FORM PTO-1619A Expires 06/30/99 OMB 0651-0027

08-02-2001

U.S. Department of Commerce Patent and Trademark Office **PATENT**



101796684 RECORDATION FORM COVER SHEET

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TO: The Commissioner of Patents and Trademark	s: Please record the attached origina	I document(s) or copy(ies).
Submission Type	Conveyance Type	.,
V New 07/25/01	Assignment Securit	y Agreement
Resubmission (Non-Recordation) Document ID#	License Change	e of Name
Correction of PTO Error Reel # Frame #	Merger Other	nment
Corrective Document	(For Use ONLY by U.S. Go	
Reel # Frame #	Departmental File	e Secret File
Conveying Party(ies)	Mark if additional names of conve	Month Day Year
Name (line 1) Marsden, John O.		07/24/01
Name (line 2)		Execution Date Month Day Year
Name (line 1) Brewer, Robert E.		07/24/01
Name (me i) Biewel, Robert E.	9101201	7
Name (line 2)	1/1/2/0	8
Receiving Party	Mark if additional	names of receiving parties attached
Name (line 1) Phelps Dodge Corporation		If document to be recorded is an assignment and the receiving party is not
Name (line 2)		domiciled in the United States, an appointment of a domestic
Address (line 1) 2600 North Central Avenue		representative is attached. (Designation must be a separate document from Assignment.)
Address (line 2)		
Address (line 3) Phoenix	Arizona/U.S.A.	85004
City	State/Country	Zip Code
Domestic Representative Name and A	ddress Enter for the first Rec	eiving Party only.
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Address (line 1)		
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REEL: 012019 FRAME: 0193

FORM PTO-1619B Expires 08/30/99 OMB 0651-0027	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT
Correspondent Name and Address	Area Code and Telephone Number	(602) 382-6334
Name Wendy S. Neal		
Address (line 1) Snell & Wilmer L.L.P.		
Address (line 2) One Arizona Center		
Address (line 3) 400 East Van Buren		
Address (line 4) Phoenix, Arizona 85004-2202		
Pages Enter the total number of processing including any attachment	pages of the attached conveyance docum s.	ent # 4
Application Number(s) or Patent N		dditional numbers attached
	e Patent Number (DO NOT ENTER BOTH numbers for	* ***
Patent Application Number(s)	Patent	Number(s)
If this document is being filed together with a new Paisigned by the first named executing inventor.	tent Application, enter the date the patent application	Was Month Day Year 07/24/01
Patent Cooperation Treaty (PCT)		
Enter PCT application number	PCT PCT	PCT
only if a U.S. Application Numb has not been assigned.	er PCT PCT	PCT
Number of Properties Enter the tot	al number of properties involved.	1
Fee Amount Fee Amou	nt for Properties Listed (37 CFR 3.41): \$	40.00
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Deposit Account	dditional fees can be charged to the account.)	
(Einer 10) payment by deposit decount of it d	Deposit Account Number: #	19-2814
	Authorization to charge additional fees:	Yes 🚺 No
Statement and Signature		
To the best of my knowledge and	belief, the foregoing information is true a	nd correct and any
	e original document. Charges to deposit	account are authorized, as
indicated herein.	$() \bigcirc \bigcirc \bigcirc$	
Wendy S. Neal	Sand Xual	July 25, 2001
Name of Person Signing	Signature	Date

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RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce Patent and Trademark Office PATENT

T. ST. WY., Share War.		
Conveying Enter additiona	Party(ies) I Conveying Parties Mark if additional names of	conveying parties attached Execution Date
	Robertson, Joanna M.	Month Day Year
Name (line 1)	Robertson, Joanna IVI.	07/24/2001
Name (line 2)		Execution Date Month Day Year
Name (line 1)	Hazen, Wayne W.	07/24/2001
Name (line 2)		Execution Date Month Day Year
Name (line 1)	Thompson, Philip	07/24/2001 2
,		
Name (line 2)		
		12:
Receiving P	arty Mark if addi	tional names of receiving parties attached
Name (line 1)		If document to be recorded is an assignment and the
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Address (line 1)		representative is attached. (Designation must be a separate document from
Address (line 2)		Assignment.)
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Name (line 1)		If document to be recorded is an assignment and the receiving party is not
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Address (line 1)		representative is attached. (Designation must be a separate document from
Address (line 2)		Assignment)
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Application	Number(s) or Patent Number(s)	Mark if additional numbers attached
Enter either th	e Patent Application Number or the Patent Number (DO NOT ENTER BOTH no	ımbers for the same property).
	tent Application Number(s)	Patent Number(s)
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RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce Patent and Trademark Office PATENT

Conveying F		if additional names of conveying parties attached
Enter additional	Conveying Parties	Execution Date Month Day Year
Name (line 1)	Baughman, David R.	07/24/2001
Name (line 2)		Execution Date Month Day Year
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Address (line 1)		representative is attached. (Designation must be a separate document from
Address (line 2)		Assignment.)
Address (line 3)		State/Country Zip Code
Nama dia A	City	State/Country Zip Code If document to be recorded
Name (line 1)		is an assignment and the receiving party is not domiciled in the United
Name (line 2)		States, an appointment of a domestic representative is attached.
Address (line 1)		(Designation must be a separate document from Assignment.)
Address (line 2)		
Address (line 3)	City	State/Country Zip Code
Application	Number(s) or Patent Number(s)	Mark if additional numbers attached
	e Patent Application Number or the Patent Number (DC	NOT ENTER BOTH numbers for the same property).
Pa	tent Application Number(s)	Patent Number(s)

PATENT

REEL: 012019 FRAME: 0196

ASSIGNMENT

UTILITY PATENT

WHEREAS, the undersigned inventor(s) (hereinafter singly and collectively, "ASSIGNOR") of the address(es) indicated below, have invented a METHOD FOR RECOVERY OF METAL VALUES FROM METAL-CONTAINING MATERIALS USING HIGH TEMPERATURE PRESSURE LEACHING for which application for Letters Patent of the United States has been executed herewith;

AND WHEREAS, PHELPS DODGE CORPORATION (hereinafter "ASSIGNEE"), a corporation organized and existing under and by virtue of the laws of the State of Arizona, having its principal place of business at and a mailing address of 2600 North Central Avenue, Phoenix, Arizona 85004-3014, is desirous of acquiring an interest therein;

AND WHEREAS, a "formal application," as referred to herein, shall mean any provisional, non-provisional, continuation, continuation in part, divisional, reissue, reexamination, foreign, PCT or other patent application or like document;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR by these presents do sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right to the aforesaid applications, to the invention as described in the aforesaid applications, and to all formal applications which may be filed based in whole or in part on one or more of the aforesaid applications, in the United States and all foreign countries, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States adheres, and hereby authorizes and requests the Commissioner of Patents to issue said Letters Patent to ASSIGNEE, for the sole use and benefit of ASSIGNEE, its successors, assigns and legal representatives,

AND HEREBY AGREE to transfer, upon request of ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, a like interest in and to any improvements and formal applications based thereon, growing out of or relating to the invention;

AGREEING, FURTHERMORE, without further remuneration, to provide all reasonable assistance and execute any papers requested by ASSIGNEE, its successors, assigns and legal representatives, to preserve and/or acquire ASSIGNEE's full protection and title in and to the invention hereby transferred and any improvements therein,

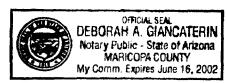
AGREEING, FURTHERMORE, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE for the filing and granting of formal applications based on the invention or improvements therein, and for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.

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EXECUTED as of the date(s) written below by ASSIGNOR: INVENTOR'S NAME **ADDRESS SIGNATURE** DATE John O. Marsden 1248 East Seminole Dr. Phoenix, Arizona 85022 STATE OF HZ On this 24 day of _______, 2001, before me, a notary public in and for said county, appeared John O. Marsden, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, and he acknowledged that he signed. sealed and delivered the said instrument as a free and voluntary act for the uses and purposes therein set forth. (Seal) My commission expires: 'OFFICIAL SEAL' Kathryn Ramsey Notary Public-Arizona Maricopa County My Commission Expires 10/27/2001 **INVENTOR'S ADDRESS** SIGNATURE DATE NAME 1498 W. Lebanon Road Robert E. Brewer Safford, Arizona 85546 STATE OF A County of Marcoga) ss. On this 29 day of 50, 2001, before me, a notary public in and for said county, appeared Robert E. Brewer, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, and he acknowledged that he signed, sealed and delivered the said instrument as a free and voluntary act for the uses and purposes therein set forth. (Seal)

My commission expires:

6-16-02



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I INVENTABLE I ANNOFER II CE		
	GNATURE	DATE
NAME 1450 C. D. I. I.		ļ
Joanna M. 1452 S. Roadrunner Lane	and I Grand	and Andreas
()	in Rubustan I	124204
STATE of AZ		0 0
County of May cape)		
On this 24 day of July 2001, before m	ne, a notary public in	and for
said county, appeared Joanna M. Robertson, who is personally ki	nown to me to be t	he same
person whose name is subscribed to the foregoing instrument, and		
signed, sealed and delivered the said instrument as a free and vo	_	
purposes therein set forth.	•	
	•	
(Seal)	teren	1
Notary Public	OFFICIAL SEAL DEBORAH A. GIANCATERIN	
My commission expires:	Notary Public - State of Arizona MARICOPA COUNTY	1
6-16-02	My Comm. Expires June 16, 2002	
INVENTOR'S ADDRESS SIG	GNATURE	DATE
NAME		
Wayne W. Hazen 2655 Van Gordon Drive	. 1 //	
Lakewood, Colorado 80215 Lakewood	me W. Hagen	24 July 01
	\mathcal{O}	0 1
STATE OF $\frac{H^2}{}$		
STATE OF		
County of Marcopa)		
On this are day of Torry 2001 before to	na a natami nublia in	and for
On this 24 day of July, 2001, before m said county, appeared Wayne W. Hazen, who is personally known	to me to be the same	anu ioi
whose name is subscribed to the foregoing instrument, and he ac	knowledged that he	sioned
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therein set forth.	or for the abob and p	Jarposos
VALUE VALUE DATA LOTATA.		
(Seal) Deborah D. June Notary Public	citeren	

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My commission expires:

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PATENT REEL: 012019 FRAME: 0199

OFFICIAL SEAL
DEBORAH A. GIANCATERIN
Notary Public - State of Arizona
MARICOPA COUNTY
My Comm. Expires June 16, 2002

INVENTOR'S NAME	ADDRESS	SIGNATURE	DATE
Philip Thompson	4513 White Cherry Way West Valley City, Utah 84120	Philoson	3/14/01
STATE OF <u>J2</u> County of Marcaga)) ss.)		
said county, appeared F whose name is subscril	day of, 200 Philip Thompson, who is personated to the foregoing instrument e said instrument as a free and	ally known to me to be the control of the control o	e same person that he signed,
Seal)	(C) Control of the co	HA GIANCATERIN	
,	: Notary P	HA GIANCATERIN UDIR - STATE C' AVIZONA HICOPA COUNTY 1. Expires June 16, 2002	
,	: Notary P	ublic - State of Arizona RICOPA COUNTY	
My commission expires	: Notary P	ublic - State of Arizona RICOPA COUNTY	DATE
My commission expires 6-16-02 INVENTOR'S	Notary P MA My Comm	ublic - State of Arizona RICOPA COUNTY 1. Expires June 16, 2002	DATE 4/24/01

On this 24 day of Tuzy , 2001, before me, a notary public in and for said county, appeared David R. Baughman, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, and he acknowledged that he signed, sealed and delivered the said instrument as a free and voluntary act for the uses and purposes therein set forth.

(Seal)

My commission expires:

6-16-02

SNELL & WILMER L.L.P.

One Arizona Center 400 East Van Buren Phoenix, Arizona 85004-0001 (602) 382-6000

RECORDED: 07/25/2001

OFFICIAL SEA DEBORAH A. GIANCATERIN Notary Public - State of Arizona MARICOPA COUNTY My Comm. Expires June 16, 2002

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