502208717 01/26/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Julie Cissell	01/25/2013
Chongying Xu	01/07/2013
Thomas M. Cameron	01/09/2013
William Hunks	01/09/2013
David W. Peters	01/08/2013

RECEIVING PARTY DATA

Name:	Advanced Technology Materials, Inc.	
Street Address:	7 Commerce Drive	
City:	Danbury	
State/Country:	CONNECTICUT	
Postal Code:	06810-4169	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13808165

CORRESPONDENCE DATA

Fax Number: 9194199354

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 919-419-9350

Email: hip@hultquistip.com

Correspondent Name: Steven J. Hultquist

Address Line 1: P.O. Box 14329

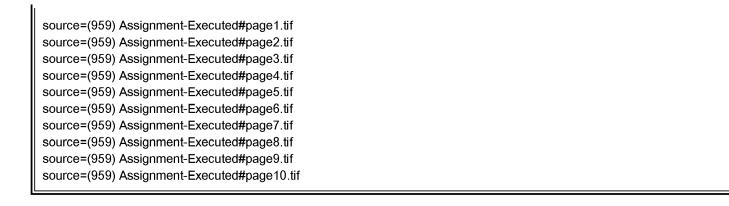
Address Line 4: Research Triangle Pk, NORTH CAROLINA 27709

ATTORNEY DOCKET NUMBER:	2771-959 [7486]
NAME OF SUBMITTER:	Steven J. Hultquist

Total Attachments: 10

PATENT REEL: 029699 FRAME: 0648 OP \$40,00 13808165

502208717



PATENT REEL: 029699 FRAME: 0649

ASSIGNMENT

We, JULIE CISSELL, CHONGYING XU, THOMAS M. CAMERON, WILLIAM HUNKS, and DAVID W. PETERS, have made an invention the specification of which is described in U.S. Patent Application No. 13/808,165 filed January 3, 2013 in the United States Patent and Trademark Office on entitled:

"DOPING OF ZrO2 FOR DRAM APPLICATIONS"

We hereby assign to Advanced Technology Materials, Inc., 7 Commerce Drive, Danbury, CT 06810-4169, all ownership and rights in:

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

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 and the appropriate officers of all foreign countries to issue patents on the invention to:

Advanced Technology Materials, Inc.

as 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.

Page 1 of 2

Jelle assell	01/25/2013
JULIE CISSELL	Date (mm/dd/yyyy)
CHONGYING XU	Date (mm/dd/yyyy)
THOMAS M. CAMERON	Date (mm/dd/yyyy)
WILLIAM HUNKS	Date (mm/dd/yyyy)
DAVID W. PETERS	Date (mm/dd/yyyy)

ASSIGNMENT

We, JULIE CISSELL, CHONGYING XU, THOMAS M. CAMERON, WILLIAM HUNKS, and DAVID W. PETERS, have made an invention the specification of which is described in U.S. Patent Application No. 13/808,165 filed January 3, 2013 in the United States Patent and Trademark Office on entitled:

"DOPING OF ZeO2 FOR DRAM APPLICATIONS"

We hereby assign to Advanced Technology Materials, Inc., 7 Commerce Drive, Danbury, CT 06810-4169, all ownership and rights in:

the invention and U.S. Patent Application; (i)

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

U.S. Patents on the invention; and (iii)

corresponding foreign patent applications and patents. (iv)

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 and the appropriate officers of all foreign countries to issue patents on the invention to:

Advanced Technology Materials, Inc.

as 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.

Page 1 of 2

JULIE CISSELL	Date (mm/dd/yyyy) 01/07/2013
CHONGYING XU	Date (mm/dd/yyyy)
THOMAS M. CAMERON	Date (mm/dd/yyyy)
WILLIAM HUNKS	Date (mm/dd/yyyy)
DAVID W. PETERS	Date (mm/dd/yyyy)

ASSIGNMENT

We, JULIE CISSELL, CHONGYING XU, THOMAS M. CAMERON, WILLIAM HUNKS, and DAVID W. PETERS, have made an invention the specification of which is described in U.S. Patent Application No. 13/808,165 filed January 3, 2013 in the United States Patent and Trademark Office on entitled:

"DOPING OF ZrO2 FOR DRAM APPLICATIONS"

We hereby assign to Advanced Technology Materials, Inc., 7 Commerce Drive, Danbury, CT 06810-4169, all ownership and rights in:

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

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 and the appropriate officers of all foreign countries to issue patents on the invention to:

Advanced Technology Materials, Inc.

as 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.

JULIE CISSELL	Date (mm/dd/yyyy)
CHONGYING XU	Date (mm/dd/yyyy)
THOMAS M. CAMERON	Date (mm/dd/yyyy)
WILLIAM HUNKS	Date (mm/dd/yyyy)
DAVID W. PETERS	Date (mm/dd/yyyy)

ASSIGNMENT

We, JULIE CISSELL, CHONGYING XU, THOMAS M. CAMERON, WILLIAM HUNKS, and DAVID W. PETERS, have made an invention the specification of which is described in U.S. Patent Application No. 13/808,165 filed January 3, 2013 in the United States Patent and Trademark Office on entitled:

"DOPING OF ZrO2 FOR DRAM APPLICATIONS"

We hereby assign to Advanced Technology Materials, Inc., 7 Commerce Drive, Danbury, CT 06810-4169, all ownership and rights in:

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

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 and the appropriate officers of all foreign countries to issue patents on the invention to:

Advanced Technology Materials, Inc.

as 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.

JULIE CISSELL	Date (mm/dd/yyyy)
CHONGYING XU	Date (mm/dd/yyyy)
THOMAS M. CAMERON	Date (mm/dd/yyyy)
whian Aus	1/9/2013
WILLIAM HUNKS	Date (mm/dd/yyyy)
DAVID W. PETERS	Date (mm/dd/yyyy)

ASSIGNMENT

We, JULIE CISSELL, CHONGYING XU, THOMAS M. CAMERON, WILLIAM HUNKS, and DAVID W. PETERS, have made an invention the specification of which is described in U.S. Patent Application No. 13/808,165 filed January 3, 2013 in the United States Patent and Trademark Office on entitled:

"DOPING OF ZrO2 FOR DRAM APPLICATIONS"

We hereby assign to Advanced Technology Materials, Inc., 7 Commerce Drive, Danbury, CT 06810-4169, all ownership and rights in:

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

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 and the appropriate officers of all foreign countries to issue patents on the invention to:

Advanced Technology Materials, Inc.

as 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.

JULIE CISSELL	Date (mm/dd/yyyy)
CHONGYING XU	Date (mm/dd/yyyy)
THOMAS M. CAMERON	Date (mm/dd/yyyy)
WILLIAM HÜNKS	Date (mm/dd/yyyy) //-/8-2/13
DAVID W. PETERS	Date (mm/dd/yyyy)