

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SHINJI HIRAI	06/16/2017
MAKOTO KOBAYASHI	06/16/2017
MASANAGA TANAKA	06/16/2017
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<b>City:</b>	SUWON-SI, GYEONGGI-DO
<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>Postal Code:</b>	16677
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15538512
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	1904.1439
<b>NAME OF SUBMITTER:</b>	TEMNIT AFEWORK REG. NO. 58,202
<b>SIGNATURE:</b>	/Temnit Afework/
<b>DATE SIGNED:</b>	06/26/2017
<b>Total Attachments: 1</b>	
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# WORLD WIDE ASSIGNMENT

5801-1035

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, Yeongdeong-gu,  
Suwon-si, Gyeonggi-do 16677  
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 in the invention entitled  
(Title of Invention)

## COOLING DEVICE

relating to International Patent Application PCT/\_\_\_\_\_/\_\_\_\_\_, and/or for which application for Letters Patent of the United States of America was executed on even date herewith or, 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.

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 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.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/hers/their signature(s).

(Typed Name & Signature of Inventor(s))

(Date)

(Typed Name & Signature of Witness(es))

1) <u>Hirai Shinji</u>	June 16, 2017	_____
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2) <u>Kobayashi Makoto</u>	June 16, 2017	_____
KOBAYASHI, Makoto		
3) <u>Tanaka Masanaga</u>	June 16, 2017	_____
TANAKA, Masanaga		
4) _____	_____	_____
5) _____	_____	_____
6) _____	_____	_____
7) _____	_____	_____

PATENT

RECORDED: 06/26/2017

REEL: 042817 FRAME: 0119