# 505318101 02/07/2019 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5364882

		NEW ASSIGNMENT		
NATURE OF CONVEYAN	ICE:	ASSIGNMENT		
CONVEYING PARTY DA	ATA	·		
		Name	Execution Date	
LIXIANG XU			02/07/2019	
HONG WANG			02/07/2019	
QLLI			01/28/2019	
XIAOWAN KE			02/07/2019	
RECEIVING PARTY DA	ТА			
Name:	SAMSU	NG ELECTRONICS CO., LTD.		
Street Address:	129, SA	MSUNG-RO, YEONGTONG-GU		
City:	SUWON	SUWON-SI, GYEONGGI-DO		
State/Country:	KOREA	, REPUBLIC OF		
Postal Code:	16677			
Property Type		Number		
Application Number:	1	16323901		
Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p	ATA e sent to provided;	6323901 the e-mail address first; if that is uns ; if that is unsuccessful, it will be sen		
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Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email:	ATA e sent to provided; 2 L	the e-mail address first; if that is uns if that is unsuccessful, it will be sen 202-293-0804 usdocketing@jeffersonip.com	nt via US Mail.	
Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1:	ATA e sent to provided; 2 u 1	the e-mail address first; if that is uns if that is unsuccessful, it will be sen 202-293-0804 usdocketing@jeffersonip.com UEFFERSON IP LAW, LLP 130 CONNECTICUT AVE., NW, SUITE	nt via US Mail.	
Application Number: CORRESPONDENCE DA Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	ATA e sent to provided; 2 u 1	the e-mail address first; if that is uns if that is unsuccessful, it will be served 202-293-0804 usdocketing@jeffersonip.com IEFFERSON IP LAW, LLP 130 CONNECTICUT AVE., NW, SUITE NASHINGTON, D.C. 20036	nt via US Mail.	
Application Number: CORRESPONDENCE DA Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NU	ATA e sent to provided; 2 u 1	the e-mail address first; if that is uns if that is unsuccessful, it will be sen 202-293-0804 Isdocketing@jeffersonip.com IEFFERSON IP LAW, LLP 130 CONNECTICUT AVE., NW, SUITE NASHINGTON, D.C. 20036	nt via US Mail.	

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	ORM COVER SHEET
To the Director of the U.S. Patent and Trademark Office: Please	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) Lixiang XU, 2) Hong WANG, 3) Qi LI, and 4) Xiaowan KE	Name: Samsung Electronics Co., Ltd.
	Internal Address:
Additional name(s) of conveying party(ies) attached? Yes 🖌 No	
3. Nature of conveyance/Execution Date(s):	Street Address: <u>129, Samsung-ro, Yeongtong-gu</u>
Execution Date(s) January 28, 2019 and February 7, 2019	
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: Republic of Korea Zip: 16677
Other	Additional name(s) & address(es) attached? Yes 🔽 No
A. Patent Application No.(s) 16/323,901	document is being filed together with a new application. B. Patent No.(s)
Additional numbers at	
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	
	<b>7. Total fee</b> (37 CFR 1.21(h) & 3.41) \$
Internal Address: James G. Pohlman	Authorized to be charged by credit card
Street Address: 1130 Connecticut Ave., NW, Suite 420	Authorized to be charged to deposit account 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: 202-403-3587	b. Deposit Account Number
Email Address: usdocketing@jeffersonip.com	Authorized User Name
9. Signature:/James G. POHLMAN/ Reg. Signature	#68,921 February 7, 2019 Date
James G. Pohlman	Total number of pages including cover
Name of Person Signing	sheet, attachments, and documents:
· -	t) should be faxed to (571) 273-0140, or mailed to: of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

DOCKET NO.: 0203-2351 CLIENT REF.: YPF201708-0002/US-PCT\_DMC SAMSUNG REF.: WC-201607-038-1-US0

#### <u>Assignment</u>

WHEREAS, the following inventors, namely 1) Lixiang XU, 2) Hong WANG, 3) Qi LI, and 4) Xiaowan KE (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

## METHOD AND APPARATUS FOR CONTROLLING OR PAGING A USER EQUIPMENT,

for which a United States Patent Application is being filed concurrently herewith or, if not being concurrently filed, was filed on <u>February 7, 2019</u>, and assigned Serial No. <u>16/323,901</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, Suwon-si, 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 Assignee's expense:

a. to execute:

- 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;
- b. 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;

- to communicate to the Assignee 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.

### DOCKET NO.; 0203-2351 CLIENT REF.: YPF201708-0002/US-PCT\_DMC SAMSUNG REF.: WC-201607-038-1-US0

Signature of Inventor:	ディーデ Lixiapg XU	2019.02.07  Date
Signature of Inventor:	Hong Wang Hong WANG	2019.02.07
	LAUNE TITLING	- <b></b>
Signature of Inventor:	<u>(J. )</u> QILI	2019.01.28 Date
Signature of Inventor:		
	Xiaowan KE	Date

3

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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, Suwon-si, 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.

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- 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;
- b. 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;

- to communicate to the Assignee 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
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Signature of Inventor:

	Lixiang XU	Date
Signature of Inventor		
	Hong WANG	Date
Signature of Inventor:		
	QiLI	Date
Signature of Inventor:	Xiannon Ke	2019.02.07
	Xiaowan KE	Date

## PATENT REEL: 048266 FRAME: 0239

**RECORDED: 02/07/2019**