## 504084810 11/07/2016

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
KI HWAN KWON	10/25/2016
JIN WOOK YOON	10/25/2016
EUN BI SEO	10/25/2016
MIN HEE KIM	10/25/2016
CHONG AM KIM	10/25/2016
BYUNG HYUN LEE	10/25/2016

### **RECEIVING PARTY DATA**

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## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15306961

### **CORRESPONDENCE DATA**

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504084810 PATENT REEL: 040243 FRAME: 0617

ATTORNEY DOCKET NUMBER:	2494.1432
NAME OF SUBMITTER:	TEMNIT AFEWORK
SIGNATURE:	/Temnit Afework/
DATE SIGNED:	11/07/2016
Total Attachments: 3 source=Assignment#page1.tif	
source=Assignment#page2.tif source=Assignment#page3.tif	

PATENT REEL: 040243 FRAME: 0618

# **WORLD WIDE ASSIGNMENT**

S&H 10/16

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration furnished to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by

(Insert Name(s) & Address(es) of ASSIGNEE(S))

SAMSUNG ELECTRONICS CO., LTD. 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677 Republic of Korea

6)\_

LEE, Byung Hyun

SEOUL NATIONAL UNIVERSITY R&DB FOUN I, Gwanak-ro Gwanak-gu Seoul 151-015 Republic of Korea	NDATION
hereinafter, "ASSIGNEE"), the receipt of which is hereby a ransfers to ASSIGNEE the entire and exclusive right, title a Title of Invention)	acknowledged, the undersigned ASSIGNOR hereby sells, assigns and and interest to the invention entitled
MULTI-PULSE JET GENERATOR AND AI	R CONDITIONER HAVING SAME
elating to International Patent Application PCT// States of America was executed on even date herewith or,	and/or for which application for Letters Patent of the United if not so executed, was:
(a) executed on ;	(Insert date of execution of application, if not concurrent)
(b) filed on , Serial No.	Any registered attorney or patent agent of STAAS & HALSEY LLP, 1201 New York Avenue, N.W., Suite 700 Washington, D.C. 20005 (202/434-1500) is hereby authorized to insert in (b) the specified data, when known.
nvention and/or on said application and any rights of priorit including inter partes review, post grant review and covere	ed States of America and of any and all other countries granted on said ty, extension, continuation, division, renewal, substitute, reissue, reviews and business method review), supplemental examination, interference, or or terms for which the said Letters Patent(s) may be granted and including cation(s) and Letters Patent(s)").
ASSIGNEE, to do all acts which the ASSIGNEE may deem enforcing protection for said invention in the United States of and prosecution of said application(s) and the issuance of livision, renewal, substitute, reissue, reviews, supplemental any litigation or other legal proceeding which may arise of	tid ASSIGNEE and without charge to but at the expense of said in necessary, desirable or expedient, for securing, maintaining and of America and in any and all other countries, including in the preparation said Letters Patent(s), and in any rights of priority, extension, continuation, at examination, interference, reexamination, or public use proceeding, and or be declared in relation to same, such acts to include but not be limited d declarations, taking all rightful oaths, providing sworn testimony, and
IN WITNESS WHEREOF, the undersigned inventor(s) h (Typed Name & Signature of Inventor(s))	nas (have) affixed his/her/their signature(s). (Date) (Typed Name & Signature of Witness(es))
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7 <u>/ / / / / / / / S</u> YOON, Jin Wook	T. (26) (20) (6)
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KIM, Min Hee	
5) KIM. Chona Am	
ATM, DIDITO ATM	

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### SEOUL NATIONAL UNIVERSITY R&DB FOUNDATION

1, Gwanak-ro Gwanak-gu Seoul 151-015 Republic of Korea

(hereinafter, "ASSIGNEE"), the receipt of which is hereby a transfers to ASSIGNEE the entire and exclusive right, title (Title of Invention)	acknowledged, the undersigned ASSIGNOR hereby sells, assigns and and interest to the invention entitled
MULTI-PULSE JET GENERATOR AND A	IR CONDITIONER HAVING SAME
relating to International Patent Application PCT//_States of America was executed on even date herewith or,	and/or for which application for Letters Patent of the United , if not so executed, was:
(a) executed on ;	(Insert date of execution of application, if not concurrent)
(b) filed on , Serial No.	Any registered attorney or patent agent of STAAS & HALSEY LLP, 1201 New York Avenue, N.W., Suite 700 Washington, D.C. 20005 (202/434-1500) is hereby authorized to insert in (b) the specified data, when known.
invention and/or on said application and any rights of priori (including inter partes review, post grant review and covered	ed States of America and of any and all other countries granted on said ity, extension, continuation, division, renewal, substitute, reissue, reviews ed business method review), supplemental examination, interference, or or terms for which the said Letters Patent(s) may be granted and including ication(s) and Letters Patent(s)").
ASSIGNEE, to do all acts which the ASSIGNEE may deem enforcing protection for said invention in the United States and prosecution of said application(s) and the issuance of division, renewal, substitute, reissue, reviews, supplements in any litigation or other legal proceeding which may arise of	aid ASSIGNEE and without charge to but at the expense of said in necessary, desirable or expedient, for securing, maintaining and of America and in any and all other countries, including in the preparation said Letters Patent(s), and in any rights of priority, extension, continuation all examination, interference, reexamination, or public use proceeding, and or be declared in relation to same, such acts to include but not be limited and declarations, taking all rightful oaths, providing sworn testimony, and
IN WITNESS WHEREOF, the undersigned inventor(s) to (Typed Name & Signature of Inventor(s))	nas (have) affixed his/her/their signature(s). (Date) (Typed Name & Signature of Witness(es))
1)KWON, Ki Hwan	

YOON, Jin Wook SEO, Eun Bi 김인희 2016.10.25 KIM, Min Hee KIM, Chong Am 1 43 LEE, Byung Hyun 2016.10.25

## WORLD WIDE ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration furnished to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by

(Insert Name(s) & Address(es) of ASSIGNEE(S))

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1, Gwanak-ro Gwanak-gu Seoul 151-015 Republic of Korea

(hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled (Title of Invention)

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elating to International Patent Application PCT// States of America was executed on even date herewith or	
(a) executed on ;	(Insert date of execution of application, if not concurrent)
(b) filed on ,	Any registered attorney or patent agent of STAAS & HALSEY LLP, 1201 New York Avenue, N.W., Suite 700 Washington, D.C. 20005
Serial No.	(202/434-1500) is hereby authorized to insert in (b) the specified data, when known.

and to said application and all Letters Patent(s) of the United States of America and of any and all other countries granted on said invention and/or on said application and any rights of priority, extension, continuation, division, renewal, substitute, reissue, reviews (including inter partes review, post grant review and covered business method review), supplemental examination, interference, or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention in the United States of America and in any and all other countries, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), and in any rights of priority, extension, continuation, division, renewal, substitute, reissue, reviews, supplemental examination, interference, reexamination, or public use proceeding, and in any literation or other legal proceeding, which may price or be detected in reflection to continuation and the research in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

(	Typed Name & Signature of Inventor(s))	(Date)	(Typed Name & Signature of Witness(es))
1)			
	KWON, Ki Hwan		
2)			
	YOON, Jin Wook		
3)			
	SEO, Eun Bi		
4)			
	KIM, Min Hee		
5)	9 21	2016.10.25	
	KIM, Chong Am		
6)			
	LEE, Byung Hyun		

**PATENT** REEL: 040243 FRAME: 0621

**RECORDED: 11/07/2016**