

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2575136

SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
CONVEYING PARTY DATA									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>YI YANG</td> <td>09/26/2013</td> </tr> <tr> <td>AZIZ S. SHAIKH</td> <td>10/08/2013</td> </tr> <tr> <td>SRINIVASAN SRIDHARAN</td> <td>09/26/2013</td> </tr> </tbody> </table>		Name	Execution Date	YI YANG	09/26/2013	AZIZ S. SHAIKH	10/08/2013	SRINIVASAN SRIDHARAN	09/26/2013
Name	Execution Date								
YI YANG	09/26/2013								
AZIZ S. SHAIKH	10/08/2013								
SRINIVASAN SRIDHARAN	09/26/2013								
RECEIVING PARTY DATA									
Name:	HERAEUS PRECIOUS METALS NORTH AMERICA CONSHOHOCKEN LLC								
Street Address:	24 UNION HILL ROAD								
City:	WEST CONSHOHOCKEN								
State/Country:	PENNSYLVANIA								
Postal Code:	19428								
PROPERTY NUMBERS Total: 3									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13881395</td> </tr> <tr> <td>Application Number:</td> <td>61407588</td> </tr> <tr> <td>PCT Number:</td> <td>US2011057963</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13881395	Application Number:	61407588	PCT Number:	US2011057963
Property Type	Number								
Application Number:	13881395								
Application Number:	61407588								
PCT Number:	US2011057963								
CORRESPONDENCE DATA									
Fax Number:	(202)772-5858								
Phone:	2027725800								
Email:	wolfe@blankrome.com								
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>									
Correspondent Name:	CHARLES R. WOLFE								
Address Line 1:	600 NEW HAMPSHIRE AVE. NW								
Address Line 4:	WASHINGTON, DISTRICT OF COLUMBIA 20037								
ATTORNEY DOCKET NUMBER:	136617.04500								
NAME OF SUBMITTER:	CHARLES R. WOLFE, JR.								

Signature:	/Charles R. Wolfe, Jr./
Date:	10/11/2013
Total Attachments: 7 source=Assignment4500#page1.tif source=Assignment4500#page2.tif source=Assignment4500#page3.tif source=Assignment4500#page4.tif source=Assignment4500#page5.tif source=Assignment4500#page6.tif source=Assignment4500#page7.tif	

ASSIGNMENT

THIS ASSIGNMENT, made on the date set forth below by Yi YANG; Aziz S. SHAIKH; and Srinivasan SRIDHARAN, residing at 290 Avon Rd, Apt #J414, Devon, Philadelphia 19333; 16421 Winecreek Road, San Diego, California 92127; and 14073 Pine Lakes Drive, Strongsville, Ohio 44136, respectively (hereinafter referred to as the Assignors), witnesseth:

WHEREAS, said Assignors have invented certain new and useful improvements in SOLAR CELL METALLIZATIONS CONTAINING METAL ADDITIVE set forth in an application for Letters Patent of the United States, identified as Provisional Application No. 61/407,588 filed October 28, 2010, PCT/US2011/057963 filed October 27, 2011 and Application No. 13/881,395 filed July 8, 2013; and

WHEREAS, Heraeus Precious Metals North America Conshohocken LLC, a corporation duly organized under and pursuant to the laws of the State of Pennsylvania having its principal place of business at 24 Union Hill Road, West Conshohocken, Pennsylvania 19428 (hereinafter referred to as the Assignee) is desirous of acquiring the entire right, title and interest in and to said inventions and said application for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the said Assignors have sold, assigned, transferred and set over, unto the Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application for Letters Patent, and any and all Letters Patent or Patents in the United

States of America and all foreign countries and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the said Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the Assignors, had this sale and assignment not been made.

AND for the same consideration, the said Assignor hereby covenant and agree to and with the said Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, the said Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and the application for Letters Patent above-mentioned, and that the same are unencumbered and that the said Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, the said Assignors hereby covenant and agree to and with the said Assignee, its successors, legal representatives and assigns, that the said Assignors will, whenever counsel of the said Assignee or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, that any division, continuation or continuation-in-part of any application for Letters Patent, or reissue or extension of any Letters Patent, to be obtained

thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to the said Assignors, their successors, legal representatives and assigns, but at the cost and expense of the said Assignee, its successors, legal representatives and assigns.

AND said Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to the said Assignee, as the assignee of said inventions and the Letters Patent to be issued thereon for the sole use and behoof of the said Assignee, its successors, legal representatives and assigns.

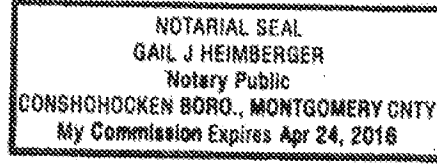
The undersigned hereby grant the firm of Blank Rome LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

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Yi Yang

Date: 9/26/2013

United States of America)
State of Pennsylvania) ss.:
County of Delaware)



On this 26 day of September, 2013, before me personally came Yi Yang, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Gail J Heimberger

Notary Public

My Commission Expires: April 24, 2016

Aziz S. Shaikh

Date: _____

United States of America)
State of _____) ss.:
County of _____)

On this _____ day of _____, _____, before me personally came Aziz S. Shaikh, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Notary Public

My Commission Expires: _____

Yi Yang


Date: _____

United States of America)
State of _____) ss.:
County of _____)

On this _____ day of _____, _____, before me personally came Yi Yang, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Notary Public

My Commission Expires: _____



Aziz S. Shaikh

Date: October 8, 2013

United States of America)
State of _____) ss.:
County of _____)

On this _____ day of _____, _____, before me personally came Aziz S. Shaikh, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Notary Public

My Commission Expires: _____

CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of San Diego

On 8th October 2013 before me, S K Gill-Brownell Notary Public
(Here insert name and title of the officer)

personally appeared Aziz S. Shaikh

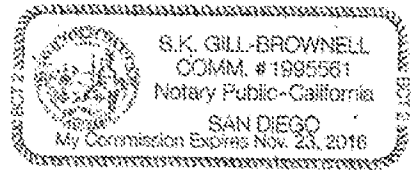
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

S K Gill-Brownell
 Signature of Notary Public

(Notary Seal)



ADDITIONAL OPTIONAL INFORMATION

INSTRUCTIONS FOR COMPLETING THIS FORM

Any acknowledgment completed in California must contain verbiage exactly as appears above in the notary section or a separate acknowledgment form must be properly completed and attached to that document. The only exception is if a document is to be recorded outside of California. In such instances, any alternative acknowledgment verbiage as may be printed on such a document so long as the verbiage does not require the notary to do something that is illegal for a notary in California (i.e. certifying the authorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required.

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. he/she/they, is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
 - ✦ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
 - ✦ Indicate title or type of attached document, number of pages and date.
 - ✦ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document

DESCRIPTION OF THE ATTACHED DOCUMENT

Assignment
(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages four Document Date 8th Oct 2013
(Additional information)

CAPACITY CLAIMED BY THE SIGNER

Individual (s)
 Corporate Officer

(Title)

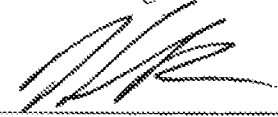
Partner(s)
 Attorney-in-Fact
 Trustee(s)
 Other _____


Srinivasan Sridharan

Date: 9/26/13

United States of America)
State of Ohio) ss.:
County of Cuyahoga)

On this 26th day of September, 2013, before me personally came Srinivasan Sridharan, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.


Notary Public

My Commission Expires: _____

KENNETH A. CLARK, Attorney
NOTARY PUBLIC - STATE OF OHIO
My commission has no expiration date.
Section 147.03 R.C.