504349364 05/03/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HWIDONG NA	04/17/2017

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.	
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State/Country:	KOREA, REPUBLIC OF	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15585377

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NAME OF SUBMITTER:	BRIAN J. HAIRSTON
SIGNATURE:	/Brian J. Hairston/
DATE SIGNED:	05/03/2017

Total Attachments: 2

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PATENT 504349364 REEL: 042224 FRAME: 0500

COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

DECLARATION

As a below-named inventor, I hereby de	clare that this declaration is directed to the application attached hereto, or
to United States Application Number or I	PCT International Application Number
filed on	(if applicable), entitled:
RECOG	INITION METHOD AND APPARATUS
The above-identified application was ma	de or authorized to be made by me.
I believe I am the original inventor or an application.	original joint inventor of a claimed invention in the above-identified
I hereby acknowledge that any willful fall by fine or imprisonment of not more than	se statement made in this declaration is punishable under 18 USC 1001 n five (5) years, or both.
I have reviewed and understand the con	itents of the above-identified application, including the claims.
to be material to patentability as defined	United States Patent and Trademark Office all information known to me in 37 CFR 1.56, including for continuation-in-part applications, material een the filing date of the prior application and the national or PCT on-in-part application.
	ASSIGNMENT
For valuable consideration, I, as a below	<i>ı-</i> named assignor, hereby assign to:
SAMSUNG ELECTRONICS CC 129, Samsung-ro, Yeongtong-gi Suwon-si, Gyeonggi-do 16677 Republic of Korea	
and its successors and assigns (collective	vely hereinafter called "the Assignee"), the entire right, title, and interest
throughout the world in the inventions ar	nd improvements that are the subject of the application identified in the
above declaration, which is United State 15/585,377 filed on	s Application Number or PCT International Application Number May 3, 2017
Assignment by inserting above the appli	pointed in the above-identified application to hereafter complete this cation number and the filing date of the above-identified application when errors that may be discovered in this Assignment.
•	ntified application, any and all United States and foreign patents, utility

This Assignment includes the above-identified application, any and all United States and foreign patents, utility models, and design registrations granted for any of the inventions and improvements that are the subject of the above-identified application, and the right to claim priority based on the filing date of the above-identified application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, design registrations, like rights of exclusion, and inventors' certificates for any of the inventions and improvements that are the subject of the above-identified application; and I agree for myself and my heirs, legal representatives, and assigns without further

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COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

compensation to perform such lawful acts and to sign such further applications, Assignments, preliminary statements, and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.

In witness whereof, I, as a below-named inventor and assignor, intending to be legally bound, have hereunto affixed my signature on the date indicated below next to my signature.

Inventor's Legal Name	Hwidong NA			
Inventor's Signature	14/1/2	Dale	2010.	4, 19,
Residence (City, Country)	Suwon-si, Republic of Korea			
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