FORM PTO-1595 (Rev. 6-93)

U.S. Department of Commerce Patent And Trademark Office ΞT

102401999 OMB No. 0651-0011 (exp. 4/94)

The state of the s	1	
To the Honorable Commissioner of Patents and Trademarks:	Please record the attached original document or copy thereof.	
1. Name of conveying party(ies): Junshi Yoshioka (12/12/01) Akiko Sugimoto (12/12/01) Makoto Dobashi (12/12/01) Ken-ichiro Iwakiri (12/12/01) Yutaka Hirasawa (12/12/01) Additional name(s) of conveying party(ies) attached? Yes x No 3. Nature of conveyance:	2. Name and address of receiving party(ies): Name: Mitsui Mining & Smelting Co., Ltd. Internal Address: Street Address: 11-1 Osaki 1-chome, Shinagawa-ku City: Tokyo State: Zip: 141-8584	
<u>x</u> Assignment <u> </u>	Country: <u>Japan</u>	
Security Agreement Change of Name	Additional name(s) & address(es) attached? Yes _X_No	
Other		
Execution Date: December 12, 2001	-17	
Execution Date: December 12, 2001 4. Application number(s) or registration number(s): 10/031,279 If this document is being filed together with a new application, the execution date of the application is 4. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? Yes x No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved 1		
concerning document should be mailed:	7. Total fee (37 C.F.R. 3.41) \$_40.00	
Name: Harold N. Wells		
Internal Address: Jenkens & Gilchrist	x Enclosed	
225 West Washington	Authorized to be charged to deposit account	
City: Chicago State: IL Zip: 60606-3418	8. Deposit account number: 10-0447/47163-00044 (Attach duplicate copy of this page if paying by deposit account)	
DO NOT USE THIS SPACE		
9. Statement and signature. To the best of my knowledge and belief, the foregoing informathe original document. Harold N. Wells Name of Person Signing Total number of pages including cover sheet, attachments and do		
P6/2003 BRYRNE 00000177 10031279		

40.00 OP 01 FC:8021

Chicago 251863v1 47173-00044

ASSIGNMENT

WHEREAS, We, JUNSHI YOSHIOKA, AKIKO SUGIMOTO, MAKOTO DOBASHI, KEN-ICHIRO IWAKIRI and YUTAKA HIRASAWA have invented certain new and useful improvements in the following: ELECTRODEPOSITED COPPER FOIL WITH CARRIER AND METHOD FOR PRODUCING THE SAME for which we have made application for United States Letters Patent; and,

WHEREAS, MITSUI MINING & SMELTING CO., LTD., a corporation organized and existing under the laws of Japan, having its principal place of business 11-1 Osaki 1-chome, Shinagawa-ku, Tokyo, 141-8584 Japan (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring our entire right, title and interest in and to the invention, and in and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we do hereby sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives the entire right, title and interest in and to said invention and in and to said applications and all patents which may be granted therefore, and all provisionals, divisions, reissues, substitutions, continuations, continuation-in-part and extensions thereof, and we hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as our interest is concerned, to the said ASSIGNEE of our entire right, title and interest.

We also hereby sell and assign to said ASSIGNEE, its successors, assigns and legal representatives the full and exclusive rights, title and interest to the invention disclosed in said applications throughout the world, including the right to file applications and obtain patents, utility models, industrial models and designs for said invention in its own name throughout the world including all rights of priority, all rights to publish cautionary notices reserving ownership of said invention and all rights to register said invention in appropriate registries; and

We further agree to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such rights, title and interest in ASSIGNEE, its successors, assigns and legal representatives.

We hereby further agree that we will communicate to said ASSIGNEE, or its successors, assigns and legal representatives, any facts known to us respecting any improvements; and, at the expense of said ASSIGNEE, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, make all lawful oaths, and generally do everything possible to vest title in said ASSIGNEE and to aid said ASSIGNEE, its successors, assigns and legal representatives to obtain and enforce proper protection for said invention in all countries.

We further authorize and direct our attorneys to insert below* the serial number and filing date of said application now identified as Case Docket No. 47163-00044 as soon as the same shall have been made known to them by the United States Patent Office.

*Serial Number: 10/031,279

Filing Date: 11/7/01

Chicago 18192 iv1 47163-00044

IN WITNESS WHEREOF, December , 2001.	I have he	ereunto set my hand and seal this 12th day of
	Name: Address:	Junshi Yoshioka c/o Mitsui Mining & Smelting Co., Ltd. Corporate R&D Center 1333-2 Haraichi Ageo-shi Saitama-ken 362-0021, JAPAN
STATE OF)		
COUNTY OF) ss.		
		, 2001, before me, a Notary Public in y appeared, known by me to be the person of the instrument, and acknowledged the same to be his
		lotary Public
[seal]	M	My Commission Expires:
IN WITNESS WHEREOF,	I have he	ereunto set my hand and seal this 12th day of
December ,2001.		
		Akilco Sugimoto
	Name: Address:	Akiko Sugimoto c/o Mitsui Mining & Smelting Co., Ltd. Corporate R&D Center 1333-2 Haraichi Ageo-shi Saitama 362-0021, JAPAN
STATE OF		
COUNTY OF) ss.		
On this day of and for the State and County aforesaid above name who signed and sealed the own free act and deed.	d, personall e foregoing	, 2001, before me, a Notary Public in y appeared , known by me to be the person of the instrument, and acknowledged the same to be his
	N	lotary Public
[seal]		Ay Commission Expires:

Chicago 181921v1 47163-00044

	, 2001.		
		Name: Address:	Makoto Dobashi c/o Mitsui Mining & Smelting Co., Ltd. Corporate R&D Center 1333-2 Haraichi Ageo-shi Saitama 362-0021, JAPAN
STATE OF)		
COUNTY OF) ss.)		
and for the State and	County aforesaid ned and sealed the	l, personall	, 2001, before me, a Notary Public in y appeared, known by me to be the person of the instrument, and acknowledged the same to be his
[seal]			otary Public ly Commission Expires:
IN WITNES		I have he	reunto set my hand and seal this 12th day of
	, 2001.		
	, 2001.	Name: Address:	Ken-ichiro Iwakiri c/o Mitsui Mining & Smelting Co., Ltd. Copper Foil Sector Copper Foil Division 656-2 Kamakurabashi Ageo-shi Saitama-ken 362-0013, JAPAN
STATE OF)	Name:	Ken-ichiro Iwakiri c/o Mitsui Mining & Smelting Co., Ltd. Copper Foil Sector Copper Foil Division 656-2 Kamakurabashi Ageo-shi
))) ss.)	Name:	Ken-ichiro Iwakiri c/o Mitsui Mining & Smelting Co., Ltd. Copper Foil Sector Copper Foil Division 656-2 Kamakurabashi Ageo-shi
STATE OF COUNTY OF On this and for the State and)) ss.) day of I County aforesaid and sealed the	Name: Address:	Ken-ichiro Iwakiri c/o Mitsui Mining & Smelting Co., Ltd. Copper Foil Sector Copper Foil Division 656-2 Kamakurabashi Ageo-shi

Chicago 121921v1 47163-00044

 $(\mathbf{e}_{i}, \mathbf{e}_{i}) = (\mathbf{e}_{i}, \mathbf{e}_{i}) = (\mathbf{e}_{i}, \mathbf{e}_{i}, \mathbf{e}_{i})$

PATENT Docket No. 47163-00044

IN WITNESS WH	IEREOF, I hav	e hereunt	so set my hand and seal this 12th day of
December	, 2001.		
		Yut	taka) fizasawa
		Name: Address:	Yutaka Hirasawa c/o Mitsui Mining & Smelting Co., Ltd. Copper Foil Sector Copper Foil Division 656-2 Kamakurabashi Ageo-shi Saitama-ken 362-0013, JAPAN
STATE OF)		
COUNTY OF) ss.)		
and for the State and	County aforesaid ned and sealed the	, personall	, 2001, before me, a Notary Public in y appeared, known by me to be the person of the instrument, and acknowledged the same to be his
			Notary Public
[seal]			My Commission Expires:

Chicago 181921v1 47163-00044

RECORDED: 03/25/2003