503477978 09/14/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3524603

		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY	ΔΤΔ			
		Name	Execution Date	
BOKDEUK JEONG			09/10/2015	
SUNGMIN LEE			09/11/2015	
RECEIVING PARTY D	ΑΤΑ			
Name:	ame: SAMSUNG ELECTRONICS CO., LTD.			
Street Address:	129, SAM	129, SAMSUNG-RO		
Internal Address: YEONGTONG-GU				
City:	SUWON-	SUWON-SI, GYEONGGI-DO		
State/Country:	KOREA,	KOREA, REPUBLIC OF		
Postal Code:	16677			
PROPERTY NUMBERS		Number		
Annulis attain Missis In		·		
Application Number:	14	1775801		
		4775801		
CORRESPONDENCE	DATA			
CORRESPONDENCE	DATA (3	12)775-8100	s unsuccessful, it will be sent	
CORRESPONDENCE Fax Number: <i>Correspondence will I</i> <i>using a fax number, if</i>	DATA (3 be sent to th provided; h	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be		
CORRESPONDENCE Fax Number: <i>Correspondence will I using a fax number, if</i> Phone:	DATA (3 be sent to th provided; 1 (3	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be 12) 775-8000		
CORRESPONDENCE Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email:	DATA (3 be sent to th provided; 1 (3 m	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be 12) 775-8000 hmpto@mcandrews-ip.com	e sent via US Mail.	
CORRESPONDENCE Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name:	DATA (3 be sent to th provided; 1 (3 m	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be 12) 775-8000 hmpto@mcandrews-ip.com CANDREWS, HELD & MALLOY,	e sent via US Mail. LTD.	
CORRESPONDENCE Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1:	DATA (3 be sent to the provided; 1 (3 m :	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be 12) 775-8000 hmpto@mcandrews-ip.com CANDREWS, HELD & MALLOY, 00 W. MADISON STREET, 34TH	e sent via US Mail. LTD.	
CORRESPONDENCE Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name:	DATA (3 be sent to the provided; 1 (3 m :	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be 12) 775-8000 hmpto@mcandrews-ip.com CANDREWS, HELD & MALLOY,	e sent via US Mail. LTD.	
CORRESPONDENCE Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	DATA (3 be sent to th provided; 1 (3 m 50 50 Cl	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be 12) 775-8000 hmpto@mcandrews-ip.com CANDREWS, HELD & MALLOY, 00 W. MADISON STREET, 34TH	e sent via US Mail. LTD. FLOOR	
CORRESPONDENCE Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	DATA (3 be sent to the provided; 1 (3 m (3 m 50 Cl UMBER:	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be 12) 775-8000 hmpto@mcandrews-ip.com CANDREWS, HELD & MALLOY, 00 W. MADISON STREET, 34TH HICAGO, ILLINOIS 60661	e sent via US Mail. LTD. FLOOR	
CORRESPONDENCE Fax Number: Correspondence will I using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET N NAME OF SUBMITTER:	DATA (3 be sent to the provided; 1 (3 m (3 m 50 Cl UMBER:	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be 12) 775-8000 hmpto@mcandrews-ip.com CANDREWS, HELD & MALLOY, 00 W. MADISON STREET, 34TH HICAGO, ILLINOIS 60661 29928US01 (YPF201403-003)	e sent via US Mail. LTD. FLOOR	
CORRESPONDENCE Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1:	DATA (3 be sent to the provided; 1 (3 m (3 m 50 Cl UMBER:	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be 12) 775-8000 hmpto@mcandrews-ip.com CANDREWS, HELD & MALLOY, 00 W. MADISON STREET, 34TH HICAGO, ILLINOIS 60661 29928US01 (YPF201403-003 WILHELM L. RAO	e sent via US Mail. LTD. FLOOR	
CORRESPONDENCE Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET N NAME OF SUBMITTER: SIGNATURE:	DATA (3 be sent to the provided; 1 (3 m (3 m 50 Cl UMBER:	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be 12) 775-8000 hmpto@mcandrews-ip.com CANDREWS, HELD & MALLOY, 00 W. MADISON STREET, 34TH HICAGO, ILLINOIS 60661 29928US01 (YPF201403-003 WILHELM L. RAO /Wilhelm L. Rao/	e sent via US Mail. LTD. FLOOR	
CORRESPONDENCE Fax Number: Correspondence will I using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET N NAME OF SUBMITTER: SIGNATURE: DATE SIGNED:	DATA (3 be sent to the provided; 1 (3 m (3 m 50 Cl UMBER:	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be 12) 775-8000 hmpto@mcandrews-ip.com CANDREWS, HELD & MALLOY, 00 W. MADISON STREET, 34TH HICAGO, ILLINOIS 60661 29928US01 (YPF201403-003 WILHELM L. RAO /Wilhelm L. Rao/ 09/14/2015	e sent via US Mail. LTD. FLOOR	
CORRESPONDENCE Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET N NAME OF SUBMITTER: SIGNATURE: DATE SIGNED: Total Attachments: 3	DATA (3 be sent to the provided; 1 (3 m (3 m 50 Cl UMBER:	12)775-8100 he e-mail address first; if that is if that is unsuccessful, it will be 12) 775-8000 hmpto@mcandrews-ip.com CANDREWS, HELD & MALLOY, 00 W. MADISON STREET, 34TH HICAGO, ILLINOIS 60661 29928US01 (YPF201403-003 WILHELM L. RAO /Wilhelm L. Rao/ 09/14/2015 age1.tif	e sent via US Mail. LTD. FLOOR	

Ckent Ref. No. YPF201403-0003/US-PCT_DMC (GN-201209-018-1-US0) Attorney Docket No. 29928US01

ASSIGNMENT

AS A BELOW NAMED INVENTOR, I and each of us, individually hereby declare that: IN CONSIDERATION of the sum of TEN (\$10.00) or the equivalent thereof, and other good and valuable consideration, the receipt of which from the hereinafter named ASSIGNEE is hereby acknowledged, I do hereby sell, assign and forever grant and convey unto:

ASSIGNEE: Samsung Electronics Co., Ltd.

ADDRESS: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677 Republic of Korea

Who is my ASSIGNEE, and to the successors and assigns of my ASSIGNEE, all my right, title and interest, in and for the United States of America and all other countries, including all rights of priority, in and to the invention entitled;

TITLE: KEY VALUE-BASED DATA STORAGE SYSTEM AND OPERATION METHOD THEREOF

invented by me (if only one inventor is named below) or us (if more than one inventor is named below) and described in an application for a United States patent, the specification of which is either attached hereto or otherwise accompanies this Assignment or indicates an Attorney Docket No. 29928US01, or is more particularly identified as:

- executed on even date herewith, or
- X Serial No. <u>14/775,801</u> filed in the U.S. Patent and Trademark Office on <u>September 14, 2015</u>, or
- _____executed on ______,

and in and to all United States patents which may be granted thereon and therefore, and in and to all certificates of corrections, divisions, continuations, continuations-in-part, divisionals, designs, appeals, reissues, reexaminations, substitutions and any extensions thereof; said interest being the entire ownership of the patent when granted, to be held and enjoyed by said **SAMSUNG ELECTRONICS CO., LTD.**, my ASSIGNEE, its successors, assigns or other legal representatives, to the full end of the term, terms or any extension of renewal thereof, for which said patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment, sale and conveyance had not been made;

AND I hereby covenant and agree to sign and execute any further documents or instruments which may from time-to-time be either necessary, lawful, proper or requested by the ASSIGNEE, in the prosecution of the above-named application or in the preparation and prosecution of any certificate of correction, division, continuation, continuation-in-part, reissue, reexamination, in any amendment, extension or interference proceeding, whether administrative or judicial, or otherwise, to secure the title hereto in said ASSIGNEE;

Client Ref. No. YPF201403-0003/US-PCT_DMC (GN-201209-018-1-US0) Attorney Docket No. 29928US01

AND I do hereby authorize and request the Commissioner of Patents and Trademarks to issue said patent for said invention, or patents resulting therefrom, insofar as our interest is concerned, to the said ASSIGNEE of our entire right, title and interest.

AND I further authorize and direct the ASSIGNEE and its attorney to insert above, the serial number and filing date of said application now identified as Attorney Docket No. 29928US01, as soon as the same shall have been made known to them by the United States Patent and Trademark Office.

AND I further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto, and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, I/we have set our hands and seals on the dates written beside my/our respective names:

INVENTOR 1

ASSIGNOR:

Bacdenic Jerry-

Date: Sep. 10. 2015

Bokdeuk JEONG

74 मले

Date: Sep 11, 2015

Witness Signature Jihyun KIM

Witness Name (Printed)

Client Ref. No. YPF201403-0003/US-PCT_DMC (GN-201209-018-1-US0) Attorney Docket No. 29928US01

INVENTOR 2

ASSIGNOR; 211~ Sungmin L/EE

Gep 11., 2015 Date:

召入党

Sep 11, 2015 Date:

Witness Signature Jihyun KIM

Witness Name (Printed)

Page 3 of 3

RECORDED: 09/14/2015