505712204 10/08/2019

EPAS ID: PAT5759014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YOO JIN CHOI	09/17/2019
MOSTAFA EL-KHAMY	09/17/2019
JUNGWON LEE	09/18/2019

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:	16576166

CORRESPONDENCE DATA

Fax Number: (516)228-8475

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: 5162283565

Email: genmail@farrelliplaw.com

PAUL J. FARRELL **Correspondent Name:**

Address Line 1: 290 BROADHOLLOW ROAD

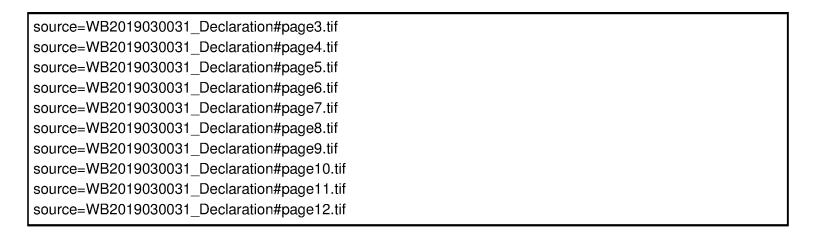
Address Line 2: SUITE 210 E

Address Line 4: MELVILLE, NEW YORK 11747

	This document serves as an Oath/Declaration (37 CFR 1.63).
DATE SIGNED:	10/08/2019
SIGNATURE:	/pjf/
NAME OF SUBMITTER:	PAUL J. FARRELL
ATTORNEY DOCKET NUMBER:	2180-173

Total Attachments: 12

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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: METHOD AND APPARATUS FOR VARIABLE RATE COMPRESSION WITH A Title: CONDITIONAL AUTOENCODER 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: \boxtimes The attached U.S. non-provisional patent application, or U.S. non-provisional patent application number $\frac{16/576,166}{}$, filed on 9/19/2019 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-201903-003-1 Attorney Ref No. 2180-173 COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM

Page 1 of 4

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) 62/820,148 and 62/860,522, filed on March 18, 2019 and June 12, 2019, respectively, 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-201903-003-1	Attorney Ref No.	2180-173
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SAMSUNG ELECTRONICS CO., LTD.

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.

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SEC Ref No.	WB-201903-003-1	Attorney Ref No	2180-173
COMBINED DE	CLARATION (37 CFR 1.63) FOR U	JTILITY PATENT APPLICATION	AND ASSIGNMENT FORM

Page 3 of 4

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

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SIGNATURE _		DATE 	
INVENTOR/ASSIGNOR	EL-KHAMY	Mostafa	
LEGAL NAME OF SECOND	Family Name	First Given Name	Second Given Name
SIGNATURE _	Gooth Chro	DATE	9/17/2019
INVENTOR/ASSIGNOR			
FIRST	Family Name CHOI	Yoo Jin	Second Given Name

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 4 of 4

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

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Page 1 of 4

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Samsung Electronics Co., Ltd.

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SEC Ref No	WB-201903-003-1	Attorney Ref No.	2180-173

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SEC Ref No.	WB-201903-003-1	Attorney Ref No.	2180-173
_			

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

	Family Name	First Given Name	Second Given Name
FIRST INVENTOR/ASSIGNOR	СНОІ	Yoo Jin	
SIGNATURE		DATE —	
LEGAL NAME OF SECOND	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	EL-KHAMY	Mostafa	
·	Mallen	_	9/17/2019
LEGAL NAME OF THIRD	Family Name	First Given Name	Second Given Name
LEGAL NAME OF			
LEGAL NAME OF THIRD	Family Name	First Given Name	
LEGAL NAME OF THIRD NVENTOR/ASSIGNOR	Family Name	First Given Name Jungwon DATE	
LEGAL NAME OF THIRD INVENTOR/ASSIGNOR	Family Name LEE	First Given Name Jungwon DATE	

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 4 of 4

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COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM

SEC Ref No. WB-201903-003-1

REEL: 050652 FRAME: 0647

Attorney Ref No. 2180-173

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SIGNATURE _		DATE	
LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SECOND INVENTOR/ASSIGNOR	EL-KHAMY	Mostafa	
SIGNATURE _		DATE	
LEGAL NAME OF	Family Name	First Given Name	Second Given Name
THIRD INVENTOR/ASSIGNOR	LEE	Jungwon	
ي SIGNATURE	14	DATE 	9/18/19
SEC Ref No WB -	-201903-003-1	Attorney Ref No.	2180-173

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 4 of 4

PATENT REEL: 050652 FRAME: 0650

RECORDED: 10/08/2019