# 503294597 05/06/2015

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3341215

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
STANISLAW PLECHA	12/11/2014
NARINOBU KAGAMI	12/09/2014
JOHN EVERETT CREIGHTON	01/30/2015
VIOREL DUMA	02/19/2015

### **RECEIVING PARTY DATA**

Name:	ADVANCED REFINING TECHNOLOGIES LLC
Street Address:	7500 GRACE DRIVE
City:	COLUMBIA
State/Country:	MARYLAND
Postal Code:	21044

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14378894

### CORRESPONDENCE DATA

**Fax Number:** (908)654-7866

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:** (908) 518-6425

Email: Assignment@ldlkm.com

Correspondent Name: LDLK&M

Address Line 1: 600 SOUTH AVENUE WEST

Address Line 4: WESTFIELD, NEW JERSEY 07090

ATTORNEY DOCKET NUMBER:	GRACE 3.3-015 (E)
NAME OF SUBMITTER:	HARVEY L. COHEN
SIGNATURE:	/Harvey L. Cohen/
DATE SIGNED:	05/06/2015

## **Total Attachments: 4**

source=GRACE 3.3-015 (E) (941)#page1.tif source=GRACE 3.3-015 (E) (941)#page2.tif source=GRACE 3.3-015 (E) (941)#page3.tif

PATENT 503294597 REEL: 035574 FRAME: 0969

source=GRACE 3.3-015 (E) (941)#page4.tif

PATENT REEL: 035574 FRAME: 0970

former PTO/SB/15 (8-00) Modified LDLK&M

a morting of a service of the contract of the	Docket Number (Optional)		
ASSIGNMENT OF UTILITY APPLICATION	GRACE 3.3-015 (E)		
Whereas, I, Viorel Duma			
118 Jade Ct., Hercules, California 94547 hereafter referred to as assignor, have with others invented certain new and useful improvements in SPHEROIDAL RESID HYDRODEMETALLATION CATALYST			
x for which an application for a United States Letters Patent was filed on August 14, 2014 Application Number 14/378,894			
for which an application for a United States Letters Pater			
x for which an International Application was filed on	February 15, 2013 , as		
PCT/US2013/026323 , designating the United	States.		
Whereas, Advanced Refining Technologies LLC a corporation of Delaware herein referred to as "assignee" whose mailing address is			
NOW, THEREFORE, in consideration of the sum of one dollar (\$ 1.00 ), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses inc			
And I do hereby authorize my attorneys to insert on this deed the when known.	e filing date and application number of said application		
19. Feb. 2015	Vanna		
Date Viorel Duma			
Witness The Macsea Typed Name of Witness			
x *Total of forms are submitted.	***************************************		

Grace Ref. W9920-01\

former PTO/SB/15 (8-00) Modified LDLK&
locket Number (Optional)
GRACE 3.3-015 (E)
of
ul improvements in
August 14, 2014
-
by me on
2013 , as
s is
assign and set over to said assignee my for said invention and the aforesaid utility tions and patents applied for or granted fing without limitation all applications and uant to any law or treaty, and including all e same for its own use and the use of its privy or benefit and the Commissioner of approvements or resulting therefrom to said and my legal representatives, heirs and aliver all original, divisional, continuation,

Whereas, I, Stanislaw Plecha 10518 Vista Road, Columbia, Maryland 21044 hereafter referred to as assignor, have with others invented certain new and usef SPHEROIDAL RESID HYDRODEMETALLATION CATALYST x for which an application for a United States Letters Patent was filed on Application Number 14/378,894 for which an application for a United States Letters Patent was executed by for which an International Application was filed on February 15, 2 PCT/US2013/026323 , designating the United States. And Whereas, Advanced Refining Technologies LLC a corporation of Delaware herein referred to as "assignee" whose mailing address 7500 Grace Drive, Columbia, Maryland 21044 is desirous of acquiring the entire right, title and interest in the same; NOW, THEREFORE, in consideration of the sum of dollar (\$ is acknowledged, and other good and valuable consideration, I as assignor hereby sell, entire right, title and interest for the United States of America and all other countries in and patent application and all original, divisional, continuation, substitute or reissue applica therefor in the United States of America and all other countries, for said invention, include patents for said invention claiming priority or benefit of the aforesaid utility application purs claims for damages by reason of past infringement with the right to sue for and collect the successors, assigns and legal representatives, and including the right to claim such price Patents and Trademarks is hereby authorized and requested to issue all patents on said irr assignee herein, as assignee of the entire interest therein; and the undersigned for me assigns do hereby agree and covenant without further remuneration, to execute and de reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee. I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 61/600,024, filed February 17, 2012, and in the invention disclosed thereto in all countries of the world including the right to claim priority or benefit of said Application No. 61/600,024 pursuant to any law or treaty in the countries of the world. And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known. Stanislaw Plecha Typed Name of Witness

ASSIGNMENT OF UTILITY APPLICATION

\*Total of forms are submitted Х

Grace Ref. W9920-01

former PTO/SB/15 (8-00) Modified LDLK&M

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional)			
	GRACE 3.3-015 (E)			
Whereas, I,John Everett Creighton				
2620 Offutt Road, Woodstock, Maryland 21163				
hereafter referred to as assignor, have with others invented cert	ain new and useful improvements in			
SPHEROIDAL RESID HYDRODEMETALLATION CA	TALYST			
x for which an application for a United States Letters Patent was filed on August 14, 2014  Application Number 14/378,894				
for which an application for a United States Letters Pater	nt was executed by me on			
x for which an International Application was filed on <u>February 15, 2013</u> , as				
PCT/US2013/026323 , designating the United	States.			
And				
Whereas, Advanced Refining Technologies LLC a corporation of Delaware herein referred to as "assignee" whose	no mailing addraga is			
7500 Grace Drive, Columbia, Maryland 21044	se mailing address is			
is desirous of acquiring the entire right, title and interest in the sa	ame:			
	·			
NOW, THEREFORE, in consideration of the sum of one dollar (\$ 1.00 ), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses inc				
I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 61/600,024, filed February 17, 2012, and in the invention disclosed thereto in all countries of the world including the right to claim priority or benefit of said Application No. 61/600,024 pursuant to any law or treaty in the countries of the world.				
And I do hereby authorize my attorneys to insert on this deed the filing d	ate and application number of said application when known.			
Date  Date  John Everett Creighton  Rend-Creighton				
Typed Name of Witness				

x \*Total of Grace Ref. W9920-01\ forms are submitted.

	former PTO/SB/15 (8-00) Modified LDLK&M		
ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional)		
ASSIGNMENT OF UTILITY APPLICATION	GRACE 3.3-015 (E)		
Whereas, I, Narinobu Kagami of			
1-26-28-405 Chuokou, Chuoku, Chiba 260-0024, Ja	pan		
hereafter referred to as assignor, have invented certain new a	nd useful improvements in		
SPHEROIDAL RESID HYDRODEMETALLATION CATALYST			
X for which an application for a United States Letters Patent was filed on  Application Number 14/378,894  Application Number 14/378,894			
for which an application for a United States Letters Patent was executed by me on,			
X for which an International Application was filed or	February 15, 2013 , as		
PCT/US2013/026323 , designating the United S	tates.		
And			
Whereas, Advanced Refining Technologies LLC			
a corporation of <u>Delaware</u> herein referred to as "assignee" who	se mailing address is		
7500 Grace Drive, Columbia, Maryland 21044			
is desirous of acquiring the entire right, title and interest in the	same;		
NOW, THEREFORE, in consideration of the sum of one is acknowledged, and other good and valuable consideration, assignee the entire right, title and interest for the United Statinvention and the aforesaid utility patent application and all capplications and patents applied for or granted therefor in the said invention, including without limitation all applications and of the aforesaid utility application pursuant to any law or treat past infringement with the right to sue for and collect the sassigns and legal representatives, and including the right to Patents and Trademarks is hereby authorized and requested therefrom to said assignee herein, as assignee of the entire legal representatives, heirs and assigns do hereby agree an and deliver all original, divisional, continuation, reissue a improvements and all assignments thereof to said assignee or representatives all facts known to the undersigned respecting any interferences or other legal proceedings in which any of sign all lawful papers, make all rightful oaths, and to do successors, assigns and nominees to obtain patent protection incident to said applications to be borne and paid by said assigneed.	tes of America and all other countries in and to said original, divisional, continuation, substitute or reissue United States of America and all other countries, for patents for said invention claiming priority or benefit ty, and including all claims for damages by reason of ame for its own use and the use of its successors, laim such priority or benefit and the Commissioner of to issue all patents on said improvements or resulting interest therein; and the undersigned for me and my d covenant without further remuneration, to execute and other applications for Letters Patent on said or its assigns, to communicate to said assignee or its said improvements, whenever requested, to testify in said applications or patents may become involved, to generally everything necessary to aid assignee, its for said improvements in all countries, the expenses gnee.		
I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 61/600,024, filed February 17, 2012, and in the invention disclosed thereto in all countries of the world including the right to claim priority or benefit of said Application No. 61/600,024 pursuant to any law or treaty in the countries of the world			
And I do hereby authorize my attorneys to insert on this capplication when known.	deed the filing date and application number of said		
December 9, 2014	Marinobu Kagami		
December 9, 2014  Date  Jahen Endo  Witness  Takero Endo	Narinobu Kagami Narinobu Kagami		
Takevo Endo Printed Name of Witness			

**RECORDED: 05/06/2015** 

PATENT REEL: 035574 FRAME: 0974