

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
HIROSHI TAKAMURA	08/06/2014
RYO SUZUKI	08/07/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	JX NIPPON MINING & METALS CORPORATION
<b>Street Address:</b>	6-3, OTEMACHI 2-CHOME
<b>Internal Address:</b>	CHIYODA-KU
<b>City:</b>	TOKYO
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	100-8164
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14375154
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(215)540-5818
<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>	215-540-9200
<b>Email:</b>	docketing@howsoniplaw.com
<b>Correspondent Name:</b>	WILLIAM BAK, HOWSON & HOWSON LLP
<b>Address Line 1:</b>	350 SENTRY PARKWAY
<b>Address Line 2:</b>	BUILDING 620, SUITE 210
<b>Address Line 4:</b>	BLUE BELL, PENNSYLVANIA 19422
<b>ATTORNEY DOCKET NUMBER:</b>	OGOSH307USA
<b>NAME OF SUBMITTER:</b>	BEA HOUWEN
<b>SIGNATURE:</b>	/Bea Houwen/
<b>DATE SIGNED:</b>	08/27/2014
<b>Total Attachments: 2</b>	
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**ASSIGNMENT**

WHEREAS, Hiroshi Takamura and Ryo Suzuki, hereinafter referred to as ASSIGNORS, have invented and are the owner of an invention entitled "POLYCRYSTALLINE SILICON SPUTTERING TARGET, said invention being fully set forth and described in the application for Letters Patent of the United States which has been prepared in connection with said invention, and which has been signed by ASSIGNORS; and

WHEREAS, JX Nippon Mining & Metals Corporation, a Japanese Corporation engaged in business at 6-3, Otemachi 2-chome, Chiyoda-ku, Tokyo, 100-8164 Japan, hereinafter referred to as ASSIGNEE, is desirous of acquiring the said invention and any and all applications for Letters Patent and any and all Letters Patent of the United States and foreign countries which may be issued therefor;

NOW THEREFORE, THIS IS TO WITNESS, that in consideration of the sum of One Dollar (\$1.00) paid to ASSIGNORS by ASSIGNEE, the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNORS have sold, assigned and set over, and hereby does sell, assign and set over, unto ASSIGNEE, its successors and assigns, the entire right, title and interest for, to and within the United States and all foreign countries, in and to the aforesaid invention and in and to any and all application for Letters Patent and Letters Patent which may be issued therefor in the United States and in any and all foreign countries.

And ASSIGNORS hereby authorize and request the Commissioner of Patent and Trademarks to issue any and all Letters patent of the United States to ASSIGNEE, its successors and assigns, as the owner of all right, title and interest therein.

And for said consideration, it is hereby covenanted and agreed that at the request and expense of ASSIGNEE, its successors and assigns, ASSIGNORS will execute any further papers and do such other acts and things as may be necessary and proper to procure Letters Patent for said invention in the United States and in such foreign countries as ASSIGNEE, its successors and assigns may elect, and vest the full title thereto in ASSIGNEE, its successors and assigns.

And ASSIGNORS hereby authorize and direct their attorneys to insert, in the space provided below, the serial number and filing date of the aforesaid application for Letters Patent of the United States when the same shall have been made known to them by the United States Patent and Trademark Office.

IN WITNESS WHEREOF, this Assignment has been executed on the dates accompanying our signatures.

Hiroshi Takamura August 6<sup>th</sup>, 2014  
Hiroshi Takamura (Date)

Ryo Suzuki August 7, 2014  
Ryo Suzuki (Date)

Application for United States Letters patent Serial Number 14/375,154  
filed 7-29-14

Howson & Howson  
HOWSON & HOWSON LLP