504615604 10/27/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4662319

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YOONGEON KIM	10/16/2017
SEUNGTAE KO	10/16/2017
TAESIK YANG	10/25/2017
JUNEYONG YOUNG	10/27/2017

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:	15796103

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.

202-293-0804 Phone:

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

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

Address Line 4: WASHINGTON, D.C. 20036

ATTORNEY DOCKET NUMBER:	0203-2150
NAME OF SUBMITTER:	JOSHUA H. SGUEO
SIGNATURE:	/Joshua H. SGUEO/
DATE SIGNED:	10/27/2017

Total Attachments: 10

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RECORDATION FO	ORM COVER SHEET	
PATENT	S ONLY	
To the Director of the U.S. Patent and Trademark Office: Pleas	se record the attached documents or the new address(es) below.	
 Name of conveying party(ies) Yoongeon KIM, 2) Seungtae KO, 3) Taesik YANG, and Juneyong YOUNG 	2. Name and address of receiving party(ies) Name: Samsung Electronics Co., Ltd. Internal Address:	
Additional name(s) of conveying party(ies) attached? Yes No. 3. Nature of conveyance/Execution Date(s): Execution Date(s) 10/16/2017, 10/25/2017, and 10/27/2017 Assignment Merger Security Agreement Change of Name Joint Research Agreement Government Interest Assignment Executive Order 9424, Confirmatory License Other	Street Address: 129, Samsung-ro, Yeongtong-gu City: Suwon-si, Gyeonggi-do State: Country: Republic of Korea Zip: Additional name(s) & address(es) attached? Yes	
A. Patent Application No.(s) 15/796,103	document is being filed together with a new application. B. Patent No.(s) tached? 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: Joshua H. Sgueo Street Address: 1130 Connecticut Ave., NW, Suite 420	Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed	
	None required (government interest not affecting title)	
City: Washington	8. Payment Information a. Credit Card Last 4 Numbers	
State: DC Zip: 20036	Expiration Date	
Phone Number: 202-293-0804	h Denosit Account Number	
Fax Number: 202-403-3587	b. Deposit Account Number	
Email Address: usdocketing@jeffersonip.com	Authorized User Name	
9. Signature: /Joshua H. SGUEO/ Reg. No. Signature	o. 67,154 October 27, 2017 Date	
Joshua H. Sgueo 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

REEL: 043972 FRAME: 0816

CLIENT REF.: YPF201611-0021/US-N_DMC SAMSUNG REP.: NG-201611-016-1-US1

Assignment

WHEREAS, the following inventors, namely 1) Youngeon KIM, 2) Scungtae KO, 3) Taesik YANG, and 4) Juneyong YOUNG (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

BEAMFORMING ANTENNA ASSEMBLY INCLUDING PATTERNED MIRROR AND VEHICLE SIDE MIRROR ASSEMBLY INCLUDING THE SAME.

for which a United States Patent Application is being filed concurrently herewith or, if not being concurrently filed, was filed on. October 27, 2017..., and assigned Serial No. 15/796,103.; 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-70, 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:
 - 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

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CLIENT REF.: YPF201611-0021/US-N_DMC SAMSUNG REF.: NG-201611-016-1-US1

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.

CLIENT REF.: YPF201611-0021/US-N_DMC SAMSUNG REF.: NG-201611-016-1-US1

Signature of Inventor:	4	10.16.2017)
	Yoongeon KIM	Date
Signature of Inventor:	Surface Surfac	/0//6/20//
	Seungtae KO	Date
Signature of Inventor:		
	Taesik YANG	Date
Signature of Inventor:		
	Junevong YOUNG	Date

CLIENT REF.: YPF201611-0021/US-N_DMC SAMSUNG REF.: NG-201611-016-1-US1

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CLIENT REF.: YPF201611-0021/US-N_DMC SAMSUNG REF.: NG-201611-016-1-US1

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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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Signature of Inventor:		
	Yoongson KIM	Date
Signature of Inventor:		
	Sennatae NO	Date
Signature of Inventor	Zally ANG	
Signature of Inventor		
	Jangyang YOUNG	Date

CLIENT REF: YPE201611-0021/US-N_DMC

CLIENT REF.: YPF201611-0021/US-N_DMC SAMSUNG REF.: NG-201611-016-1-US1

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CLIENT REF.: YPF201611-0021/US-N_DMC SAMSUNG REF.: NG-201611-016-1-US1

- proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof;
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DOCKET NO.: 8283-2158
CLIENT REF.: YPF281611-8021/US-N_DMC
SAMSUNG REF.: NG-261611-816-1-US1

Signature of Inventor:

Yeongeon KIM

Date

Signature of Inventor:

Taesik YANG

Date

Signature of Inventor:

Juneyong YOUNG

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PATENT

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