PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PAN-KWI PARK	03/16/2015
DONG-SUK SHIN	04/24/2015
SEOK-JUN WON	04/24/2015
WEON-HONG KIM	03/16/2015
JAE-GON LEE	04/01/2015

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.
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City:	SUWON-SI, GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	443-742

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14697266

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ATTORNEY DOCKET NUMBER:	SEC.3749
NAME OF SUBMITTER:	ADAM C. VOLENTINE
SIGNATURE:	/ADAM C. VOLENTINE/
DATE SIGNED:	04/28/2015
	This document serves as an Oath/Declaration (37 CFR 1.63).
	•

Total Attachments: 5

PATENT REEL: 035508 FRAME: 0741



PATENT REEL: 035508 FRAME: 0742

COMBINED DECLARATION (EXCUSE) SOLITOR AND THE PARENT APPLICATION AND ASSOCIATION AND

The undersigned acknowledges that this document is being used both as an assignment of the invention and as the declaration (57 CFR 1,63) for a Unitry or Design Application.

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

N.	THOOS OF MANUFACTURING SEMICONOUS	TOR DEVICES	
ior which A	Cignor Nabout to make or has made United	i States of International a	pplication
WHEREAS,	as a below named inventor(s), I/(we) haveby	declare that	
Section I. E	Xeciaration		
	Nion is directed to		
	The attached U.S. non-providensi paten	Capplication, or	
	U.S. non-provisional patent application of	omber	, nied
	PCT international patent application num	t w	Medico
The above	lder Med application was made or authorize	d to be made by me (us)	
(0,000,000), <u>2000,000</u> , quencos 2010, 60	ve that I am (we are) the original Inventor (or I the above-identified application.	riginal joint inventors) of	aciained
	by acknowledge that any willful faite statems under 18 U.S.C. 1601 by fine or imprisonmer		
The forms	es un es Photose of an Apollogico Debo Stess		
	38-203402-032-1-150 Aftom	sty Ref No. 5E.C.	1749

COMMENSO DECLARATION (37 CFC 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 1.945

thereby state that there reviewed and understand the contemp 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 4 1.56

Section II. Assignment

In consideration of the sum of One Dollar (STDO) and other your and value be consideration. Bald to each of the undersigned, the undersigned hereby sell(s) and assign(s) to

Samsing Electronics Co., Ltd.

having an address at 125, Samsong co. Yeongtong gu, Suworesi, Gyeonggi-do 443-742, Republic of Korea Thereinafter designated as the Apagree), the entire (100%) right, little and Interest for the United States as defined in 35 USC 9100, in the invention described in the application Identified in Section Lof this document.

Assignor hereby confirms any orion assignment to Assignee, and to the extent that Assignor has not already done so, agrees to action, and hereby does, and, assign and penefer unto Assigned and its successors in interest, the full and exclusive right, little 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 Pavis 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 aforesald 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 aforestid application and the subject matter disclosed therein, these rights. fille and interest to be held and enjoyed by Assignes 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 rue for, and recover for past infilingements 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 coveries is 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 amiliar 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 relaxue, re

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Page 2 of 5

Examination, or extension the collision for ingoloring print, or figure purpose of protecting title and to the Gald Invention, the United States application for patent, or Larrers Palant Therefor, and to tently in support the collision to be need of Assigner without for the or other compensation than that above set for the

Assigned hereby coverages that no assignment, sale, its rese, agreement or encombrance, has been or will be entered into which would conflict with this Assignment, and

A signer hereby requests the United States valent and Tradement Office to Esse the Letters Patent of the United States of American States, whose pury it is to esse or grant patents buildly of countries foreign to the United States, whose pury it is to esse or grant patents and applications as aforesald, to issue the Letters Patent States Model Resistance of extending builds right to Assense.

The undersigned hereby grant(s) the law firm of VOLENTINE & WHITT, PLIC 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. Patern and Trademark Office for recordation of this document.

Section 13. Inventorical Assignments September 5

		inst Given Name	Second Close Name
This ENTERVALUE	PANX	PAN-KWI	
SIGNATURE	14. Juli	DATE	2018/6/16

SEC Not No. IB-281402-932-1-4580 Astorney Refine SEC 3749

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FOAL NAME OF		
INVENTOR/ASSKINOR		
SKRATURE	DATE	

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TMRO VVONTOR/ASSIGNOR	WON	SEQUOUN	
SIGNATURE		3740	2017/04/24

INVENTOR/ASSIGNOR	LEGAL NAME OF	Family Name		Secure Given Name
		KW	W/(QN-HONG	
SIGNATURE (2/27/1/08/1/20/7)			0/11	

Attorney Belling SEC Ref No. 138-201402-032-1-1/50

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COMBINED DECLARATION (37 OF 1.53) FOR UTUITY PATENT APPLICATION AND ASSIGNMENT FORM. Page 4 of 5

SAME UNITED THE NO. OF CO., LTD.

LIGAL NAME ()		Frst Governance	Second Given Name
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SIGNATURE	Zer Jo Gm	DATE	>~: //

SEC Ref No. (B. 201402-032.1-174) Associety Ref No. SYX: \$749

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