PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3053599

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KOICHIRO TANAKA	09/02/2014
KAZUKI KAMMURI	09/03/2014

RECEIVING PARTY DATA

Name:	JX NIPPON MINING & METALS CORPORATION
Street Address:	6-3, OTEMACHI 2-CHOME, CHIYODA-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	1008164

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14369909

CORRESPONDENCE DATA

Fax Number: (919)419-0383

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.

Phone: 9194938000 Email: 9194938000 cmiller@jwth.com

Correspondent Name: ARLES A. TAYLOR, JR. **Address Line 1:** 3100 TOWER BLVD

Address Line 2: UNIVERSITY TOWER, SUITE 1200
Address Line 4: DURHAM, NORTH CAROLINA 27707

ATTORNEY DOCKET NUMBER:	1680/100 PCT/US	
NAME OF SUBMITTER:	CARLY MILLER	
SIGNATURE:	/carlymiller/	
DATE SIGNED:	10/06/2014	

Total Attachments: 4

source=Assignmentasfiled#page1.tif source=Assignmentasfiled#page2.tif source=Assignmentasfiled#page3.tif source=Assignmentasfiled#page4.tif

PATENT 503006999 REEL: 033893 FRAME: 0811

RECORDATION FORM COVER SHEET PATENTS ONLY			
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.			
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)		
KOICHIRO TANAKA KAZUKI KAMMURI	Name: JX Nippon Mining & Metals Corporation		
KAZUKI KAIVIIVIURI	Internal Address:		
· · · · · · · · · · · · · · · · · · ·	Street Address: 6-3, Otemachi 2-chome,		
Additional name(s) of conveying party(ies) attached? Yes No	Chiyoda-ku		
3. Nature of conveyance/Execution Date(s): Execution Date(s): 09/02/2014; 09/03/2014	City: Tokyo		
Assignment Merger	State:		
Security Agreement Change of Name Joint Research Agreement	Country: Japan Zip: 1008164		
Government Interest Assignment			
Executive Order 9424, Confirmatory License			
Other	Additional name(s) & address(es) attached? Yes No		
4. Application or patent number(s): This document is being filed together with a new application.			
A. Patent Application No.(s) 14/369,909	B. Patent No.(s)		
Additional numbers at	tached? Yes No		
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents		
Server in the se	involved: 1		
Name <u>: Arles A. Taylor, Jr.</u>	7. Total fee (37 CFR 1.21(h) & 3.41) \$		
Jenkins, Wilson, Taylor & Hunt, P.A.	Authorized to be charged by credit card		
Internal Address:	Authorized to be charged to deposit account		
Street Address: Suite 1200, University Tower	Enclosed None required (government interest not affecting title)		
3100 Tower Boulevard	vario required (gorsamment interest not anothing unit)		
City: Durham	Payment Information Credit Card Last 4 Numbers		
State: NC Zip: 27707	Expiration Date		
Phone Number: 919-493-8000	b. Deposit Account Number 50-0426		
Fax Number:919-419-0383	Authorized User Name <u>Jenkins, Wilson, Taylor & Hunt, P.A.</u>		
Email Address: <u>ataylor@jwth.com</u>	Attorney Docket No.: 1680/100 PCT/US		
2 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
9. Signature: Mul. 18 (n. 1)	10/06/14		
Signature: Arles A. Taylor, Jr.	Total number of pages including cover sheet, attachments, and documents:		

PATENT REEL: 033893 FRAME: 0812

Attorney Docket No.: 1680/100 PCT/US

ASSIGNMENT

WHEREAS, we, Koichiro Tanaka of Ibaraki, Japan; and Kazuki Kammuri of Ibaraki, Japan (hereinafter "Assignors"), have invented certain new and useful improvements in COPPER FOIL COMPOSITE, FORMED PRODUCT AND METHOD OF PRODUCING THE SAME (hereinafter "Invention") for which application for a U.S. Patent was made on June 30, 2014 as Serial No. 14/369,909 (hereinafter "Application"), and claims priority to International Application No. PCT/JP2012/050591 filed January 13, 2012.

AND, WHEREAS, JX Nippon Mining & Metals Corporation, a corporation duly organized and existing under the laws of Japan, having its principal office and place of business at 6-3, Otemachi 2-chome, Chiyoda-ku, Tokyo Japan 1008164 (hereinafter "Assignee"), is desirous of acquiring an interest therein.

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors have sold and by these presents do hereby sell, assign, transfer and convey unto the Assignee, its successors and assigns, their entire right, title and interest in and to the Invention and Application, and in and to any and all foreign patent applications filed on the Invention, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with their right to claim the priority of the Application in all countries in accordance with the Paris Convention, the Patent Cooperation Treaty, or other agreement or national law under which priority can be claimed, the same to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignors if this Assignment and sale had not been made.

PATENT REEL: 033893 FRAME: 0813 Attorney Docket No.: 1680/100 PCT/US

Assignors hereby request that said Letters Patent be issued in accordance with this Assignment.

Assignors further covenant and agree that, at the time of the execution and delivery of these presents, Assignors possess full title to the Invention and Application above-mentioned, and that they have the unencumbered right and authority to make this Assignment.

Assignors further covenant and agree, and likewise bind their heirs, legal representatives and assigns, to promptly communicate to said Assignee or its representatives any facts known to them relating to the Invention, to testify in any interference or legal proceedings involving the Application or Invention, to execute any additional papers which may be requested to confirm the right of the Assignee, its representatives, successors and assigns to secure patent or similar protection for the Invention in all countries and to vest in the Assignee complete title to the Invention and Letters Patent, without further compensation, but at the expense of said Assignee, its successors, assigns and other legal representatives.

Executed this	<u> </u>	y of $\frac{S_4}{}$	eptember	2014.
			Ferchipo	Tanaka
			Koichiro Tanaka	
Witnessed by:				
Toshia dsahi	2 S	Captember	2014	
Name	Dat	e' .	·	
Atsush: Kodanu	2 Se	eptember 2	014	
Name	Dat	rė		
	:			

Attorney Docket No.: 1680/100 I	PCT/US
Executed this3	_day of2014.
	Caroli CAMMURZ
	Kazuki Kammuri
Witnessed by:	
Joshiyaki Ono- Name	3 September 2014 Date
Kazutuka Aoshima Name	3 September 2014 Date