

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5769546

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the THE SPELLING OF THE FOURTH NAMED INVENTOR previously recorded on Reel 044600 Frame 0714. Assignor(s) hereby confirms the CHANGO CHO SHOULD BE CHANGHO CHOI.

CONVEYING PARTY DATA

Name	Execution Date
JANKI SHARADKUMAR BHIMANI	12/22/2017
RAJINIKANTH PANDURANGAN	12/22/2017
VIJAY BALAKRISHNAN	12/22/2017
CHANGHO CHOI	12/22/2017

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.
Street Address:	129, SAMSUNG-RO, YEONGTONG-GU
City:	SUWON-SI, GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	16677

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15853419

CORRESPONDENCE DATA

Fax Number: (626)577-8800
Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 626-795-9900
Email: pto@lrrc.com
Correspondent Name: LEWIS ROCA ROTHGERBER CHRISTIE LLP
Address Line 1: PO BOX 29001
Address Line 4: GLENDALE, CALIFORNIA 91209

ATTORNEY DOCKET NUMBER:	145689/MJC/FMO
NAME OF SUBMITTER:	FRANCES M. O'BRIEN
SIGNATURE:	/Frances M. O'Brien/
DATE SIGNED:	10/14/2019
Total Attachments: 7	

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SAMSUNG ELECTRONICS CO., LTD.

COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY OR DESIGN PATENT APPLICATION AND ASSIGNMENT FORM¹

The undersigned acknowledges that this document is being used both as an assignment of the invention and as the declaration (37 CFR 1.63) for a Utility or Design Application.

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

Title: METHODS AND SYSTEMS FOR TESTING STORAGE DEVICES VIA A REPRESENTATIVE I/O GENERATOR

for which Assignor is about to make or has made United States or International application for patent.

WHEREAS, as a below named inventor(s), I/(we) hereby declare that:

Section I. Declaration

This declaration is directed to:

- The attached U.S. non-provisional patent application, or
- U.S. non-provisional patent application number _____, filed on _____, or
- PCT international patent application number _____, filed on _____

The above-identified application was made or authorized to be made by me (us).

I (we) believe that I am (we are) the original inventor (original joint inventors) of a claimed invention in the above-identified application.



¹ This form requires the use of an Application Data Sheet.

SEC Ref No. WB-201708-002-1 Attorney Ref No. 145689

SAMSUNG ELECTRONICS CO., LTD.

I (we) hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims.

I acknowledge that I am aware of the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

Section II. Assignment

In consideration of and according to the provisions of the Assignor's employment agreement(s), the undersigned hereby sell(s) and assign(s) to

Samsung Electronics Co., Ltd.

having an address at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677, Republic of Korea (hereinafter designated as the Assignee), the entire (100%) right, title and interest for the United States as defined in 35 USC §100, in the invention or design described in the application identified in Section I of this document.

Assignor hereby confirms any prior assignment to Assignee, and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions or designs as described in the aforesaid application, to the aforesaid application itself, and to provisional application(s) 62/559,447 to which the aforesaid application claims priority, and to all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application or provisional, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights

SEC Ref No. WB-201708-002-1 Attorney Ref No. 145689

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relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights;


Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee.

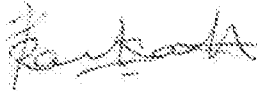
The undersigned hereby grant(s) the law firm of LEWIS ROCA ROTHGERBER CHRISTIE LLP the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.


Section III. Inventor(s)/Assignor(s) Signature(s)


LEGAL NAME OF FIRST INVENTOR/ASSIGNOR	Family Name	First Given Name	Second Given Name
	BHIMANI	Janki	Sharadkumar
SIGNATURE		DATE	12/22/17

SEC Ref No. WB-201708-002-1 Attorney Ref No. 145689

SAMSUNG ELECTRONICS CO., LTD.

LEGAL NAME OF SECOND INVENTOR/ASSIGNOR	Family Name	First Given Name	Second Given Name
	PANDURANGAN	Rajinikanth	
SIGNATURE		12/22/17 DATE	

LEGAL NAME OF THIRD INVENTOR/ASSIGNOR	Family Name	First Given Name	Second Given Name
	BALAKRISHNAN	Vijay	
SIGNATURE		12/22/17 DATE	

LEGAL NAME OF FOURTH INVENTOR/ASSIGNOR	Family Name	First Given Name	Second Given Name
	CHOI	Changho	
SIGNATURE		12/22/17 DATE	

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SEC Ref No. WB-201708-002-1 Attorney Ref No. 145689

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4772289

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
JANKI SHARADKUMAR BHIMANI	12/22/2017
RAJINIKANTH PANDURANGAN	12/22/2017
VIJAY BALAKRISHNAN	12/22/2017
CHANGO CHO	12/22/2017
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State/Country:	KOREA, REPUBLIC OF
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PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15853419
CORRESPONDENCE DATA	
Fax Number:	(626)577-8800
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	626 795-9900
Email:	pto@lrrc.com
Correspondent Name:	LEWIS ROCA ROTHGERBER CHRISTIE LLP
Address Line 1:	P.O. BOX 29001
Address Line 4:	GLENDALE, CALIFORNIA 91209
ATTORNEY DOCKET NUMBER:	145689 (414471) MJC/VDW
NAME OF SUBMITTER:	VICKIE D. WALL
SIGNATURE:	/Vickie D. Wall/
DATE SIGNED:	01/11/2018
Total Attachments: 4	
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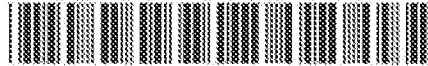
UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

May 10, 2018

PTAS

LEWIS ROCA ROTHGERBER CHRISTIE LLP
P.O. BOX 29001
GLENDALE, CA 91209



504743939

United States Patent and Trademark Office
Notice of Non-Recordation of an Assignment Document

The enclosed document has been examined and found non-recordable by the Assignment Recordation Branch of the U.S. Patent and Trademark Office. The reason(s) for non-recordation are stated below:

1. The document submitted to correct errors in the previously recorded document is not acceptable. To correct an error in the recorded document, you must file a new cover sheet stating the error and the nature of conveyance, attach the previously recorded cover sheet which contains the error and the supporting document and pay the recording fees as set forth in 37 C.F.R. §3.34

Documents being resubmitted for recordation must reflect the corrected information to be recorded, the Document ID number referenced above and all pages from this submitted document. The original date of filing of this assignment document will be maintained if resubmitted with the appropriate correction(s) by **Tuesday, July 10, 2018**, as outlined under 37 CFR 3.51. The resubmitted document must include a stamp with the official date of receipt under 37 CFR 3. Applicants may use the certified procedures under 37 CFR 1.8 or 1.10 for resubmission of the returned papers if they desire to have the benefit of the date of deposit in the United States Postal Service.

To file the resubmission electronically, navigate to the EPAS website at <http://epas.uspto.gov>, click the Start Resubmission button and enter the following information:

Document ID: 504743939
Access Code: KH619J7MCPC7WTZ

To file the resubmission in paper, send documents to: U.S. Patent and Trademark Office, Mail Stop: Assignment Recordation Branch, P.O. BOX 1450, Alexandria, VA 22313. If you have any questions regarding this notice, you may contact the Assignment Recordation Branch at 571-272-3350.

LAZENA MARTIN
ASSIGNMENT RECORDATION BRANCH
PUBLIC RECORDS DIVISION

PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT4790667

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Correspondent Name:	LEWIS ROCA ROTHGERBER CHRISTIE LLP	
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NAME OF SUBMITTER:	VICKIE D. WALL	
SIGNATURE:	/Vickie D. Wall/	
DATE SIGNED:	01/24/2018	
Total Attachments: 4		