506335260 11/03/2020 PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
MINSOO PARK		10/29/2020
CHANYUL KIM		10/29/2020
MINWOO PARK		10/29/2020
SEUNGSOO JEONG		10/29/2020
KIHO CHOI		10/29/2020
NARAE CHOI		10/29/2020
WOONGILL CHOI		10/29/2020
ANISH TAMSE		10/23/2020

YIN-JI PIAO

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.
Street Address:	129, SAMSUNG-RO, YEONGTONG-GU, GYEONGGI-DO
City:	SUWON-SI
State/Country:	KOREA, REPUBLIC OF
Postal Code:	16677

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17052573

CORRESPONDENCE DATA

Fax Number:	(202)	293-7860
		e-mail address first; if that is unsuccessful, it will be sent at is unsuccessful, it will be sent via US Mail.
Phone:	202-2	93-7060
Email:	tyarbo	prough@sughrue.com, sughrue@sughrue.com
Correspondent Name:	SUGI	HRUE MION, PLLC
Address Line 1:	2000	PENNSYLVANIA AVENUE, N.W.
Address Line 2:	SUIT	E 900
Address Line 4:	WAS	HINGTON, D.C. 20006
ATTORNEY DOCKET NUMBER		Q246586
NAME OF SUBMITTER:		TODD YARBOROUGH - TEAMS

506335260

PATENT REEL: 054254 FRAME: 0173

10/29/2020

SIGNATURE:	/Todd Yarborough/
DATE SIGNED:	11/03/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 6 source=Q246586ExecutedAssignmer source=Q246586ExecutedAssignmer source=Q246586ExecutedAssignmer source=Q246586ExecutedAssignmer source=Q246586ExecutedAssignmer source=Q246586ExecutedAssignmer	ntwithDeclaration#page2.tif ntwithDeclaration#page3.tif ntwithDeclaration#page4.tif ntwithDeclaration#page5.tif

Docket No.: Q246586 SEC Ref: MK2018050321US1 Only After Sept 16, 2012

ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

Whereas, We, the undersigned inventors hereinafter called assignors, have invented certain improvements described in the application identified below; and

Whereas, <u>SAMSUNG ELECTRONICS CO., LTD. of 129, Samsung-to, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea</u>, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

We, the above named assignors, hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America and all other countries, including all divisions, and continuations thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues thereof, and including rights of priority under the International Convention of Paris (1883) as amended, the laws of all foreign countries, and the laws of the United States including the right to claim priority under 35 USC 119 and the right to sue for past damages, and we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and we hereby agree that the assignee may apply for foreign Letters Patent on the invention and we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee.

(Legalization not required for recording but is prima facie evidence of execution under 35 USC 261)

As the below named inventor, I hereby declare that:

This assignment with declaration is \square The attached application, or directed to:

United States Application or PCT International Application Number <u>PCT/KR2019/005662</u> filed on <u>May 10, 2019</u>.

The application is entitled:

IMAGE SEGMENTATION METHOD AND APPARATUS FOR IMAGE ENCODING AND DECODING

The above identified application was made or was authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application for which this assignment with declaration is being submitted.

I am aware of the daty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR 1.56.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

NAME OF SOLE OR FIRST INVENTOR:	
Given Name (first and middle [if any]) Minsoo	Family Name or Surname PARK
Inventor's signature Min 500 Park	Date 2020, 10, 29
Residence: Suwon-si, Republic of Korea	
Mailing Address: 129, Samsong-ro, Yeongtong-gu, Suwon-si, Gy	eonggi-do, 16677, Republic of Korea
NAME OF SECOND INVENTOR:	
Given Name (first and middle [if any]) Chanyul	Family Name or Surname KIM
Inventor's signature Chamyuu	Date: 2020, 10,29
Residence: Suwon-si, Republic of Korea	
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gy	eonggi-do, 16677, Republic of Korea
NAME OF THIRD INVENTOR:	
Given Name (first and middle [if any]) Minwoo	Family Name or Surname PARK
Inventor's signature Park, Min Woo	Date Oct 29 Date
Residence: Suwon-si, Republic of Korea	
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gy	conggi-do, 16677, Republic of Korea
NAME OF FOURTH INVENTOR:	
Given Name (first and middle [if any]) Seungsoo	Family Name or Surname JEONG
Inventor's signature Seurges Joong	Date oct. 29. 2020
Residence: Susvon-si, Republic of Korea	
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gy	eonggi-do, 16677, Republic of Korea
NAME OF FIFTH INVENTOR:	
Given Name (first and middle [if any]) Kiho	Family Name or Surname CHOI
Inventor's signature	Date 200. 10.29
Residence: Suwon-si, Republic of Korea	
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gy	conggi-do, 16677, Republic of Korea

	PAT	ENT	
REEL :	054254	FRAME:	0176

NAME OF SIXTH INVENTOR:	
Given Name (ürst and middle [if any]) Narae	Family Name or Surname CHOI
Inventor's signature Norme Cha	n Date Oct, 29, 2020
Residence: Suwon-si, Republic of Korea	
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suw	von-sí, Gyconggi-do, 16677, Republic of Korea
NAME OF SEVENTH INVENTOR:	
Given Name (first and middle [if any]) Woongil	Family Name or Surname CHOI
Inventor's signature	1 Date Oct. 29. 2020
Residence: Suwon-si, Republic of Korea	
	von-si, Gyeonggi-do, 16677, Republic of Korea
NAME OF EIGHTH INVENTOR:	
Given Name (first and middle [if any]) Anish	Family Name or Surname TAMSE
Inventor's signature	Daie
Residence: Suwon-si, Republic of Korea	
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suw	von-si, Gyeonggi-do, 16677, Republic of Korea
NAME OF NINTH INVENTOR:	
Given Name (first and middle [if any]) Yin-ji	Family Name or Surname PIAO
Inventor's signature	Daie 64.29.200
Residence: Suwon-si, Republic of Kores	
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suw	on-si, Gyeonggi-do, 16677, Republic of Korea

ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

Whereas, We, the undersigned inventors hereinafter called assignors, have invented certain improvements described in the application identified below; and

Whereas, <u>SAMSUNG ELECTRONICS CO., LTD. of 129</u>, <u>Samsung-ro</u>, <u>Yeongtong-gu</u>, <u>Suwon-si</u>, <u>Gyeonggi-do</u>, <u>16677</u>, <u>Republic of Korea</u>, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

We, the above named assignors, hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America and all other countries, including all divisions, and continuations thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues thereof, and including rights of priority under the International Convention of Paris (1883) as amended, the laws of all foreign countries, and the laws of the United States including the right to claim priority under 35 USC 119 and the right to sue for past damages, and we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and we hereby agree that the assignee may apply for foreign Letters Patent on the invention and we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee.

(Legalization not required for recording but is prima facie evidence of execution under 35 USC 261)

As the below named inventor, I hereby declare that:

This assignment with declaration is directed to:	The attached application, or
	United States Application or PCT International Application Number PCT/KR2019/005662 filed on May 10, 2019.
The application is entitled:	

IMAGE SEGMENTATION METHOD AND APPARATUS FOR IMAGE ENCODING AND DECODING

The above identified application was made or was authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application for which this assignment with declaration is being submitted.

I am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR 1.56.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

NAME OF SOLE OR FIRST INVENTOR:		
Given Name		
(first and middle [if any]) Minsoo	Family Name or Surname PARK	
	J Funday Hunte of Statiante Firster	
Inventor's signature	Date	
Inventor 5 Signature	L'ARL	
Residence: Suwon-si, Republic of Korea		
Kesidence. Suwon-si, Kepublic of Korea		
Malline (Alaman (20) Samana Namatan Sama (Om	and to terms have been by any	
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeo	onggi-uo, 10077, Republic of Korea	
NAME OF SECOND INVENTOR:		
Given Name		
(first and middle {if any}) Chanyul	Family Name or Surname KIM	
Inventor's signature	Date	
Residence: Suwon-si, Republic of Korea		
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeu	onggi-do, 16677, Republic of Korea	
NAME OF THIRD INVENTOR:		
Given Name (first and middle [if any]) Minwoo	Family Name or Surname PARK	
(sust and inaddle [it any]) Minwoo	Frankry Name of Sumane FARK	
	m .	
Inventor's signature	Date	
Residence: Suwon-si, Republic of Korea		
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeo	onggi-do, 16677, Republic of Korea	
NAME OF FOURTH INVENTOR:		
Given Name		
(first and middle {if any}) Seungsoo	Family Name or Surname JEONG	
Inventor's signature	Date	
Residence: Suwon-si, Republic of Korea		
Residence. Subtracts, replayie of march		
Mailing Address: 129, Samsung-ro, Veongtong-gu, Suwon-si, Gyed	anal in 16677 Danisha af Kasa	
	Suggi-do, 10077, Republic of Korea	
NAME OF FIFTH INVENTOR:	*****	
Given Name		
(first and middle [if any]) Kiho	Family Name or Surname CHOI	
Inventor's signature	Date	
Residence: Suwon-si, Republic of Korea		
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeo	onggi-do, 16677, Republic of Korea	

NAME OF SIXTH INVENTOR:	
Given Name	
(first and middle [if any]) Narae	Family Name or Surname CHOI
Inventor's signature	Date
Residence: Suwon-si, Republic of Korea	
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeo	nogi-do. 16677. Republic of Korea
NAME OF SEVENTH INVENTOR:	
Given Name	
(first and middle [if any]) Woongil	Family Name or Surname CHOI
Inventor's signature	Date
Residence: Suwon-si, Republic of Korea	
Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeo	nggi-do, 16677, Republic of Korea
NAME OF EIGHTH INVENTOR:	
Given Name	
(first and middle [if any]) Anish	Family Name or Surname TAMSE
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Inventor's signature	Date 23 rd Oct 2020
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Inventor's signature	· · · · · · · · · · · · · · · · · · ·
Inventor's signature	Date 23 ^M Oct 2020
Inventor's signature July . Residence: Suwon-si, Republic of Korea	Date 23 ¹⁴ Oct 2020
Inventor's signature Residence: Suwon-si, Republic of Korea Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeo NAME OF NINTH INVENTOR: Given Name	nggi-do, 16677, Republic of Korea
Inventor's signature Residence: Suwon-si, Republic of Korea Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeo NAME OF NINTH INVENTOR:	Date 23 ^M Oct 2020
Inventor's signature Residence: Suwon-si, Republic of Korea Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeo NAME OF NINTH INVENTOR: Given Name (first and middle [if any]) Yin-ji	Date 23 rd Oct 2020 mggi-do, 16677, Republic of Korea Family Name or Surname PIAO
Inventor's signature Residence: Suwon-si, Republic of Korea Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeo NAME OF NINTH INVENTOR: Given Name	nggi-do, 16677, Republic of Korea
Inventor's signature Residence: Suwon-si, Republic of Korea Mailing Address: 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeo NAME OF NINTH INVENTOR: Given Name (first and middle [if any]) Yin-ji Inventor's signature	Date 23 rd Oct 2020 mggi-do, 16677, Republic of Korea Family Name or Surname PIAO
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