505973502 03/18/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6020210

		NEW ASSIGNMENT	NEW ASSIGNMENT		
IATURE OF CONVEYAN	ICE:	ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY D	ΑΤΑ				
		Name	Execution Date		
DONG SOO KIM			03/12/2020		
PRAJIT SIVASANKARA	N NAIR		03/10/2020		
HWA YONG KANG			03/12/2020		
YOUNG KWON YOON			03/12/2020		
LOKESH RAYASANDRA	BORE	GOWDA	03/10/2020		
JONG HUN WON			03/12/2020		
RECEIVING PARTY DA	ТА				
Name:	SAMSUNG ELECTRONICS CO., LTD.				
Street Address:		129, SAMSUNG-RO, YEONGTONG-GU			
City:	SUWON-SI, GYEONGGI-DO				
State/Country:	KOREA, REPUBLIC OF				
Postal Code:					
PROPERTY NUMBERS Total: 1		Number			
Dreparty Type					
Property Type		Number			
Property Type Application Number:		16648449			
Application Number:	ΔΤΔ				
Application Number: CORRESPONDENCE D	ΑΤΑ				
Application Number: CORRESPONDENCE D Fax Number: Correspondence will be	e sent t	16648449 o the e-mail address first; if that is unsu			
Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p	e sent t	16648449 o the e-mail address first; if that is unsuc d; if that is unsuccessful, it will be sent			
Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will be using a fax number, if µ</i> Phone:	e sent t	16648449 o the e-mail address first; if that is unsuc d; if that is unsuccessful, it will be sent 202-293-0804			
Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will be using a fax number, if µ</i> Phone: Email:	e sent t	16648449 o the e-mail address first; if that is unsuc d; if that is unsuccessful, it will be sent 202-293-0804 usdocketing@jeffersonip.com			
Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name:	e sent t	16648449 o the e-mail address first; if that is unsue d; if that is unsuccessful, it will be sent 202-293-0804 usdocketing@jeffersonip.com JEFFERSON IP LAW, LLP	via US Mail.		
Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will be using a fax number, if µ</i> Phone: Email: Correspondent Name: Address Line 1:	e sent t	16648449 o the e-mail address first; if that is unsue d; if that is unsuccessful, it will be sent of 202-293-0804 usdocketing@jeffersonip.com JEFFERSON IP LAW, LLP 1130 CONNECTICUT AVE., NW, SUITE 4	via US Mail.		
Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name:	e sent t	16648449 o the e-mail address first; if that is unsue d; if that is unsuccessful, it will be sent 202-293-0804 usdocketing@jeffersonip.com JEFFERSON IP LAW, LLP	via US Mail.		
Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	e sent t	16648449 o the e-mail address first; if that is unsuch d; if that is unsuccessful, it will be sent with 202-293-0804 usdocketing@jeffersonip.com JEFFERSON IP LAW, LLP 1130 CONNECTICUT AVE., NW, SUITE 4 WASHINGTON, D.C. 20036	via US Mail.		
Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1:	e sent t	16648449 o the e-mail address first; if that is unsuch d; if that is unsuccessful, it will be sent with 202-293-0804 usdocketing@jeffersonip.com JEFFERSON IP LAW, LLP 1130 CONNECTICUT AVE., NW, SUITE 4 WASHINGTON, D.C. 20036	via US Mail.		
Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will be</i> <i>using a fax number, if µ</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NU	e sent t	16648449 o the e-mail address first; if that is unsue d; if that is unsuccessful, it will be sent with 202-293-0804 usdocketing@jeffersonip.com JEFFERSON IP LAW, LLP 1130 CONNECTICUT AVE., NW, SUITE 4 WASHINGTON, D.C. 20036 0210-0423	via US Mail.		

Total Attachments: 4

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RECORDATION FORM COVER SHEET PATENTS ONLY				
To the Director of the U.S. Patent and Trademark Office: Pleas	se record the attached documents or the new address(es) below.			
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)			
1) Dong Soo KIM, 2) Prajit Sivasankaran NAIR, 3) Hwa Yong KANG, 4) Young Kwon YOON, 5) Lokesh Rayasandra	Name: Samsung Electronics Co., Ltd.			
BOREGOWDA, and 6) Jong Hun WON	Internal Address:			
Additional name(s) of conveying party(ies) attached? Yes 🗸 No 3. Nature of conveyance/Execution Date(s):	Street Address: 129, Samsung-ro, Yeongtong-gu			
Execution Date(s) March 10 and 12, 2020	Street Address. <u>129, Samsung-to, Teoligiong-gu</u>			
Assignment Merger				
Security Agreement Change of Name	City: Suwon-si, Gyeonggi-do			
Joint Research Agreement	State:			
Government Interest Assignment				
Executive Order 9424, Confirmatory License	Country: <u>Republic of Korea</u> Zip: <u>16677</u>			
Other	Additional name(s) & address(es) attached? Yes 🔽 No			
A. Patent Application No.(s) 16/648,449 Additional numbers at	B. Patent No.(s)			
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: One			
Name: Jefferson IP Law, LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$			
Internal Address: James J. Livingston	Authorized to be charged by credit card			
Street Address: 1130 Connecticut Ave., NW, Suite 420	 Enclosed None required (government interest not affecting title) 			
City: Washington	8. Payment Information			
State: District of Columbia Zip:20036	a. Credit Card Last 4 Numbers Expiration Date			
Phone Number: <u>202-293-0804</u>				
Fax Number: <u>202-403-3587</u>	b. Deposit Account Number			
Email Address: usdocketing@jeffersonip.com	Authorized User Name			
9. Signature:/James J. LIVINGSTON/Reg.	#55,394 March 18, 2020 Date			
Signature	Total number of pages including cover			
James J. Livingston Name of Person Signing	sheet, attachments, and documents:			
· -	t) should be faxed to (571) 273-0140, or mailed to: If the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450			

PATENT REEL: 052153 FRAME: 0737

<u>Assignment</u>

WHEREAS, the following inventors, namely 1) Dong Soo KIM, 2) Prajit Sivasankaran NAIR, 3) Hwa Yong KANG, 4) Young Kwon YOON, 5) Lokesh Rayasandra BOREGOWDA, and 6) Jong Hun WON (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

ELECTRONIC DEVICE FOR PROVIDING FUNCTION BY USING RGB IMAGE AND IR IMAGE ACQUIRED THROUGH ONE IMAGE SENSOR,

for which a United States Patent Application is being filed concurrently herewith or, if not being concurrently filed, was filed on <u>March 18, 2020</u>, and assigned Serial No. <u>16/648,449</u>; and,

WHEREAS, Samsung Electronics Co., Ltd., a corporation duly organized under the laws of the Republic of Korea, located and doing business at 129, Samsung-ro, Yeongtong-gu, Suwonsi, Gyeonggi-do, Republic of Korea, 16677 (hereinafter called "Assignee"), is desirous of acquiring the entire right, title and interest therein;

NOW, THEREFORE, BE IT KNOWN that for and in good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors do hereby sell, assign and transfer unto said Assignee the entire and exclusive worldwide right, title and interest in and to all said inventions and discoveries disclosed in said application, and in and to said application, any and all substitutions, divisions, provisionals, conversions of provisionals and continuations thereof, and in and to all Letters Patent, United States and all other foreign countries, that may be granted for said inventions and discoveries, and in and to all extensions, renewals and reissues thereof; and the right to file any other foreign country application and/or claim priority under the provisions of any international treaty or convention arising from this application or any divisional, continuing, substitute or reissue application therefrom. The aforesaid assignment includes the right in and to all income, royalties, damages and payments, now or hereafter due or payable with respect to any Letters Patent which may be granted, and in and to all causes of action (either in law or in equity), and the right to sue, counterclaim, and recover for past, present and future infringement of the rights assigned or to be assigned under this Assignment, as fully and entirely as the same would have been held and enjoyed by Assignors if this sale, assignment and transfer had not been made.

Assignors covenant and agree, without further compensation to said Assignors but at Assignce's expense:

a. to execute:

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- i. all papers to be used in connection with this application and any divisional, continuing, substitute or reissue application thereof, as the Assignee may deem necessary or expedient, and
- all papers in connection with any interference, litigation, mediation, arbitration or other proceeding relating to this application or any divisional, continuing, substitute or reissue application thereof, as may be necessary or expedient;

프라짓나이프13592437시님아务뀥[Camera & Imaging Solutions /SRI-Bangalore1071104147 202003100826 1811] #[11] #[11]

- to cooperate with the Assignee in every way possible in obtaining evidence and going forward in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof;
- c. to communicate to the Assignce any facts relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof, including evidence for any interference, litigation, mediation, arbitration or other proceeding relating to said invention, whenever requested;
- d. to testify in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof whenever requested; and
- e. to perform all other affirmative acts which may be necessary or desirable to secure full and complete protection of the inventions and discoveries or that may be necessary or desirable to vest in Assignee the complete title to the inventions and discoveries and Letters Patent hereby conveyed and to enable Assignee to record title.

Assignors hereby authorize and request the United States Patent and Trademark Office or any other issuing authority to issue any and all Letters Patent that may be granted upon this invention and/or this application or any divisional, continuing, substitute or reissue application thereof to the Assignee, its legal representatives, successors and assigns.

Assignors each hereby represents, covenants and warrants that he or she has the full right to convey the entire right, title and interest by this instrument, free of any encumbrances and that no other agreement has been or will be executed in conflict herewith.

The provisions of this Assignment are binding upon Assignors' heirs, legal representatives and/or administrators and assigns.

Assignors hereby grant to the law firm of Jefferson IP Law, LLP of Washington, DC and its attorneys and agents as associated with Customer No. 68103 the authority and power to insert on this instrument any further identification which may be necessary or desirable for purposes of recordation in the United States Patent and Trademark Office or a Patent Office of any foreign country.

2

DOCKET NO.: 0210-0423 CLIENT REF.: 2018-OPSE-1302/US2 SAMSUNG REF.: GM-201705-010-1-US2

Signature of Inventor:

Dongeo Kila

<u>///он-/2</u>302-0 Date

Dong Soo KIM

Signature of Inventor:

Prajit Sivasankaran NAIR

10/03/2020

Signature of Inventor:

Hwa Yorz Kong-Hwa Yong KANG

 $\frac{Mer-12}{Date}$

Signature of Inventor:

Young Knon YOON

Signature of Inventor:

Lokesh Rayasandra BOREGOWDA

10 MAR 2020 Date

<u>Mar - 12 - 2020</u> Date

Signature of Inventor:

Jone han WON

REEL: 052153 FRAME: 0740

프라짓나이르13592437서님아중립(Camera & Imaging Solutions /SRI-Bangalore1071184147 2020031008261

3

RECORDED: 03/18/2020