PATENT ASSIGNMENT

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SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Hiroshi Kuwagaki	06/16/2011

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:	100-0004				

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	13139266	

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 35706-0318-00-US

NAME OF SUBMITTER: Leola P. Bryant

Total Attachments: 2

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OF \$40.00 1313926

PATENT REEL: 026472 FRAME: 0317

A S S I G N M E N T

WHEREAS, I,

Hiroshi KUWAGAKI, a citizen of Japan, c/o Technology Development Center, JX Nippon Mining & Metals Corporation, 1-1-2, Shirogane-cho, Hitachi-shi, Ibaraki 317-0056, Japan

have invented certain new and useful improvements in

Ni-Si-Co COPPER ALLOY AND MANUFACTURING METHOD THEREFOR

for which I have on June 16, 2011 executed an application for United States Letters Patent under 35 U.S.C. 371 resulting from the International Application No. PCT/JP2009/070753 filed on December 11, 2009; and

WHEREAS, JX Nippon Mining & Metals Corporation, a Japanese Corporation, located at 6-3, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-0004, Japan,, (hereinafter called the "Assignee"), is desirous of acquiring the entire right, title and interest in and to said application and the inventions and improvements therein disclosed so far as the United States of America is concerned.

NOW, THEREFORE, in good and valuable consideration paid to me by said Assignee, receipt whereof is hereby acknowledged, I do hereby assign, sell, transfer and set over unto said Assignee the entire right, title and interest in and to said application and the inventions and improvements therein disclosed for the United States and any Letters Patent which may issue therefore in the United States and all divisions, re-issues, continuations, renewals and/or extensions thereof, said Assignee to have and to hold the interests herein assigned to the full ends of the terms of said Letters Patent and any and all divisions, re-issues, continuations, renewals and/or extensions thereof, respectively, a fully and entirely as the same would have been held and enjoyed by me had this Assignment not been made.

The Commissioner of Patents and Trademarks is requested to issue such Letters Patent in accordance herewith. I covenant that I am the lawful owners of the said application, and of the right to make, use or sell the

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inventions and improvements disclosed therein within the United States and that I have the full right to make this Assignment.

And for the consideration aforesaid, I agree that I will communicate to said Assignee or the representatives thereof any facts known to me respecting the inventions and improvements of the said United States application and will, upon request, but without expense to me, testify in any legal proceedings, sign all lawful papers, execute all divisional, re-issue, continuation, renewal and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts deemed necessary or expedient by said Assignee or by counsel for said Assignee, to assist or enable said Assignee to obtain and enforce full benefits from the rights and interest herein assigned. This Assignment shall be binding upon my heirs, executors, administrators and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors, and/or assigns, as the case may be, of said Assignee.

	Executed	dat <u>l</u>	<u>barakı</u>			
this	<u>16th</u>	day of	June,	2011	 Hiroshi	Huwagol
					Hiroshi K	UWAGAKI

PATENT REEL: 026472 FRAME: 0319

RECORDED: 06/21/2011