505362974 03/07/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
INSOO KIM	03/05/2019
KYUHONG KIM	03/05/2019
CHANG KYU CHOI	03/05/2019

RECEIVING PARTY DATA

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City:	SUWON-SI		
State/Country:	KOREA, REPUBLIC OF		
Postal Code:	16677		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16295400

CORRESPONDENCE DATA

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NAME OF SUBMITTER:	BRIAN J. HAIRSTON
SIGNATURE:	/Brian J. Hairston/
DATE SIGNED:	03/07/2019

Total Attachments: 2

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PATENT 505362974 REEL: 048530 FRAME: 0413

COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

DECLARATION

As a below-named inventor, I hereby deck	re that this declaration is directed	to the application attached hereto,
or to United States Application Number or		
filed on	(if a	oplicable), entitled:
DATA RECOGNITION APPARAT	US AND METHOD, AND TRA METHOD	INING APPARATUS AND
The above-identified application was made	or authorized to be made by me.	
I believe I am the original inventor or an or application.	ginal joint inventor of a claimed in	vention in the above-identified
I hereby acknowledge that any willful false 1001 by fine or imprisonment of not more t	statement made in this declaration nan five (5) years, or both.	is punishable under 18 USC
I have reviewed and understand the conter	its of the above-identified applicat	ion, including the claims.
i am aware of the duty to disclose to the Ui me to be material to patentability as define material information that became available PCT international filing date of the continua	f in 37 CFR 1.56, including for cor between the filing date of the prio	ntinuation-in-part applications.
	ASSIGNMENT	
For valuable consideration, I, as a below-na	med assignor, hereby assign to:	
Samsung Electronics Co., Ltd. 129, Samsung-ro, Yeongtong-gu Suwon-si, Gyeonggi-do 16677 Republic of Korea	, ,	
and its successors and assigns (collectively	hereinafter called "the Assignee"), the entire right, title, and
interest throughout the world in the invention		
identified in the above declaration, which is Number	United States Application Number d on <u>March 7, 2019</u>	or PCT International Application
I authorize and request the attorneys appoint Assignment by inserting above the application when known, and to correct any typographic	on number and the filing date of the	ne above-identified application
This Assignment includes the above-identificutility models, and design registrations gran subject of the above-identified application, a identified application under the International	ed for any of the inventions and it nd the right to claim priority based	mprovements that are the I on the filing date of the above-

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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 compensation to perform such lawful acts and to sign such

PATENT REEL: 048530 FRAME: 0414

012052,1700 FN-201808-022-1-US0

COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

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	Insoo KIM		
Inventor's Signature	at the same	Date	2019.3.5
Residence (City, Country)	Seongnam-si, Republic of Korea		
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Inventor's Legal Name	Kyuhong KIM		
Inventor's Signature	7pm	Date	2019, 3,5
Residence (City, Country)	Seoul, Republic of Korea		ополовую поможения в менения в менения по по почения половой в половой в поможения в почения в менения в ме
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Inventor's Legal Name	Chang Kyu CHOI	****************	nnnn na martin an
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