503749668 03/23/2016

## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ADVANCED INTERCONNECT MATERIALS, LLC	03/19/2016

### **RECEIVING PARTY DATA**

Name:	TOHOKU UNIVERSITY
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#### **PROPERTY NUMBERS Total: 6**

Property Type	Number
Patent Number:	8188599
Patent Number:	8372745
Patent Number:	7755192
Patent Number:	8258626
Patent Number:	8420535
Patent Number:	8324730

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DATE SIGNED:	03/23/2016

PATENT 503749668 REEL: 038078 FRAME: 0852

## **Total Attachments: 2**

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PATENT REEL: 038078 FRAME: 0853

# Assignment

Whereas, ADVANCED INTERCONNECT MATERIALS, LLC of 6-6-40-402, Aza-Aoba, Sendai-shi, Miyagi 980-0845 JAPAN, hereinafter called assignor, has acquired by assignment the entire right, title, and interest in the following U.S. patents and the inventions disclosed therein:

- 1. U.S. Patent No. 8,188,599 B2, issued May 29, 2012, entitled SEMICONDUCTOR DEVICE, ITS MANUFACTURING METHOD, AND SPUTTERING TARGET MATERIAL FOR USE IN THE METHOD (Assignment recorded on April 7, 2008, at Reel 020780, Frame 0239).
- 2. U.S. Patent No. 8,372,745 B2, issued February 12, 2013, entitled SEMICONDUCTOR DEVICE, ITS MANUFACTURING METHOD, AND SPUTTERING TARGET MATERIAL FOR USE IN THE METHOD (Assignment recorded on June 16, 2009, at Reel 022836, Frame 0963).
- 3. U.S. Patent No. 7,755,192 B2, issued July 13, 2010, entitled COPPER INTERCONNECTION STRUCTURE, BARRIER LAYER INCLUDING CARBON AND HYDROGEN (Assignment 1 recorded on April 17, 2009, at Reel 022576, Frame 0752; Assignment 2 recorded on April 17, 2009, at Reel 022576, Frame 0740; and Assignment 3 recorded on March 21, 2011, at Reel 026002, Frame 0918).
- 4. U.S. Patent No. 8,258,626 B2, issued September 4, 2012, entitled COPPER INTERCONNECTION, METHOD FOR FORMING COPPER INTERCONNECTION STRUCTURE, AND SEMICONDUCTOR DEVICE (Assignment 1 recorded on October 16, 2009, at Reel 023387, Frame 0794; Assignment 2 recorded on October 16, 2009, at Reel 023398, Frame 0700; and Assignment 3 recorded on March 21, 2011, at Reel 026008, Frame 0715).
- 5. U.S. Patent No. 8,420,535 B2, issued April 16, 2013, entitled COPPER INTERCONNECTION, METHOD FOR FORMING COPPER INTERCONNECTION STRUCTURE, AND SEMICONDUCTOR DEVICE (from parent Application No. 12/586,043 filed September 15, 2009, issued as U.S. Patent No. 8,258,626 B2: Assignment 1 recorded on October 16, 2009, at Reel 023387, Frame 0794; Assignment 2 recorded on October 16, 2009, at Reel 023398, Frame 0700; and Assignment 3 recorded on March 21, 2011, at Reel 026008, Frame 0715).
- 6. U.S. Patent No. 8,324,730 B2, issued December 4, 2012, entitled COPPER INTERCONNECTION STRUCTURE AND METHOD FOR FORMING COPPER INTERCONNECTIONS (Assignment 1 recorded on December 3, 2009, at Reel 023606, Frame 0775; Assignment 2 recorded on December 3, 2009, at Reel 023606, Frame 0779; and Assignment 3 recorded on March 21, 2011, at Reel 026008, Frame 0715).

Whereas, TOHOKU UNIVERSITY, of 2-1-1 Katahira, Aoba-ku, Sendai-shi, Miyagi 980-8577 JAPAN, hereinafter called assignee, desires to acquire the assignor's entire right, title, and interest in the above U.S. patents and the inventions disclosed therein;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

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The above named assignor hereby sells, assigns and transfers to the above named assignee, its successors and assigns, the entire right, title and interest in the above U.S. patents and the inventions disclosed therein.

Date: March 19, 2016 Hideaki Kawakami

By: Hideaki KAWAKAMI

Title: President

ADVANCED INTERCONNECT MATERIALS, LLC

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

> **PATENT REEL: 038078 FRAME: 0855**

RECORDED: 03/23/2016