# 503224107 03/18/2015

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3270725

NATURE OF CONVEYAN	NCE:	ASSIGNMENT		
CONVEYING PARTY D				
	АТА			
		Name	Execution Date	
JAEHYUK JANG			02/27/2015	
SOENGHUN KIM			02/27/2015	
GERT-JAN VAN LIESHOUT			02/12/2015	
YOUNGBUM KIM			02/27/2015	
RECEIVING PARTY DA Name:		JNG ELECTRONICS CO., LTD.		
Street Address:	129, SAMSUNG-RO, YEONGTONG-GU			
		SUWON-SI, GYEONGGI-DO		
City:		KOREA, REPUBLIC OF		
State/Country:	KURE	A, REPUBLIC OF		
PROPERTY NUMBERS	Total: 1			
Property Type		Number		
Application Number:		14661459		
CORRESPONDENCE D	ΑΤΑ			
Fax Number:				
		o the e-mail address first; if that is unsu d; if that is unsuccessful, it will be sent v		
Phone:		202-293-0804		
		usdocketing@jeffersonip.com		
Email:				
Email: Correspondent Name: Address Line 1:		JEFFERSON IP LAW, LLP 1130 CONNECTICUT AVE., NW, SUITE 4		

ATTORNEY DOCKET NUMBER:	0203-1555		
NAME OF SUBMITTER:	MAENG-HO SHIN		
SIGNATURE:	/Maeng-Ho SHIN/		
DATE SIGNED:	03/18/2015		
Total Attachments: 7			

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> PATENT REEL: 035192 FRAME: 0306

RECORDATION FORM COVER SHEET PATENTS ONLY					
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.					
1. Name of conveying par	ty(ies)	2. Name and address of receiving party(ies)			
1) Jaehyuk JANG, 2) Soenghun KIM, 3) Gert-Jan VAN LIESHOUT, and 4) Youngbum KIM		Name: Samsung Electronics Co., Ltd.			
and 4) Youngburn Kilvi		Internal Address:			
Additional name(s) of conveying p <b>3. Nature of conveyance/E</b> Execution Date(s) <u>02/27/15; (</u> Assignment Security Agreement Joint Research Agreement Government Interest As Executive Order 9424, ( Other <b>4. Application or patent n</b> A. Patent Application No.(s 14/661,459	D2/27/15; 02/12/15; 02/27/15 Merger Change of Name tent ssignment Confirmatory License umber(s):	Street Address:  129, Samsung-ro, Yeongtong-gu    City:  Suwon-si, Gyeonggi-do    State:			
5 Nome and address to u					
		6. Total number of applications and patents involved: One			
Name: Jefferson IP Law, LLP					
Internal Address: Maeng-Ho S	SHIN	<b>7. Total fee</b> (37 CFR 1.21(h) & 3.41) \$			
internal real cool. <u>maong no c</u>		Authorized to be charged by credit card Authorized to be charged to deposit account			
Street Address: 1130 Connect	icut Avo. NW Suito 420				
Street Address: 1130 Connecticut Ave., NW, Suite 420		None required (government interest not affecting title)			
Citur Washington		8. Payment Information			
City: Washington	7:	a. Credit Card Last 4 Numbers			
State: <u>DC</u>	Zip: <u>20036</u>	Expiration Date			
Phone Number: <u>202-293-0804</u>		b. Deposit Account Number			
Fax Number: <u>202-403-3587</u>		Authorized User Name			
Email Address: <u>usdocketing@</u>	effersonip.com				
9. Signature:	/Maeng-Ho SHIN/ Reg. #5				
	Signature	Date			
	Maeng-Ho SHIN ne of Person Signing	Total number of pages including cover sheet, attachments, and documents: 7			
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: 035192 FRAME: 0307

#### <u>Assignment</u>

WHEREAS, the following inventors, namely 1) Jaehyuk JANG, a citizen of the Republic of Korea, 2) Soenghun KIM, a citizen of the Republic of Korea, 3) Gert-Jan VAN LIESHOUT, a citizen of Netherlands, and 4) Youngbum KIM, a citizen of the Republic of Korea (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

#### RANDOM ACCESS METHOD AND APPARATUS FOR USE IN WIRELESS COMMUNICATION SYSTEM SUPPORTING DUAL CONNECTIVITY,

for which a United States Patent Application is being filed concurrently herewith or, if not being concurrently filed, was filed on <u>March 18, 2015</u>, and assigned Serial No. <u>14/661,459</u>; and,

WHEREAS, Samsung Electronics Co., Ltd., a corporation duly organized under the laws of the Republic of Korea, located and doing business at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, 443-742 (hereinafter called "Assignee"), is desirous of acquiring the entire right, title and interest therein;

NOW, THEREFORE, BE IT KNOWN that for and in good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors do hereby sell, assign and transfer unto said Assignee the entire and exclusive worldwide right, title and interest in and to all said inventions and discoveries disclosed in said application, and in and to said application, any and all substitutions, divisions, provisionals, conversions of provisionals and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals and reissues thereof; and the right to file any foreign application and/or claim priority under the provisions of any international treaty or convention arising from this application or any divisional, continuing, substitute or reissue application therefrom. The aforesaid assignment includes the right in and to all income, royalties, damages and payments, now or hereafter due or payable with respect to any Letters Patent which may be granted, and in and to all causes of action (either in law or in equity), and the right to sue, counterclaim, and recover for past, present and future infringement of the rights assigned or to be assigned under this Assignment, as fully and entirely as the same would have been held and enjoyed by Assignors if this sale, assignment and transfer had not been made.

Assignors covenant and agree, without further compensation to said Assignors but at Assignee's expense:

- a. to execute:
  - i. all papers to be used in connection with this application and any divisional, continuing, substitute or reissue application thereof, as the Assignee may deem necessary or expedient, and

PATENT REEL: 035192 FRAME: 0308

- all papers in connection with any interference, litigation, mediation, arbitration or other proceeding relating to this application or any divisional, continuing, substitute or reissue application thereof, as may be necessary or expedient;
- b. to cooperate with the Assignee in every way possible in obtaining evidence and going forward in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof;
- c. to communicate to the Assignee any facts relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof, including evidence for any interference, litigation, mediation, arbitration or other proceeding relating to said invention, whenever requested;
- d. to testify in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof whenever requested; and
- e. to perform all other affirmative acts which may be necessary or desirable to secure full and complete protection of the inventions and discoveries or that may be necessary or desirable to vest in Assignee the complete title to the inventions and discoveries and Letters Patent hereby conveyed and to enable Assignee to record title.

Assignors hereby authorize and request the United States Patent and Trademark Office or any other issuing authority to issue any and all Letters Patent that may be granted upon this invention and/or this application or any divisional, continuing, substitute or reissue application thereof to the Assignee, its legal representatives, successors and assigns.

Assignors each hereby represents, covenants and warrants that he or she has the full right to convey the entire right, title and interest by this instrument, free of any encumbrances and that no other agreement has been or will be executed in conflict herewith.

The provisions of this Assignment are binding upon Assignors' heirs, legal representatives and/or administrators and assigns.

Assignors hereby grant to the law firm of Jefferson IP Law, LLP of Washington, DC and its attorneys and agents as associated with Customer No. 68103 the authority and power to insert on this instrument any further identification which may be necessary or desirable for purposes of recordation in the United States Patent and Trademark Office or a Patent Office of any foreign country.

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Signature of Inventor:	Jaehyuk JANG	February 27,2015 Date
Signature of Inventor:	Soenghun KIM	<u>February &gt;9, &gt;015</u> Date
Signature of Inventor:		
	Gert-Jan VAN LIESHOUT	Date
Signature of Inventor:	Youngbum KIM	February 29,2015 Date
		prine a veni

#### <u>Assignment</u>

WHEREAS, the following inventors, namely 1) Jaehyuk JANG, a citizen of the Republic of Korea, 2) Soenghun KIM, a citizen of the Republic of Korea, 3) Gert-Jan VAN LIESHOUT, a citizen of Netherlands, and 4) Youngbum KIM, a citizen of the Republic of Korea (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

#### RANDOM ACCESS METHOD AND APPARATUS FOR USE IN WIRELESS COMMUNICATION SYSTEM SUPPORTING DUAL CONNECTIVITY,

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WHEREAS, Samsung Electronics Co., Ltd., a corporation duly organized under the laws of the Republic of Korea, located and doing business at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, 443-742 (hereinafter called "Assignee"), is desirous of acquiring the entire right, title and interest therein;

NOW, THEREFORE, BE IT KNOWN that for and in good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors do hereby sell, assign and transfer unto said Assignee the entire and exclusive worldwide right, title and interest in and to all said inventions and discoveries disclosed in said application, and in and to said application, any and all substitutions, divisions, provisionals, conversions of provisionals and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals and reissues thereof; and the right to file any foreign application and/or claim priority under the provisions of any international treaty or convention arising from this application or any divisional, continuing, substitute or reissue application therefrom. The aforesaid assignment includes the right in and to all income, royalties, damages and payments, now or hereafter due or payable with respect to any Letters Patent which may be granted, and in and to all causes of action (either in law or in equity), and the right to sue, counterclaim, and recover for past, present and future infringement of the rights assigned or to be assigned under this Assignment, as fully and entirely as the same would have been held and enjoyed by Assignors if this sale, assignment and transfer had not been made.

Assignors covenant and agree, without further compensation to said Assignors but at Assignee's expense:

- a. to execute:
  - i. all papers to be used in connection with this application and any divisional, continuing, substitute or reissue application thereof, as the Assignee may deem necessary or expedient, and

- all papers in connection with any interference, litigation, mediation, arbitration or other proceeding relating to this application or any divisional, continuing, substitute or reissue application thereof, as may be necessary or expedient;
- b. to cooperate with the Assignee in every way possible in obtaining evidence and going forward in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof;
- c. to communicate to the Assignee any facts relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof, including evidence for any interference, litigation, mediation, arbitration or other proceeding relating to said invention, whenever requested;
- d. to testify in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof whenever requested; and
- e. to perform all other affirmative acts which may be necessary or desirable to secure full and complete protection of the inventions and discoveries or that may be necessary or desirable to vest in Assignee the complete title to the inventions and discoveries and Letters Patent hereby conveyed and to enable Assignee to record title.

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Signature of Inventor:		
	Jachyuk JANG	Date
Signature of Inventor:		
	Soenghun KIM	Date
Signature of Inventor:	Gert-Jan VAN LIESHOUT	12 Feb 2015 Date
Signature of Inventor:		
	Youngbum KIM	Date

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**RECORDED: 03/18/2015**