issued .

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

STEIN, MCEWEN & BUI, LLP
Attention: Michael D. Stein
1400 Eye Street, NW
Suite 300
Washington, DC 20005

Our Docket: 0040.1021

6. Total number of applications and patents involved: 1


7. Total fee (37 CFR 3.41)..... (\$ 40.00 per Patent or Application in Assignment)

☐ Enclosed

☐ Authorized to be charged to Deposit Account No. 503333.

8. Deposit Account No. 503333: (Any underpayment is authorized to be charged to this Deposit Account) (Attach duplicate copy of this page if paying by deposit account)

Michael D. Stein, Reg. No. 37,240
Name of Person Signing


Signature

4/18/08
Date

Total number of pages including cover sheet: 3

DO NOT USE THIS SPACE

PATENT

REEL: 032712 FRAME: 0117

U.S. ASSIGNMENT

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))

SAMSUNG ELECTRONICS CO., LTD.
416, Maetan-dong, Yeongtong-gu
Suwon-si, Gyeonggi-do
Republic of Korea

PURDUE RESEARCH FOUNDATION
3000 Kent Avenue
West Lafayette, IN 47906-1075

(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 FOR CODEBOOK DESIGN AND BEAMFORMING VECTOR SELECTION
IN PER-USER UNITARY RATE CONTROL (PU2RC) SYSTEM

relating to International Patent Application PCT/JP____/____ and/or for which application for Letters Patent of the United States 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 January 10, 2008,

Application No. 11/972,397;

Any registered attorney of STEIN, MCEWEN & BUI, LLP, 1400 Eye St., N.W., Suite 300, Washington, D.C. 20005 (202/216-9505) is hereby authorized to insert in (b) the specified data, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

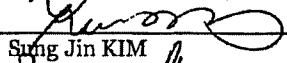

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution 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 sworn testimony, and obtaining and producing evidence.

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

(Typed Name & Signature of Inventor(s))

(Date)

(Typed Name & Signature of Witness(es))

1)	 Sung Jin KIM	March 20, 2008	
2)	 Bruno CLERCKX	March 20, 2008	
3)	Seung Young PARK		
4)	David J. LOVE		
5)	Il Han KIM		
6)			

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

(Typed Name & Signature of Inventor(s))

(Date)

(Typed Name & Signature of Witness(es))

1) _____	_____	_____
Sung Jin KIM		
2) _____	_____	_____
Bruno CLERCKX		
3) _____	03-25-2008	_____
Seung Young PARK		Dong-Ho Kim
4) _____	_____	_____
David J. LOVE		
5) _____	_____	_____
Il Han KIM		
6) _____	_____	_____

ASSIGNMENT

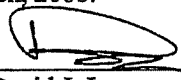
WHEREAS, David J. Love and Il Han Kim, hereinafter referred to as Assignors, have made a new and useful invention entitled METHOD FOR CODEBOOK DESIGN AND BEAMFORMING VECTOR SELECTION IN PER-USER UNITARY RATE CONTROL (PU2RC) SYSTEM, for which Assignors have made; and

WHEREAS, Purdue Research Foundation, hereinafter referred to as Assignee, a not-for-profit corporation of the State of Indiana having a place of business at 3000 Kent Avenue, West Lafayette, Indiana 47906, desires to acquire all right, title and interest in, to and under said invention disclosed, described or claimed or intended so to be in said application, and in, to and under said application, and in, to and under any and all Letters Patent, United States and foreign, which may be obtained therefor and thereon;

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar (\$1.00) and other good, valuable and sufficient considerations to Assignors in hand paid, the receipt of which is hereby acknowledged, Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto Assignee, all right, title and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and in, to and under said application, and any and all other applications thereon and arising therefrom, including any and all divisions and continuations thereof, and any and all patents to be issued and obtained therefor and thereon, United States and foreign, including all reissues and extensions thereof.

Assignors hereby authorize and request the Honorable Assistant Secretary and Commissioner of Patents and Trademarks to issue said Letters Patent to Assignee, its assigns and legal representatives. Assignors agree to sign and execute any and all other papers necessary or desirable for the procurement of Letters Patent on said invention in this and all foreign countries for the use of Assignee.

WITNESS Assignor's hand this 20th day of March, 2008.

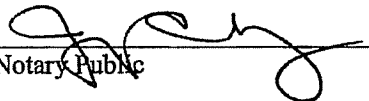


David J. Love

STATE OF INDIANA)
) SS:
COUNTY OF TIPPECANOE)

Before me, a Notary Public, in and for said County and State, personally appeared the above-named Assignor, to me personally known, and who executed the foregoing Assignment in my presence and acknowledged the execution thereof as their free and voluntary act and deed for the uses and purposes therein set forth and expressed.

My Commission Expires:



Notary Public

Printed: _____

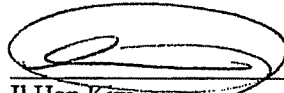
Resident of _____ County

JENNY C. KELLY, Notary Public

Resident of Tippecanoe County

My Commission Expires: August 24, 2013

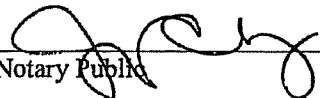
WITNESS Assignor's hand this 24th day of March, 2008


Il Han Kim

STATE OF INDIANA)
) SS:
COUNTY OF TIPPECANOE)

Before me, a Notary Public, in and for said County and State, personally appeared the above-named Assignors, to me personally known, and who executed the foregoing Assignment in my presence and acknowledged the execution thereof as their free and voluntary act and deed for the uses and purposes therein set forth and expressed.

My Commission Expires:


Notary Public

Printed: _____

Resident of _____ County

JENNY C. KELLY, Notary Public
Resident of Tippecanoe County
My Commission Expires: August 24, 2013

WITNESS Assignor's hand this 24th day of March, 2008.

Outside the USA:

Witnesses are
required when
acknowledgment
before a Notary
Public is not
Feasible.

Witness

Dong Hoi Kim

Inventor (Signature)

[Signature]

Witness

Jongwon Back

Inventor (Printed Name)

Seung Young Park

STATE OF _____)

) SS:

COUNTY OF _____)

Before me, a Notary Public, in and for said County and State, personally appeared the above-named Assignors, to me personally known, and who executed the foregoing Assignment in my presence and acknowledged the execution thereof as their free and voluntary act and deed for the uses and purposes therein set forth and expressed.

My Commission Expires:

Notary Public

Printed: _____

Resident of _____ County



04-02-2008



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U.S. DEPARTMENT OF COMMERCE

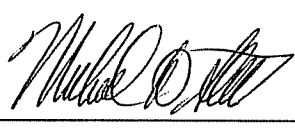
al documents or copy thereof.

To the Director of the U.S. Patent and Trademark Office

- 328.05
1. Name of conveying party(ies):
Sung Jin KIM
Bruno CLERCKX
Seung Young PARK
David J. LOVE
IL Han KIM
 2. Name and Address of receiving party(ies):

SAMSUNG ELECTRONICS CO., LTD. PURDUE RESEARCH FOUNDATION
416, Maetan-dong, Yeongtong-gu 3000 Kent Avenue
Suwon-si, Gyeonggi-do West Lafayette, IN 47906-1075
Republic of Korea
 3. Nature of conveyance: ...
☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other: _____
Execution Date(s): March 20, 2008; March 25, 2008; March 20, 2008; March 24, 2008
 4. Application number(s) or patent number(s):
☐ This document is being filed together with a new application:
(a) The execution date(s) of the application is/are:
(b) The title is: METHOD FOR CODEBOOK DESIGN AND BEAMFORMING VECTOR
SELECTION IN PER-USER UNITARY RATE CONTROL (PU2RC) SYSTEM
OR
☒ This document is being filed after filing of the application:
(a) Patent Application No(s). 11/972,397, filed January 10, 2008; or
(b) Patent No(s). , issued .
 5. Name and address of party to whom correspondence concerning document should be mailed:
STEIN, MCEWEN & BUI, LLP Our Docket: 0040.1021
Attention: Michael D. Stein
1400 Eye St., N.W., Suite 300
Washington, D.C. 20005
 6. Total number of applications and patents involved: 1
 7. Total fee (37 CFR 3.41)..... (\$ 40.00 per Patent or Application in Assignment)
☒ Enclosed
☐ Authorized to be charged to Deposit Account No. 503333.
 8. Deposit Account No. 503333: (Any underpayment is authorized to be charged to this Deposit Account) (Attach duplicate copy of this page if paying by deposit account)

Michael D. Stein, Reg. No. 37,240
Name of Person Signing


Signature

3/27/08
Date

Total number of pages including cover sheet: 7

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40.00 OF

PATENT

REEL: 032712 FRAME: 0125

U.S. ASSIGNMENT

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))

SAMSUNG ELECTRONICS CO., LTD.
416, Maetan-dong, Yeongtong-gu
Suwon-si, Gyeonggi-do
Republic of Korea

PURDUE RESEARCH FOUNDATION
3000 Kent Avenue
West Lafayette, IN 47906-1075

(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
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METHOD FOR CODEBOOK DESIGN AND BEAMFORMING VECTOR SELECTION
IN PER-USER UNITARY RATE CONTROL (PU2RC) SYSTEM

relating to International Patent Application PCT/JP_____/_____, and/or for which application for Letters Patent of the United States 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 January 10, 2008,

Application No. 11/972,397;

Any registered attorney of STEIN, MCEWEN & BUI, LLP, 1400 Eye St., N.W., Suite 300, Washington, D.C. 20005 (202/216-9505) is hereby authorized to insert in (b) the specified data, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

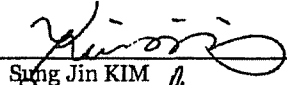

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IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

(Typed Name & Signature of Inventor(s))

(Date)

(Typed Name & Signature of Witness(es))

1)	 Sung Jin KIM	March 20, 2008	
2)	 Bruno CLERCKX	March 20, 2008	
3)	Seung Young PARK		
4)	David J. LOVE		
5)	Il Han KIM		
6)			

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(Typed Name & Signature of Inventor(s))

(Date)

(Typed Name & Signature of Witness(es))

1) _____ Sung Jin KIM	_____	_____
2) _____ Bruno CLERCKX	_____	_____
3) _____ Seung Young PARK	03-25-2008	Devg-Hoi Kim
4) _____ David J. LOVE	_____	_____
5) _____ Il Han KIM	_____	_____
6) _____	_____	_____

ASSIGNMENT


WHEREAS, David J. Love and Il Han Kim, hereinafter referred to as Assignors, have made a new and useful invention entitled METHOD FOR CODEBOOK DESIGN AND BEAMFORMING VECTOR SELECTION IN PER-USER UNITARY RATE CONTROL (PU2RC) SYSTEM, for which Assignors have made; and

WHEREAS, Purdue Research Foundation, hereinafter referred to as Assignee, a not-for-profit corporation of the State of Indiana having a place of business at 3000 Kent Avenue, West Lafayette, Indiana 47906, desires to acquire all right, title and interest in, to and under said invention disclosed, described or claimed or intended so to be in said application, and in, to and under said application, and in, to and under any and all Letters Patent, United States and foreign, which may be obtained therefor and thereon;

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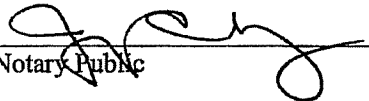


David J. Love

STATE OF INDIANA)
) SS:
COUNTY OF TIPPECANOE)

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My Commission Expires:



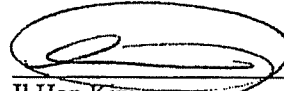
Notary Public

Printed: _____

Resident of _____ County

JENNY C. KELLY, Notary Public
Resident of Tippecanoe County
My Commission Expires: August 24, 2013

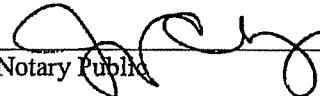
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Il Han Kim

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) SS:
COUNTY OF TIPPECANOE)

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Notary Public

Printed: _____

Resident of _____ County

JENNY C. KELLY, Notary Public
Resident of Tippecanoe County
My Commission Expires: August 24, 2013

WITNESS Assignor's hand this 24th day of March, 2008.

Outside the USA: _____

Witnesses are
required when
acknowledgment
before a Notary
Public is not
Feasible.

Witness

Dong Hoi Kim

Inventor (Signature)

[Signature]

Witness

Jongwon Back

Inventor (Printed Name)

Seung Young Park

STATE OF _____)
) SS:
COUNTY OF _____)

Before me, a Notary Public, in and for said County and State, personally appeared the above-named Assignors, to me personally known, and who executed the foregoing Assignment in my presence and acknowledged the execution thereof as their free and voluntary act and deed for the uses and purposes therein set forth and expressed.

My Commission Expires: _____

Notary Public

Printed: _____

Resident of _____ County