PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5575407

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SANG-MIN SHIN	06/17/2019
DEOK-YOUNG KIM	06/14/2019
YONG-WOOK KIM	06/14/2019
DAE-IN CHOI	06/16/2019
GANG-HEOK KIM	06/16/2019

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
Postal Code:	16677

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16470404

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:	0502-0473
NAME OF SUBMITTER:	MAULIN M. PATEL
SIGNATURE:	/Maulin M. PATEL/
DATE SIGNED:	06/17/2019

Total Attachments: 16

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PATENT REEL: 049487 FRAME: 0421

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RECORDATION FORM COVER SHEET			
PATENTS ONLY			
To the Director of the U.S. Patent and Trademark Office: Please 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) Sang-min SHIN, 2) Deok-young KIM, 3) Yong-wook KIM 4) Dae-in CHOI and 5) Gang-heok KIM	Name: Samsung Electronics Co., Ltd.		
Duo in crist and of daily listininin	Internal Address:		
Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance/Execution Date(s): Execution Date(s) 06/14/2019, 06/16/2019 and 06/17/2019 Assignment Merger Security Agreement Change of Name Joint Research Agreement Government Interest Assignment Executive Order 9424, Confirmatory License Other 4. Application or patent number(s): This A. Patent Application No.(s) 16/470,404 Additional numbers att	Street Address: 129, Samsung-ro, Yeongtong-gu City: Suwon-si, Gyeonggi-do State: Country: Republic of Korea Zip: 16677 Additional name(s) & address(es) attached? Yes No document is being filed together with a new application. B. Patent No.(s)		
5. Name and address to whom correspondence	6. Total number of applications and patents		
concerning document should be mailed:	involved: One		
Name: Jefferson IP Law, LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$		
Internal Address: Maulin M. Patel	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: /Maulin M. PATEL/ Reg. #5	6,029 June 17, 2019		
Signature	Date		
Maulin M. Patel 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: 049487 FRAME: 0423

CLIENT REF.: SH-55062-US-DMC SAMSUNG REF.: MK-201605-001-1-US0

Assignment

WHEREAS, the following inventors, namely 1) Sang-min SHIN, 2) Deok-young KIM, 3) Yong-wook KIM, 4) Dae-in CHOI, and 5) Gang-heok KIM (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 ASSISTING DRIVING OF VEHICLE AND METHOD THEREFOR,

for which a United States Patent Application is being filed concurrently herewith or, if not being concurrently filed, was filed on June 17, 2019, and assigned Serial No.16/470,404; 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:
 - 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;

1

CLIENT REF.: **SH-55062-US-DMC** SAMSUNG REF.: **MK-201605-001-1-US0**

- 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.

CLIENT REF.: SH-55062-US-DMC

SAMSUNG REF.: MK-201605-001-1-US0

Signature of Inventor:	Sang-min SHIN	6/17/2019
	Sang-min SHIN	Date
Signature of Inventor:		
	Deok-young KIM	Daie
Signature of Inventor:		
	Yong-wook KIM	Date
Signature of Inventor:		
	Dae-in CHOI	Date
Signature of Inventor:		
	Gang-heok KIM	Date

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CLIENT REF.: SH-55062-US-DMC SAMSUNG REF.: MK-201605-001-1-US0

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Signature of Inventor:	Sang-min SHIN	Date
Signature of Inventor:	Deok-young KIM	2019, 6. 1× Date
Signature of Inventor:		
	Yong-wook KIM	Date
Signature of Inventor:		
Signature of Inventor:	Dae-in CHOI	Date
	Gang-heok KIM	Date

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Signature of Inventor:		
	Sang-min SHIN	Date
Signature of Inventor:		
	Deok-young KIM	Date
Signature of Inventor:	Yongwook KIM	6/14/2019
	Yong-wook KIM	Date
Signature of Inventor:		
	Dae-in CHOI	Date
Signature of Inventor:		
	Gang-heok KIM	Date

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CLIENT REF.: **SH-55062-US-DMC** SAMSUNG REF.: **MK-201605-001-1-US0**

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Signature of Inventor:

Sang-min SHIN

Date

Deok-young KIM

Date

Yong-wook KIM

Date

July 2019

Date

Signature of Inventor:

Yong-wook KIM

Date

Signature of Inventor:

Date

Gang-heok KIM

DOCKETNO: 0502-0473

CLIENT REF. SH 55062 US-DMC

SAMSUNG REF: MK-201605-001-1-US0

PATENT REEL: 049487 FRAME: 0435

Date

CLIENT REF.: SH-55062-US-DMC SAMSUNG REF.: MK-201605-001-1-US0

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CLIENT REF.; SH-55062-US-DMC SAMSUNG REF.; MK-201605-001-1-US0

Signature of Inventor:		
	Sang-min SHIN	Daie
Signature of Inventor:		
	Deok-young KIM	Date
Signature of Inventor:		
	Yong-wook KIM	Date
Signature of Inventor:		
	Dae-in CHOI	Date
Signature of Inventor:	-d >235	2019.6.16
	Gang-heok KIM	Date