

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT2938987

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
BRYAN C. HENDRIX	03/12/2014
PHILIP S.H. CHEN	02/18/2014
WEIMIN LI	07/15/2014
DINGKAI GUO	02/17/2014
WOOSUNG JANG	02/08/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ADVANCED TECHNOLOGY MATERIALS, INC.
<b>Street Address:</b>	7 COMMERCE DRIVE
<b>City:</b>	DANBURY
<b>State/Country:</b>	CONNECTICUT
<b>Postal Code:</b>	06810
<b>Name:</b>	ATMI KOREA CO., LTD.
<b>Street Address:</b>	KANC 11F 906-10, IUI-DONG, YEONGTONG-GU
<b>City:</b>	SUWON
<b>State/Country:</b>	REPUBLIC OF KOREA
<b>Postal Code:</b>	443-270
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>PCT Number:</b>	US1414954
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(919)419-9354
<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>	9194199350
<b>Email:</b>	hip@hultquistip.com
<b>Correspondent Name:</b>	HULTQUIST IP
<b>Address Line 1:</b>	PO BOX 14329
<b>Address Line 4:</b>	RESEARCH TRIANGLE PK, NORTH CAROLINA 27709
<b>ATTORNEY DOCKET NUMBER:</b>	2771-1135 PCT
<b>NAME OF SUBMITTER:</b>	STEVEN J. HULTQUIST

PATENT

<b>SIGNATURE:</b>	/Steven J. Hultquist/
<b>DATE SIGNED:</b>	07/15/2014
<b>Total Attachments: 9</b> source=1135PCT_CombinedAssignment#page1.tif source=1135PCT_CombinedAssignment#page2.tif source=1135PCT_CombinedAssignment#page3.tif source=1135PCT_CombinedAssignment#page4.tif source=1135PCT_CombinedAssignment#page5.tif source=1135PCT_CombinedAssignment#page6.tif source=1135PCT_CombinedAssignment#page7.tif source=1135PCT_CombinedAssignment#page8.tif source=1135PCT_CombinedAssignment#page9.tif	

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**ASSIGNMENT**

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We, **BRYAN C. HENDRIX, PHILIP S.H. CHEN, WEIMIN LI, and DINGKAI GUO**, together with **WOOSUNG JANG**, have made an invention the specification of which is described in the International Patent Application No. PCT/US14/14954 filed under the provisions of 35 U.S.C. § 119, based on United States Provisional Patent Application No. 61/762,352 filed February 8, 2013; United States Provisional Patent Application No. 61/895,380 filed October 24, 2013; and United States Provisional Patent Application No. 61/903,491 filed November 13, 2013, entitled:

**"ALD PROCESSES FOR LOW LEAKAGE CURRENT AND LOW EQUIVALENT OXIDE THICKNESS BIT<sub>2</sub>O FILMS"**

We hereby assign to **Advanced Technology Materials, Inc.**, 7 Commerce Drive, Danbury, CT 06810, all ownership and rights in:

- (i) the invention and International Patent Application;
- (ii) non-provisional, continuing, divisional and continuation-in-part applications based on and claiming benefit and/or priority of said International Patent Application; and
- (iii) U.S. Patents on the invention.

We are making this assignment based on our business relationship with **Advanced Technology Materials, Inc.**

We respectfully request the Commissioner for Patents of the United States to issue patents on the invention to:

**Advanced Technology Materials, Inc.**

as co-owner of the invention and aforementioned patent rights.

We agree to execute any other legal documents that may be required to effectuate this Assignment.

We agree that we will promptly communicate to **Advanced Technology Materials, Inc.** all facts which come to our attention affecting the invention or patent rights.

We agree that we will testify in any interference or litigation involving the invention or patent rights.

We declare that we have not done anything in conflict with this Assignment.

  
BRYAN C. HENDRIX

3/12/14  
Date (mm/dd/yyyy)

PHILIP S.H. CHEN

Date (mm/dd/yyyy)

WEIMIN LI

Date (mm/dd/yyyy)

DINGKAI GUO

Date (mm/dd/yyyy)

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BRYAN C. HENDRIX

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Date (mm/dd/yyyy)

  
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PHILIP S.H. CHEN

*02/18/2014*  
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Date (mm/dd/yyyy)

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WEIMIN LI

\_\_\_\_\_  
Date (mm/dd/yyyy)

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DINGKAI GUO

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Date (mm/dd/yyyy)

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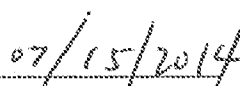
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BRYAN C. HENDRIX

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Date (mm/dd/yyyy)

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PHILIP S.H. CHEN

\_\_\_\_\_  
Date (mm/dd/yyyy)

  
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WEIMIN LI

  
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Date (mm/dd/yyyy)

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DINGKAI GUO

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Date (mm/dd/yyyy)



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**ASSIGNMENT**

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\_\_\_\_\_  
BRYAN C. HENDRIX

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Date (mm/dd/yyyy)

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PHILIP S.H. CHEN

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Date (mm/dd/yyyy)

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WEIMIN LI

\_\_\_\_\_  
Date (mm/dd/yyyy)

  
\_\_\_\_\_  
DINGKAI GUO

02/17/2014  
\_\_\_\_\_  
Date (mm/dd/yyyy)

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ASSIGNMENT

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I, WOOSUNG JANG have made an invention, together with BRYAN C. HENDRIX, PHILIP S.H. CHEN, WEIMIN LI, and DINGKAI GUO, the specification of which is described in the International Patent Application No. PCT/US14/14954 filed under the provisions of 35 U.S.C. § 119, based on United States Provisional Patent Application No. 61/762,352 filed February 8, 2013; United States Provisional Patent Application No. 61/895,380 filed October 24, 2013; and United States Provisional Patent Application No. 61/903,491 filed November 13, 2013, entitled:

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Woosung Jang  
WOOSUNG JANG

02/08/2014  
Date (mm/dd/yyyy)