502555066 11/01/2013

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2600712

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TOSHIO KUROSAWA	10/04/2013

RECEIVING PARTY DATA

Name:	JX NIPPON MINING & METALS CORPORATION
Street Address:	6-3, OTEMACHI 2-CHOME
Internal Address:	CHIYODA-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	100-8164

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14006351

CORRESPONDENCE DATA

 Fax Number:
 (215)540-5818

 Phone:
 215 540 9200

Email: docketing@howsoniplaw.com

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

Correspondent Name: WILLIAM BAK, HOWSON & HOWSON LLP

Address Line 1: BUILDING 620, SUITE 210
Address Line 2: 350 SENTRY PARKWAY

Address Line 4: BLUE BELL, PENNSYLVANIA 19422

OGOSH275USA
BEA HOUWEN
/Bea Houwen/
11/01/2013

Total Attachments: 2 source=14006351#page1.tif source=14006351#page2.tif

> PATENT REEL: 031530 FRAME: 0647

CH \$40.00 14

ASSIGNMENT

WHEREAS, Toshio Kurosawa, hereinafter referred to as ASSIGNOR, has invented and is the owner of an invention entitled "METAL FOIL PROVIDED WITH ELECTRICALLY RESISTIVE LAYER, AND BOARD FOR PRINTED CIRCUIT USING SAID METAL FOIL", 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 ASSIGNOR; 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 ASSIGNOR by ASSIGNEE, the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR has 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 ASSIGNOR hereby authorizes and requests 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, ASSIGNOR 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 ASSIGNOR hereby authorizes and directs 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.

PATENT REEL: 031530 FRAME: 0648 IN WITNESS WHEREOF, this Assignment has been executed on the date accompanying my signature.

Toshio Kurosawa October 4, 2013
Toshio Kurosawa (Date)

Application for United States Letters patent Serial Number 14/006, 35/filed 9-20-203.

HOWSON & HOWSON HA

2

RECORDED: 11/01/2013