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PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Adrianus Johannes Petrus Maria VERMEER	08/06/2012
Freddy ROOZEBOOM	08/03/2012
Joop VAN DEELEN	08/02/2012

RECEIVING PARTY DATA

Name:	Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO
Street Address:	Schoemakerstraat 97
City:	Delft
State/Country:	NETHERLANDS
Postal Code:	2628 VK

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13577922

CORRESPONDENCE DATA

Fax Number: 2028243001

Email: csmits@bannerwitcoff.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via

US Mail.

Correspondent Name: Banner & Witcoff
Address Line 1: 1100 13th Street N.W.

Address Line 2: Suite 1200

Address Line 4: Washington D.C., DISTRICT OF COLUMBIA 20005

ATTORNEY DOCKET NUMBER:	007938.00049
NAME OF SUBMITTER:	Benjamin C. Spehlmann/

Total Attachments: 2

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> PATENT REEL: 028935 FRAME: 0046

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BW: 007938.00049

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ASSIGNMENT

WHEREAS, WE, Adrianus Johannes Petrus Maria VERMEER, Freddy ROOZEBOOM and Joop VAN DEELEN residing in The Netherlands (ASSIGNORS), are the inventors of certain inventions and improvements described in a U.S. patent application identified by having the title:

METHOD AND APPARATUS FOR DEPOSITING ATOMIC LAYERS ON A SUBSTRATE

which application was filed as U.S. Application Serial Number <u>13/577,922</u> on 9 August 2012, and filed as PCT International Application <u>PCT/NL2011/050100</u> (published as WO 2011/099858) on February 11, 2011.

and WHEREAS

Nederlandse Organisatie voor toegepastnatuurwetenschappelijk onderzoek TNO Schoemakerstraat 97 2628 VK Delft The Netherlands

ASSIGNEE, desires to acquire the entire right, title and interest in and to the said application, inventions and improvements and any patents that may be granted on or as a result thereof in the United States of America (U.S.) and in any and all foreign countries;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged,

We hereby assign, to the above named ASSIGNEE, its successors, assign and legal representatives (NOMINEES) the entire right, title and interest in and to said application, inventions and improvements throughout the world and to any and all patents, petty patents and utility model patents which may be granted therefor, and all continuations, continuations-in-part, divisions, reissues, extensions, renewals, and any non-provisional based on a provisional thereof (LETTERS PATENT).

And we covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement or do anything in conflict herewith:

And we further covenant and agree that we will without undue delay execute without further consideration all such papers as may be necessary to perfect the title to said application, inventions and improvements, and LETTERS PATENT in the ASSIGNEE or its NOMINEES, and we agree to communicate to said ASSIGNEE or its NOMINEES all known facts respecting

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said application, inventions, improvements, and LETTERS PATENT, to testify in any legal proceedings, to sign all lawful papers, and generally to do all things necessary to aid ASSIGNEE or its NOMINEES to obtain and enforce for their own benefit patent protection for said application, inventions and improvements in any and all countries, all at the expense, however, of the ASSIGNEE or its NOMINEES;

And we authorize the ASSIGNEE or its NOMINEES to file in our names or their own, as appropriate, application for LETTERS PATENT in any and all countries of the world, and we authorize and request the Commissioner of Patents and Trademarks of the United States, and any proper official of any country, to issue to said ASSIGNEE or its NOMINEES any and all LETTERS PATENT for said application, inventions and improvements, for their sole use, to the full end of the term for which such LETTERS PATENT may be granted;

And we hereby grant our attorneys at the law firm of Banner & Witcoff the power to insert into this document information sufficient to identify the patent application to which this assignment pertains.

Date: 6-8-2012 Inventor: ___

Adrianus Johannes Petrus Maria VERMEER

Date: 3-8-2012

minutor 911

Freddy ROOZEBOOM

Date: 2- 1-2012

Inventor:

Note: No legalization or other witness required.

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