

## 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>
SHIRO TSUKAMOTO	04/01/2014
NOBUHITO MAKINO	04/01/2014
ATSUSHI FUKUSHIMA	04/07/2014
KAZUTO YAGI	04/01/2014
EIJI HINO	04/01/2014
<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:	14353507
<b>CORRESPONDENCE DATA</b>	
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<b>NAME OF SUBMITTER:</b>	BEA HOUWEN
<b>SIGNATURE:</b>	/Bea Houwen/
<b>DATE SIGNED:</b>	04/23/2014
<b>Total Attachments: 4</b>	

PATENT

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**ASSIGNMENT**

WHEREAS, Shiro Tsukamoto, Nobuhito Makino, Atsushi Fukushima, Kazuto Yagi and Eiji Hino, hereinafter referred to as ASSIGNORS, have invented and are the owners of an invention entitled "TITANIUM TARGET FOR SPUTTERING", 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 do 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 date accompanying our signatures.

Shiro Tsukamoto April, 1, 2014  
Shiro Tsukamoto (Date)

\_\_\_\_\_  
Nobuhito Makino (Date)

\_\_\_\_\_  
Atsushi Fukushima (Date)

Kazuto Yagi April, 1, 2014  
Kazuto Yagi (Date)

Eiji Hino 1st of April in 2014  
Eiji Hino (Date)

Application for United States Letters patent Serial Number  
filed

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HOWSON & HOWSON LLP

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

\_\_\_\_\_  
Shiro Tsukamoto

\_\_\_\_\_  
(Date)

*N. Makino*  
\_\_\_\_\_  
Nobuhito Makino

*April 1, 2014*  
\_\_\_\_\_  
(Date)

\_\_\_\_\_  
Atsushi Fukushima

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
Kazuto Yagi

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
Eiji Hino

\_\_\_\_\_  
(Date)

Application for United States Letters patent Serial Number  
filed

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HOWSON & HOWSON LLP

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

\_\_\_\_\_  
Shiro Tsukamoto

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
Nobuhito Makino

\_\_\_\_\_  
(Date)

Atsushi Fukushima April 7, 2014  
Atsushi Fukushima (Date)

\_\_\_\_\_  
Kazuto Yagi

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
Eiji Hino

\_\_\_\_\_  
(Date)

filed

Application for United States Letters patent Serial Number 14/353 507

4-23-14

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HOWSON & HOWSON LLP