

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Kwang Hee KIM</td> <td>03/18/2013</td> </tr> <tr> <td>Hyeon Cheol PARK</td> <td>03/18/2013</td> </tr> <tr> <td>Byung Ki RYU</td> <td>03/18/2013</td> </tr> <tr> <td>Jae Ho LEE</td> <td>03/18/2013</td> </tr> </tbody> </table>		Name	Execution Date	Kwang Hee KIM	03/18/2013	Hyeon Cheol PARK	03/18/2013	Byung Ki RYU	03/18/2013	Jae Ho LEE	03/18/2013
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Hyeon Cheol PARK	03/18/2013										
Byung Ki RYU	03/18/2013										
Jae Ho LEE	03/18/2013										
RECEIVING PARTY DATA											
Name:	SAMSUNG ELECTRONICS CO., LTD.										
Street Address:	129, Samsung-ro, Yeongtong-gu										
City:	Suwon-si, Gyeonggi-do										
State/Country:	KOREA, REPUBLIC OF										
Postal Code:	443-742										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13846174</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13846174						
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Application Number:	13846174										
CORRESPONDENCE DATA											
Fax Number:	8602860115										
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
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ATTORNEY DOCKET NUMBER:	PNK0934US										
NAME OF SUBMITTER:	Grant M. Ehrlich, Ph.D.										
This document serves as an Oath/Declaration (37 CFR 1.63).											
Total Attachments: 2 source=AS_FILED_Assignment#page1.tif source=AS_FILED_Assignment#page2.tif											

OP \$40.00 13846174

ASSIGNMENT

WHEREAS WE, **Kwang Hee KIM** of 101, 1630-16, Bongcheon 11-dong, Gwanak-gu Seoul, Korea; **Hyeon Cheol PARK** of 352-1801, Sibeom Daeun Maeul Woonam Firstvill Apt., Bamsong-dong, Hwaseong-si, Gyeonggi-do, Korea; **Byung Ki RYU** of 121, Yedang Maeul Woonmirin Jeil Punggyeongchae Apt., Seokwoo-dong, Hwaseong-si, Gyeonggi-do, Korea; and **Jae Ho LEE** of 517-101, Samsung 5 Cha Apt., Pungdeokcheon 2-dong, Suji-gu, Yongin-si, Gyeonggi-do, Korea (hereinafter collectively referred to as the "ASSIGNORS"), have invented certain new and useful improvements in:

SEPARATION MEMBRANE, HYDROGEN SEPARATION MEMBRANE INCLUDING THE SEPARATION MEMBRANE, AND DEVICE INCLUDING THE HYDROGEN SEPARATION MEMBRANE

(hereinafter referred to as the "INVENTION") which claims priority to **Korean** Application Nos. 10-2012-0027722 and 10-2013-0028218 filed on March 19, 2012 and March 15, 2013; and for which we are about to file an application for a United States Patent (hereinafter collectively referred to as the "APPLICATIONS");

AND WHEREAS, **SAMSUNG ELECTRONICS CO. LTD.** (hereinafter referred to as "ASSIGNEE"), a corporation organized and existing under the laws of the Country of **Korea**, having a place of business at **129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 443-742, Republic of Korea**, is desirous of acquiring an interest in any and all countries, in and to the INVENTION, the APPLICATIONS, and any and all Patents to be obtained therefor;

NOW THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for good and valuable consideration, the receipt of which is hereby acknowledged, we, the ASSIGNORS, have assigned and transferred, and hereby assign and transfer unto ASSIGNEE, the entire right, title and interest in and to the INVENTION, the APPLICATIONS, and any and all Patents that may be issued therefrom, in any and all countries, including any and all revivals, refilings, continuations, continuations-in-part, divisions and reissues thereof, to ASSIGNEE; and we do hereby agree that we will execute all papers necessary in connection with any and all patent applications when called upon to do so by ASSIGNEE, its successors or assigns, and that we will, at the cost and expense of ASSIGNEE, fully assist and cooperate in all matters in connection with any and all patent applications and Patents issuing thereon.

PNK0934US

The undersigned declare that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the APPLICATIONS or any Patents issuing thereon.

Date: March 18, 2013


Kwang Hee KIM

L.S.

Date: March 18, 2013


Hyeon Cheol PARK

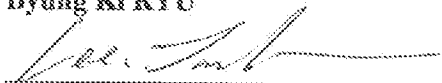
L.S.

Date: March 18, 2013


Byung Ki RYU

L.S.

Date: March 18, 2013


Jae Ho LEE

L.S.

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