# 505994920 04/01/2020

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6041630

SUBMISSION TYPE:		NEW ASSIGNMENT		
IATURE OF CONVEYA	NCE:	ASSIGNMENT	ASSIGNMENT	
CONVEYING PARTY D	ΑΤΑ			
		Name	Execution Date	
HO-SANG SUNG			03/26/2020	
JONG-HOON JEONG			03/26/2020	
KI-HYUN CHOO			03/26/2020	
EUN-MI OH			03/31/2020	
JONG-YOUB RYU			03/05/2020	
RECEIVING PARTY DA	 АТА			
Name:		UNG ELECTRONICS CO., LTD.		
Street Address:		AMSUNG-RO, YEONGTONG-GU		
City:		DN-SI, GYEONGGI-DO		
State/Country:	KORE	KOREA, REPUBLIC OF		
Postal Code:	16677			
PROPERTY NUMBERS				
Property Type		Number 16652759		
Property Type Application Number:				
Property Type Application Number: CORRESPONDENCE I				
Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will b</i>	DATA be sent t	16652759 o the e-mail address first; if that is unsucc		
Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will b</i>	DATA be sent t	16652759		
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Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will k</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name:	DATA De sent t provide	16652759 o the e-mail address first; if that is unsuce d; if that is unsuccessful, it will be sent via 202-293-0804 usdocketing@jeffersonip.com JEFFERSON IP LAW, LLP	a US Mail.	
Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will &amp;</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1:	DATA De sent t provide	16652759 o the e-mail address first; if that is unsuce 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 42	a US Mail.	
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Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will k</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	DATA be sent t provide	16652759 o the e-mail address first; if that is unsuce 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 42 WASHINGTON, D.C. 20036	a US Mail.	
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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) Ho-sang SUNG, 2) Jong-hoon JEONG, 3) Ki-hyun CHOO, 4)	Name: Samsung Electronics Co., Ltd.				
Eun-mi OH, and 5) Jong-youb RYU	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) 03/05/20, 03/26/20 & 03/31/20					
Assignment Merger	City: Suwon-si, Gyeonggi-do				
Security Agreement Change of Name					
Joint Research Agreement	State:				
Government Interest Assignment	Country: Republic of Korea Zip: 16677				
Executive Order 9424, Confirmatory License	219. <u>10077</u>				
Other	Additional name(s) & address(es) attached? Yes 🔽 No				
4. Application or patent number(s):	document is being filed together with a new application.				
A. Patent Application No.(s)	B. Patent No.(s)				
16/652,759					
Additional numbers at	ached? Yes 🖌 No				
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	<b>7. Total fee</b> (37 CFR 1.21(h) & 3.41) \$				
Internal Address: Joshua H. Sgueo					
Internal Address.	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: District of Columbia Zip:20036	a. Credit Card Last 4 Numbers				
Phone Number: 202-293-0804	Expiration Date				
	b. Deposit Account Number				
Fax Number: 202-403-3587	Authorized User Name				
Email Address: usdocketing@jeffersonip.com					
9. Signature:/Joshua H. SGUEO/ Reg. #	67,154 April 1, 2020				
Signature					
Orghadaro	Date				
Joshua H. Sgueo	Total number of pages including cover				
Joshua H. Sgueo Name of Person Signing	Total number of pages including cover				

#### Assignment

WHEREAS, the following inventors, namely 1) Ho-sang SUNG, 2) Jong-hoon JEONG, 3) Ki-hyun CHOO, 4) Eun-mi OH, and 5) Jong-youb RYU (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

#### AUDIO RECONSTRUCTION METHOD AND DEVICE WHICH USE MACHINE LEARNING,

for which a United States Patent Application is being filed concurrently herewith or, if not being concurrently filed, was filed on <u>April 1, 2020</u>, and assigned Serial No.<u>16/652,759</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 Assignce 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;
- 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:	Suyhosoy	March 36, 2020
	Ho-sang SUNG	<u>March 26, 2020</u> Date
Signature of Inventor:	Joghan Jeang	March 26 2020.
	Jong-hoon JEONG	Date
Signature of Inventor:	mm	March +6, 2020
	Ki-hyun CHOO	Date
Signature of Inventor:		
	Eun-mi OH	Date
Signature of Inventor:		
	Jong-youb RYU	Date

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Signature of Inventor:			
	Ho-sang SUNG		Date
Signature of Inventor:			
	Jong-hoon JEONG	<u></u>	Date
Signature of Inventor:			
	Ki-hyun CHOO		Date
Signature of Inventor:	- Gon hand in the second s		Mar, 31, 2020
	Eun-mi OH		Date
Signature of Inventor:			

### Jong-youb RYU

## Date

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Signature of Inventor:		
	Ho-sang SUNG	Date
Signature of Inventor:		
	Jong-hoon JEONG	Date
Signature of Inventor:		
	Ki-hyun CHOO	Date
Signature of Inventor:		
	Eun-mi OH	Date
Signature of Inventor:	Jongyard Ryn Jong-youb RYU	Mindo , 05, 2010
k	Jong-youb RYU	Date

3