

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT4429404

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JEONG GIL LEE	03/30/2017
JEE YONG KIM	03/30/2017
JUNG HWAN LEE	03/30/2017
DAE SEOK BYEON	05/09/2017
HYUN SEOK LIM	03/30/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	SAMSUNG ELECTRONICS CO., LTD.
<b>Street Address:</b>	129, SAMSUNG-RO, YEONGTONG-GU
<b>Internal Address:</b>	GYEONGGI-DO
<b>City:</b>	SUWON-SI
<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:	15604028
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(919)854-1401
<i>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.</i>	
<b>Phone:</b>	919-854-1400
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<b>Address Line 4:</b>	RALEIGH, NORTH CAROLINA 27612
<b>ATTORNEY DOCKET NUMBER:</b>	5649-4693
<b>NAME OF SUBMITTER:</b>	GAYLE ENDRES
<b>SIGNATURE:</b>	/gee/
<b>DATE SIGNED:</b>	05/24/2017

**Total Attachments: 5**

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COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY PATENT APPLICATION AND  
ASSIGNMENT FORM<sup>1</sup>

The undersigned acknowledges that this document is being used both as an assignment of  
the invention and as the declaration (37 CFR 1.63) for a Utility or Design Application.

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

Title: MEMORY DEVICES USING ETCHING STOP LAYERS

for which Assignor is about to make or has made United States or International application  
for patent.

WHEREAS, as a below named inventor(s), I/(we) hereby declare that:

**Section I. Declaration**

This declaration is directed to:

- ☒ The attached U.S. non-provisional patent application, or
- ☐ U.S. non-provisional patent application number \_\_\_\_\_, filed  
on \_\_\_\_\_, or
- ☐ PCT international patent application number \_\_\_\_\_, filed on  
\_\_\_\_\_.

The above-identified application was made or authorized to be made by me (us).

I (we) believe that I am (we are) the original inventor (original joint inventors) of a claimed  
invention in the above-identified application.

I (we) hereby acknowledge that any willful false statement made in this declaration is  
punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or  
both.

<sup>1</sup> This form requires the use of an Application Data Sheet.

SEC Ref No. IC-201607-001-1-USO

Attorney Ref No. 5649-4693

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM

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SAMSUNG ELECTRONICS CO., LTD.

examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

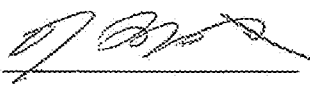
Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee.

The undersigned hereby grant(s) the law firm of Myers Bigel, P.A. the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

Section III. Inventor(s)/Assignor(s) Signature(s)

LEGAL NAME OF FIRST INVENTOR/ASSIGNOR	Family Name	First Given Name	Second Given Name
	LEE	Jeong Gil	

SIGNATURE 	DATE <u>30/Mar./2017</u>
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SEC Ref No. IC-201607-001-1-USO Attorney Ref No. 5649-4693

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM

LEGAL NAME OF SECOND INVENTOR/ASSIGNOR	Family Name	First Given Name	Second Given Name
	KIM	Jee Yong	
<p>SIGNATURE <u>KIM, JEE YONG</u> DATE <u>3/30/2017</u></p>			

LEGAL NAME OF THIRD INVENTOR/ASSIGNOR	Family Name	First Given Name	Second Given Name
	LEE	Jung Hwan	
<p>SIGNATURE <u>LEE JUNG HWAN</u> DATE <u>3/30/2017</u></p>			

LEGAL NAME OF FOURTH INVENTOR/ASSIGNOR	Family Name	First Given Name	Second Given Name
	BYEON	Dae Seok	
<p>SIGNATURE <u>BYEON DAE SEOK</u> DATE <u>9 May 2017</u></p>			

SEC Ref No. IC-201607-001-1-USO

Attorney Ref No. 5649-4693

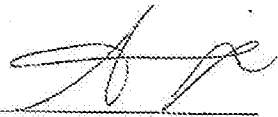
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PATENT

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LEGAL NAME OF FIFTH INVENTOR/ASSIGNOR	Family Name	First Given Name	Second Given Name
	LIM	Hyun Seok	
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>SIGNATURE</p>  </div> <div style="text-align: center;"> <p>DATE</p> <p>30 / Mar. / 2017</p> </div> </div>			

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