PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SANGIL JUNG	04/23/2019
CHANGYONG SON	04/23/2019
SEOHYUNG LEE	04/23/2019
JINWOO SON	04/23/2019
CHANG KYU CHOI	04/23/2019

RECEIVING PARTY DATA

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PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	16398710		

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DATE SIGNED: 04/30/2019

Total Attachments: 2

PATENT REEL: 049033 FRAME: 0664 source=NewApp_0120521631_CDA_wAppNo#page1.tif source=NewApp_0120521631_CDA_wAppNo#page2.tif

PATENT REEL: 049033 FRAME: 0665

COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

DECLARATION

As a below-named inventor, I hereby declare that this declar	ration is directed to the application attached hereto,
or to United States Application Number or PCT International	I Application Number
filed on	(if applicable), entitled:
METHOD AND APPARATUS WITH NEURAL NE	ETWORK PARAMETER QUANTIZATION
The above-identified application was made or authorized to	be made by me,
I believe I am the original inventor or an original joint inventor application.	or of a claimed invention in the above-identified
I hereby acknowledge that any willful faise statement made 1001 by line or imprisonment of not more than five (5) years	
I have reviewed and understand the contents of the above-i	dentified application, including the claims.
I am aware of the duty to disclose to the United States Pate me to be material to patentability as defined in 37 CFR 1.56 material information that became available between the filin PCT international filing date of the continuation-in-part appli	, including for continuation-in-part applications, or date of the prior application and the national or
ASSIGNME	ENT
For valuable consideration, I, as a below-named assignor, h	ereby assign to:
Semsung Electronics Co., Ltd. 129, Samsung-ro, Yeongtong-gu Suwon-si, Gyeonggi-do 16677 Republic of Korea	
and its successors and assigns (collectively hereinafter calle	ed "the Assignee"), the entire right, title, and
interest throughout the world in the inventions and improver	nents that are the subject of the application
identified in the above declaration, which is United States A 16/398,710 April liled on	pplication Number or PCT International Application 30, 2019
I authorize and request the attorneys appointed in the above Assignment by inserting above the application number and when known, and to correct any typographical errors that m	e-identified application to hereafter complete this the filing date of the above-identified application
This Assignment includes the above-identified application, a utility models, and design registrations granted for any of the subject of the above-identified application, and the right to cidentified application under the International Convention for Cooperation Treaty, the European Patent Convention, and the Assignee to apply in all countries in my name or in its or registrations, like rights of exclusion, and inventors' certificathat are the subject of the above-identified application; and	e inventions and improvements that are the laim priority based on the filing date of the above-the Protection of Industrial Property, the Patent all other treaties of like purposes; and I authorize who name for patents, utility models, design tes for any of the inventions and improvements

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representatives, and assigns without further 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.

COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

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	Sangil JUNG
Inventor's Signature	7 1 1 Date April 23, 2019
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Inventor's Legal Name	Changyong SON
•••••	

Inventor's Legal Name	Changyong SON			
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Inventor's Legal Name	Seohyung Li	Œ			
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Inventor's Legal Name	Jinwoo SON		
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Inventor's Legal Name	Chang Kyu CHOI		
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