503763175 03/31/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3809822

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KWANGHOON HAN	03/29/2016
TAEYOUNG LEE	03/29/2016
SEONG-HEE PARK	03/29/2016
CHILYOUL YANG	03/29/2016
MYOUNGHWAN LEE	03/29/2016

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15086920

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 202-293-0804

Email: usdocketing@jeffersonip.com
Correspondent Name: JEFFERSON IP LAW, LLP

Address Line 1: 1130 CONNECTICUT AVE., NW, SUITE 420

Address Line 4: WASHINGTON, D.C. 20036

ATTORNEY DOCKET NUMBER:	0202-1216
NAME OF SUBMITTER:	MAENG-HO SHIN
SIGNATURE:	/Maeng-Ho SHIN/
DATE SIGNED:	03/31/2016

Total Attachments: 7

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PATENT 503763175 REEL: 038161 FRAME: 0307

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source=0202-1216AssignmentAsFiled#page7.tif

PATENT REEL: 038161 FRAME: 0308

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) Kwanghoon HAN, 2) Taeyoung LEE, 3) Seong-Hee PARK, 4) Chilyoul YANG, and 5) Myounghwan LEE	Name: Samsung Electronics Co., Ltd.	
4) Omysur 174. 3, and c, myssing	Internal Address:	
Additional name(s) of conveying party(ies) attached? Yes Vo		
3. Nature of conveyance/Execution Date(s):	Street Address: 129, Samsung-ro, Yeongtong-gu	
Execution Date(s) 03/29/2016		
Assignment Merger		
Security Agreement Change of Name	City: Suwon-si, Gyeonggi-do	
Joint Research Agreement	State:	
Government Interest Assignment	Country: Republic of Korea Zip:	
Executive Order 9424, Confirmatory License	Courtify. Hepapine of Norva	
Other	Additional name(s) & address(es) attached? Yes Vo	
Additional numbers att	ached? Yes No	
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: Maeng-Ho Shin	Authorized to be charged by credit card	
	Authorized to be charged to deposit account	
Street Address: 1130 Connecticut Ave., NW, Suite 420	Enclosed	
	None required (government interest not affecting title)	
City: Washington	8. Payment Information	
State: DC Zip:20036	a. Credit Card Last 4 Numbers Expiration Date	
Phone Number: 202-293-0804		
Fax Number: 202-403-3587	b. Deposit Account Number	
Email Address: usdocketing@jeffersonip.com	Authorized User Name	
9. Signature: /Maeng-Ho SHIN/ Reg. No. 9	53,859 March 31, 2016	
Signature	Date	
Maeng-Ho Shin Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:	

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

CLIENT REF.: SP16013-US_DMC SAMSUNG REF.: MJ-201412-005-1-US0

Assignment

WHEREAS, the following inventors, namely 1) Kwanghoon HAN, 2) Taeyoung LEE, 3) Seong-Hee PARK, 4) Chilyoul YANG, and 5) Myounghwan LEE, all, citizens of the Republic of Korea (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

APPARATUS AND METHOD FOR MEASURING DISTANCE AND LOCATION,

for which a United States Patent Application is being filed of	concurrently herewith or, if not being
concurrently filed, was filed on March 31, 2016	and assigned Serial No. 15/086,920
; 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 foreign, 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 foreign 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:
 - 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;

PATENT REEL: 038161 FRAME: 0310

CLIENT REF.: SP16013-US_DMC SAMSUNG REF.: MJ-201412-005-1-US0

- 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 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.

Signature of Inventor:

CLIENT REF.: SP16013-US_DMC

SAMSUNG REF.: MJ-201412-005-1-US0

Signature of Inventor:		Mar. 29.20/6
	Kwanghoon MAN	Date
Signature of Inventor:		
	Taeyoung LEE	Date
Signature of Inventor:	m	Mar. 29,20/6
	Seong-Hee PARK	Date
Signature of Inventor:		Nov. 29, 216
	Chilyoul VANG	Date

Mor . 29 . 2016 Date Myounghwan LEE

CLIENT REF.: SP16013-US_DMC SAMSUNG REF.: MJ-201412-005-1-US0

Assignment

WHEREAS, the following inventors, namely 1) Kwanghoon HAN, 2) Taeyoung LEE, 3) Seong-Hee PARK, 4) Chilyoul YANG, and 5) Myounghwan LEE, all, citizens of the Republic of Korea (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

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for which a United States Patent Application is being filed of	concurrently herewith or, if not being
concurrently filed, was filed on March 31, 2016	and assigned Serial No. 15/086,920
; 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 foreign, 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 foreign 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:

- 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;

PATENT REEL: 038161 FRAME: 0313

CLIENT REF.: SP16013-US_DMC SAMSUNG REF.: MJ-201412-005-1-US0

- 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 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.

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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.

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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.

CLIENT REF.: SP16013-U		
SAMSUNG REF.: MJ-201	412-805-1-US9	
Signature of Inventor:		
	Kwanghoon HAN	Date
Signature of Inventor:	Tacyoung LEE	Mar 29, 2016
	Tacyoung LEE	Date
Signature of Inventor:		
	Scong-Hee PARK	Date
Signature of Inventor:		
	Chilyoul YANG	Date
Signature of Inventor:		
	Myounghwan LEE	Date