PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Ha-Jin Lim	06/16/2010
Weon-Hong Kim	06/16/2010

RECEIVING PARTY DATA

Name:	Samsung Electronics Co., Ltd.
Street Address:	416, Maetan-dong, Yeongtong-gu
City:	Suwon-si, Gyeonggi-do
State/Country:	REPUBLIC OF KOREA

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12835790

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: SAM-1490

NAME OF SUBMITTER: Anthony P. Onello, Jr.

Total Attachments: 2

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OF \$40.00 12835/90

PATENT REEL: 024683 FRAME: 0134

Attorney Reference No.: SAM-1490

ASSIGNMENT

We, Ha-Jin Lim, of 201-1001, Jayang Hyundai 2-cha Apt., 761, Jayang 3-dong, Gwangjin-gu, Seoul,
Republic of Korea; and Weon-Hong Kim, of 301-2003, Dongsuwon LG Village 3-cha Xi Apt.,
Mangpo-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea; having invented improvements
in METHOD OF FORMING HIGH-K DIELECTRIC AND METHOD OF FABRICATING
SEMICONDUCTOR DEVICE USING THE SAME identified as Attorney Docket No. SAM-1490,
described in an application for Letters Patent of the United States, which application was filed on
, and assigned Serial No (in the event that the execution date,
filing date and/or Serial No. are not entered above at the time we execute this document, and if such
information is deemed necessary, we hereby authorize and request our attorneys at Mills & Onello, LLP,
Eleven Beacon Street, Suite 605, Boston, Massachusetts 02108, USA, to insert above the execution date,
filing date and/or Serial No. of said application, when known), for good and valuable consideration, receipt
of which is hereby acknowledged from Samsung Electronics Co., Ltd., a Korean corporation having a place
of business at 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea (and
hereinafter called the Assignee, which term shall include its successors and assigns), do hereby sell, assign
and transfer unto the Assignee our entire right, title, and interest in and throughout the United States of
America (including its territories and dependencies) and all countries foreign thereto, in and to and under
said application (which term shall include hereinafter where the context so admits all divisional, continuing,
reissue and other patent applications based thereon) and the inventions (which term shall include each and
every such invention, or part thereof) therein described, and any and all patents and like rights of exclusion
(including extensions thereof) of any country which may be granted on or for said inventions or on said
application;

And for the same consideration We do also hereby sell, assign, and transfer unto the Assignee, all our rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, and all other treaties of like purpose in respect of said inventions and said application, and We do hereby authorize the Assignee to apply in our name or its own name or its designee for patents and like rights of exclusion on or for said inventions in all countries, claiming (if the Assignee so desires) the priority of the filing date of said application under the provisions of said Convention, Treaty or any such other Convention or Treaty;

And for the same consideration, We do hereby agree for ourselves and for our heirs, executors, and administrators, promptly upon request of the Assignee to execute and deliver without further compensation any power of attorney, assignment, original, divisional, continuing, reissue or other application or applications for patent or patents or like rights of exclusion of any country, or other lawful documents and any further assurances that may be deemed necessary or desirable by the Assignee, fully to secure to it said right, title, and interest as aforesaid in and to said inventions, applications, and said several patents and like rights of exclusion (including extensions thereof) or any of them, all, however, at the expense of the Assignee, its successors, or assigns;

And We do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and the corresponding Official of each country foreign thereto to issue to the Assignce, any and all patents and like rights of exclusion which may be granted in any country upon said United States application on or for said inventions;

And We do hereby covenant for ourselves and our legal representatives and agree with the Assignee, that We have granted no right or license to make, use, or sell said inventions to anyone except the Assignee,

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Attorney Reference No.: SAM-1490

that prior to the execution of this deed our right, title, and interest in and to said inventions has not been otherwise encumbered by us, and that We have not executed and will not execute any instruments in conflict herewith.

First or Sole Inventor:

Signature:

Hajin Lim

Date: 6/16/2010

Second Joint Inventor:

Signature:

WearHay Kim

Date: 6/16/2016

Weon-Hong Kim

ATTORNEY REFERENCE NO.: SAM-1490 J:\SAM\1490\1490_ASSIGNMENT-MULT-INV.DOC

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