505754538 11/01/2019 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5801351

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY	DATA			
			Name	Execution Date
HYUNG-IL WOO				01/16/2017
	ΑΤΑ			
Name:	SAMS	UNG I	ELECTRONICS CO., LTD.	
Street Address:	129, S	AMSL	JNG-RO, YEONGTONG-GU	
City:	SUWC	N-SI,	GYEONGGI-DO	
State/Country:	KORE	A, RE	PUBLIC OF	
Postal Code:	16677			
PROPERTY NUMBER	RS Total: 1	1		-
Property Typ	е		Number	
Application Number: 15614		4715		
CORRESPONDENCE	DATA	/		
		(571)	283-0740	
	he could	• •	a mail adduces final, if that is up	auroaceful it will be cont
		o the	e-mail address first; if that is un hat is unsuccessful, it will be sei	
Correspondence will using a fax number,		o the d; if tl		
Correspondence will		o the d; if tl 5712	hat is unsuccessful, it will be se	
<i>Correspondence will using a fax number,</i> Phone:	if provide	o the d; if tl 5712 aloon	hat is unsuccessful, it will be se i 830720	nt via US Mail.
Correspondence will using a fax number, Phone: Email: Correspondent Name Address Line 1:	if provide	o the d; if th 5712 aloon VOLE 1195	<i>hat is unsuccessful, it will be sei</i> 830720 nis@volentine.com ENTINE, WHITT & FRANCOS, PL 1 FREEDOM DRIVE, SUITE 1300	nt via US Mail. LC
Correspondence will using a fax number, Phone: Email: Correspondent Name	if provide	o the d; if th 5712 aloon VOLE 1195	<i>hat is unsuccessful, it will be sei</i> 830720 nis@volentine.com ENTINE, WHITT & FRANCOS, PL	nt via US Mail. LC
Correspondence will using a fax number, Phone: Email: Correspondent Name Address Line 1: Address Line 4:	if provide	o the d; if tl 5712 aloon VOLE 1195 RES	<i>hat is unsuccessful, it will be sei</i> 830720 nis@volentine.com ENTINE, WHITT & FRANCOS, PL 1 FREEDOM DRIVE, SUITE 1300	nt via US Mail. LC
Correspondence will using a fax number, Phone: Email: Correspondent Name Address Line 1: Address Line 4:	if provide	o the d; if tl 5712 aloon VOLE 1195 RES	hat is unsuccessful, it will be set 830720 nis@volentine.com ENTINE, WHITT & FRANCOS, PL 1 FREEDOM DRIVE, SUITE 1300 TON, VIRGINIA 20190	nt via US Mail. LC
Correspondence will using a fax number, Phone: Email: Correspondent Name Address Line 1: Address Line 4: ATTORNEY DOCKET NAME OF SUBMITTER	if provide	o the d; if tl 5712 aloon VOLE 1195 RES	hat is unsuccessful, it will be set 830720 nis@volentine.com ENTINE, WHITT & FRANCOS, PL 1 FREEDOM DRIVE, SUITE 1300 TON, VIRGINIA 20190 SEC.4176	nt via US Mail. LC
Correspondence will using a fax number, Phone: Email: Correspondent Name Address Line 1: Address Line 4: ATTORNEY DOCKET NAME OF SUBMITTER SIGNATURE:	if provide	o the d; if tl 5712 aloon VOLE 1195 RES	hat is unsuccessful, it will be sel 830720 nis@volentine.com ENTINE, WHITT & FRANCOS, PL 1 FREEDOM DRIVE, SUITE 1300 TON, VIRGINIA 20190 SEC.4176 ADAM C. VOLENTINE	nt via US Mail. LC
Correspondence will using a fax number, Phone: Email: Correspondent Name Address Line 1:	if provide	o the d; if tl 5712 aloon VOLE 1195 RES	hat is unsuccessful, it will be set 830720 nis@volentine.com ENTINE, WHITT & FRANCOS, PL 1 FREEDOM DRIVE, SUITE 1300 TON, VIRGINIA 20190 SEC.4176 ADAM C. VOLENTINE /ADAM C. VOLENTINE/	nt via US Mail. LC
Correspondence will using a fax number, Phone: Email: Correspondent Name Address Line 1: Address Line 4: ATTORNEY DOCKET NAME OF SUBMITTER SIGNATURE:	if provide	o the d; if tl 5712 aloon VOLE 1195 RES	hat is unsuccessful, it will be sel 830720 nis@volentine.com ENTINE, WHITT & FRANCOS, PL 1 FREEDOM DRIVE, SUITE 1300 TON, VIRGINIA 20190 SEC.4176 ADAM C. VOLENTINE /ADAM C. VOLENTINE/ 11/01/2019	nt via US Mail. LC
Correspondence will using a fax number, Phone: Email: Correspondent Name Address Line 1: Address Line 4: ATTORNEY DOCKET NAME OF SUBMITTER SIGNATURE: DATE SIGNED:	if provide S: NUMBER: R:	o the d; if tl 5712 aloon VOLE 1195 RES	hat is unsuccessful, it will be set 830720 nis@volentine.com ENTINE, WHITT & FRANCOS, PL 1 FREEDOM DRIVE, SUITE 1300 TON, VIRGINIA 20190 SEC.4176 ADAM C. VOLENTINE /ADAM C. VOLENTINE/ 11/01/2019 This document serves as an Oatl	nt via US Mail. LC
Correspondence will using a fax number, Phone: Email: Correspondent Name Address Line 1: Address Line 4: ATTORNEY DOCKET NAME OF SUBMITTER SIGNATURE: DATE SIGNED: Total Attachments: 3	if provide S: NUMBER: R: signment_ signment_	o the d; if th 5712 aloon VOLE 1195 RES RES	hat is unsuccessful, it will be set 830720 nis@volentine.com ENTINE, WHITT & FRANCOS, PL 1 FREEDOM DRIVE, SUITE 1300 TON, VIRGINIA 20190 SEC.4176 ADAM C. VOLENTINE /ADAM C. VOLENTINE/ 11/01/2019 This document serves as an Oath #page1.tif #page2.tif	nt via US Mail. LC

SAMSUNG ELECTRONICS CO., LTD.

COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY 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: INTEGRATED CIRCUIT AND APPLICATION PROCESSOR

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



 \boxtimes

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.

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.

This form requ	ires the use of an Application Data Si	neet.		
EC Ref No.	IB-201605-067-1-US0	Attacase Dat Na	SS-52633-US	
36X, AME 180.	117-2011900-0007-1-0,000	Attorney Ref No.	SEC.4176	

REEL: 050895 FRAM

Page 1 of 3

SAMSUNG ELECTRONICS CO., LTD.

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 the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, 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 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 as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, 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 Assignce 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 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,

SEC Ref No.	SEC	Ref	No.	
-------------	-----	-----	-----	--

IB-201605-067-1-US0

Attorney Ref No.

SS-52633-US SEC.4176

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

学習還12215882122834158 20175118143489

Page 2 of 3

PATENT[®] REEL: 050895 FRAME: 0159 SAMSUNG ELECTRONICS CO., LTD.

divisional, renewal or substitute thereof, and as to letters patent any reissue, reexamination, 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 VOLENTINE & WHITT, PLLC 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)



RECORDED: 11/01/2019

REEL: 050895 FRAME: 0160