504593390 10/13/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4640102

		NEW ASSIGNMENT			
ATURE OF CONVEYA	NCE:	ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY D	ΑΤΑ				
		Name	Execution Date		
SUNG-JA CHOI			10/11/2017		
EUN-KYOUNG KIM			09/25/2017		
JI-SANG YU			10/11/2017		
JI-YEON HONG			10/11/2017		
JONG-YOUB RYU			10/11/2017		
AE-WON LEE			10/11/2017		
	TA				
RECEIVING PARTY DA		UNG ELECTRONICS CO., LTD.			
Street Address:	_	AMSUNG-RO, YEONGTONG-GU			
City:		N-SI, GYEONGGI-DO			
•		A, REPUBLIC OF			
State/Country:					
State/Country:					
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PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE I Fax Number: Correspondence will b using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	S Total: 1	Number 15783476 o the e-mail address first; if that is unsucc d; if that is unsuccessful, it will be sent via 202-293-0804 usdocketing@jeffersonip.com JEFFERSON IP LAW, LLP 1130 CONNECTICUT AVE., NW, SUITE 420 WASHINGTON, D.C. 20036	u US Mail.		
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	ORM COVER SHEET		
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) Sung-ja CHOI, 2) Eun-kyoung KIM, 3) Ji-sang YU,	Name: Samsung Electronics Co., Ltd.		
4) Ji-yeon HONG, 5) Jong-youb RYU, and 6) Jae-won LEE	Internal Address:		
Additional name(s) of conveying party(ies) attached? Yes Y No 3. Nature of conveyance/Execution Date(s):	Street Address: 129, Samsung-ro, Yeongtong-gu		
Execution Date(s) September 25, 2017 and October 11, 2017	Street Address. 129, Samsung-10, reorigiong-gu		
Assignment Merger			
Security Agreement Change of Name	City: <u>Suwon-si, Gyeonggi-do</u>		
Joint Research Agreement			
Government Interest Assignment	State:		
Executive Order 9424, Confirmatory License	Country: Republic of Korea Zip:		
Other			
	Additional name(s) & address(es) attached? Yes V No document is being filed together with a new application.		
A. Patent Application No.(s)	B. Patent No.(s)		
15/783,476			
	ached? Yes VNo		
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			
Internal Address: Gregory L. Clinton	7. Total fee (37 CFR 1.21(h) & 3.41) \$		
	Authorized to be charged by credit card		
	Authorized to be charged to deposit account Enclosed		
Street Address: 1130 Connecticut Ave., NW, Suite 420	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: <u>202-293-0804</u>	· · · · · · · · · · · · · · · · · · ·		
Fax Number: 202-403-3587	b. Deposit Account Number		
Email Address: usdocketing@jeffersonip.com	Authorized User Name		
9. Signature:			
/Gregory L. CLINTON/ Reg Signature	#59,134 October 13, 2017 Date		
-			
Gregory L. Clinton	Total number of pages including cover		
Name of Person Signing	Total number of pages including cover sheet, attachments, and documents: 10 t) should be faxed to (571) 273-0140, or mailed to:		

Assignment

WHEREAS, the following inventors, namely 1) Sung-ja CHOI, 2) Eun-kyoung KIM, 3) Ji-sang YU, 4) Ji-yeon HONG, 5) Jong-youb RYU, and 6) Jae-won LEE (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

SPEECH RECOGNITION METHOD AND APPARATUS,

for which a United States Patent Application is being filed concurrently herewith or, if not being concurrently filed, was filed on <u>October 13, 2017</u>, and assigned Serial No. <u>15/783,476</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 "Assignce"), 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 applicationand/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;

PATENT REEL: 043861 FRAME: 0625

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;

- 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;
- 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' beirs, 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.: 0502-0335 CLIENT REF.: SH-54643-US-DMC SAMSUNG REF.: MID-201701-017-1-US0

Signature of Inventor:	Sume is CHEN	10/11 /2019
	Sung-ja CHOI	Date
Signature of Inventor:		
	Eun-kyoung KIM	Date
Signature of Inventor:		
	Ji-sang YU	Date
Signature of Inventor:	Horzzy	10111/2019
	Ji-yeon MONG	Date
Signature of Inventor:		
	Jong-youb RYU	Date
Signature of Inventor:		
	Jae-won LEE	Date

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Assignment

WHEREAS, the following inventors, namely 1) Sung-ja CHOI, 2) Eun-kyoung KIM, 3) Ji-sang YU, 4) Ji-yeon HONG, 5) Jong-youb RYU, and 6) Jae-won LEE (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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 - 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: 043861 FRAME: 0628

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;

- 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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2

DOCKET NO.: 0502-0335 CLIENT REF.: SH-54643-US-DMC SAMSUNG REF.: MD-201701-017-1-US0

Signature of Inventor:		
	Sung-ja CHOI	Date
Signature of Inventor:	Ka isana ka	Sr. Ix in
	Unn Kyoung Kim	 $\frac{1(2\zeta) \mathcal{P}(\eta)}{\text{Date}}$
Signature of Inventor:		
	M-sang YU	 Date
Signature of Inventor:		
	Ji-yean HONG	 Date
Signature of Inventor:		
	Jong-youb RYU	 Date
Signature of Inventor:		
congularate of allowing.	Jae-won LEE	 Date
	3	
		PATENT

REEL: 043861 FRAME: 0630

Assignment

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PATENT REEL: 043861 FRAME: 0631

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;

- 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;
- 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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2

DOCKET NO.: 0502-0335 CLIENT REF.: \$N-54643-US-DMC SAMSUNG REF.: MD-201701-017-1-U80

Signature of Inventor:

	Sung-ja CHOI	Date
Signature of Inventor:		
	Enn-kyoung KIM	Date
Signature of Inventor:	sirony Ku	10/11/2017
	Ji-sang Y()	Date
Signature of Inventor:		
	Ji-yeon HONG	Date
Signature of Inventor:	Jong you to Ry u Jong-youb RYU	10/11/50019
	Jong-youd RYU	Date
Signature of Inventor.	Junelo	to field and

3

Jae-won LEE

Date

RECORDED: 10/13/2017