

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5009596

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SANFORD ALLAN VICTOR	04/27/2018
PHILLIP F. DALY	04/27/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	UOP LLC
<b>Street Address:</b>	UOP LLC - PATENT DEPARTMENT
<b>Internal Address:</b>	25 EAST ALGONQUIN ROAD
<b>City:</b>	DES PLAINES
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	60017-5017
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15937535
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)824-3001
<i>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.</i>	
<b>Phone:</b>	(202) 824-3000
<b>Email:</b>	bwptopat@bannerwitcoff.com, dcoleman@bannerwitcoff.com
<b>Correspondent Name:</b>	BANNER & WITCOFF, LTD.
<b>Address Line 1:</b>	1100 13TH ST. NW
<b>Address Line 2:</b>	STE 1200
<b>Address Line 4:</b>	WASHINGTON, D.C. 20005
<b>ATTORNEY DOCKET NUMBER:</b>	H0060168-8501
<b>NAME OF SUBMITTER:</b>	R. GREGORY ISRAELSEN
<b>SIGNATURE:</b>	/Greg Israelson/
<b>DATE SIGNED:</b>	06/15/2018
<b>Total Attachments: 4</b>	
source=H0060168-8501-Assignment_Victor executed (190)#page1.tif	
source=H0060168-8501-Assignment_Victor executed (190)#page2.tif	
source=H0060168-8501 Assignment_Daly executed (190)#page1.tif	



**WHEREAS**, the undersigned inventor(s) (hereinafter individually and collectively referred to as "ASSIGNOR") has invented new and useful improvements in:

**DETECTING AND CORRECTING THERMAL STRESSES IN HEAT EXCHANGERS IN A  
PETROCHEMICAL PLANT OR REFINERY**

for which application for patent in the United States:

\_\_\_\_\_ has been executed on even date herewith;

\_\_\_\_\_ was executed on \_\_\_\_\_;

X was filed on March 27, 2018 and assigned U.S. Appl. No. 15/937,535;

**AND WHEREAS**, the "Assigned Property" shall mean (i) the above-identified United States application for patent (the "Application"), (ii) all inventions disclosed in the Application, (iii) any and all applications for patent throughout the world directed to the subject matter of the Application, (iv) the right of priority arising from the Application or from such other applications, under the Paris Convention for the Protection of Industrial Property or under relevant laws, treaties, conventions or bilateral and multilateral agreements, in any jurisdiction, (v) any and all patents throughout the world resulting from the Application or such other application(s) for patents, and (vi) any and all claims against third parties in connection with any of the rights assigned by this Agreement;

**AND WHEREAS**, UOP LLC, a Delaware Limited Liability Company having a place of business at 25 East Algonquin Road, Des Plaines, IL 60017-5017, its successors and assigns (hereinafter individually and collectively referred to as "ASSIGNEE"), is desirous of acquiring ASSIGNOR's entire right, title, and interest in and to and resulting from said Assigned Property and in general all property rights included therein;

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR does hereby irrevocably and unconditionally assign and transfer unto ASSIGNEE ASSIGNOR's entire right, title and interest in and to and resulting from the Assigned Property, and hereby authorizes and requests the Commissioner of Patents to issue said patent to ASSIGNEE for the sole use and benefit of ASSIGNEE; ASSIGNEE hereby accepts such transfer and assignment;

**AND ASSIGNOR FURTHERMORE** authorizes ASSIGNEE, or anyone it may properly designate, to insert on each page of this instrument (where indicated) the filing date and application number of said Application when known;

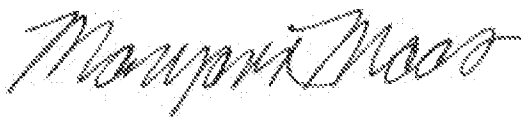
**AND ASSIGNOR AGREES, FURTHERMORE**, upon request of ASSIGNEE, and without further remuneration, but at no expense to ASSIGNOR, that ASSIGNOR or ASSIGNOR'S heirs, executors, or administrators will provide all reasonable assistance to obtain, maintain, and assert the fullest measure of legal protection that ASSIGNEE desires to obtain or assert for the Assigned Property, including executing any and all papers desired by ASSIGNEE for the filing and granting of patent rights in the Assigned Property, the perfecting of title in ASSIGNEE, and in enforcing any rights in the Assigned Property.

This instrument is executed by, and shall be binding upon ASSIGNOR, and ASSIGNOR's heirs, executors and administrators, for the uses and purposes above set forth and referred to and shall inure to the benefit of ASSIGNEE or anyone it may properly designate.

If any provision of this assignment is held by any court to be unenforceable, such provision shall be interpreted to accomplish the objectives of the original provision to the fullest extent allowed by law and the remainder of this assignment shall remain in full force and effect.

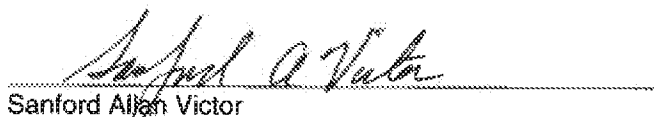
This assignment shall be construed, governed, interpreted and applied in accordance with the laws of the State of Delaware, United States of America.

**EXECUTED** on behalf of ASSIGNEE and effective as of the latest date of the ASSIGNOR signature(s) below:



Maryann Maas  
Assistant Secretary – Patent  
UOP LLC

**EXECUTED** as of the date(s) set forth below on behalf of the ASSIGNOR:

  
Sanford Allan Victor

Date: APR. 27, 2018

Phillip F. Daly

Date: \_\_\_\_\_

Ian G. Horn

Date: \_\_\_\_\_

**WHEREAS**, the undersigned inventor(s) (hereinafter individually and collectively referred to as "ASSIGNOR") has invented new and useful improvements in:

**DETECTING AND CORRECTING THERMAL STRESSES IN HEAT EXCHANGERS IN A  
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for which application for patent in the United States:

\_\_\_ has been executed on even date herewith;

\_\_\_ was executed on \_\_\_\_\_;

X was filed on March 27, 2018 and assigned U.S. Appl. No. 15/937,535 ;

**AND WHEREAS**, the "Assigned Property" shall mean (i) the above-identified United States application for patent (the "Application"), (ii) all inventions disclosed in the Application, (iii) any and all applications for patent throughout the world directed to the subject matter of the Application, (iv) the right of priority arising from the Application or from such other applications, under the Paris Convention for the Protection of Industrial Property or under relevant laws, treaties, conventions or bilateral and multilateral agreements, in any jurisdiction, (v) any and all patents throughout the world resulting from the Application or such other application(s) for patents, and (vi) any and all claims against third parties in connection with any of the rights assigned by this Agreement;

**AND WHEREAS**, UOP LLC, a Delaware Limited Liability Company having a place of business at 25 East Algonquin Road, Des Plaines, IL 60017-5017, its successors and assigns (hereinafter individually and collectively referred to as "ASSIGNEE"), is desirous of acquiring ASSIGNOR's entire right, title, and interest in and to and resulting from said Assigned Property and in general all property rights included therein;

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR does hereby irrevocably and unconditionally assign and transfer unto ASSIGNEE ASSIGNOR's entire right, title and interest in and to and resulting from the Assigned Property, and hereby authorizes and requests the Commissioner of Patents to issue said patent to ASSIGNEE for the sole use and benefit of ASSIGNEE; ASSIGNEE hereby accepts such transfer and assignment;

**AND ASSIGNOR FURTHERMORE** authorizes ASSIGNEE, or anyone it may properly designate, to insert on each page of this instrument (where indicated) the filing date and application number of said Application when known;

**AND ASSIGNOR AGREES, FURTHERMORE**, upon request of ASSIGNEE, and without further remuneration, but at no expense to ASSIGNOR, that ASSIGNOR or ASSIGNOR'S heirs, executors, or administrators will provide all reasonable assistance to obtain, maintain, and assert the fullest measure of legal protection that ASSIGNEE desires to obtain or assert for the Assigned Property, including executing any and all papers desired by ASSIGNEE for the filing and granting of patent rights in the Assigned Property, the perfecting of title in ASSIGNEE, and in enforcing any rights in the Assigned Property.

This instrument is executed by, and shall be binding upon ASSIGNOR, and ASSIGNOR's heirs, executors and administrators, for the uses and purposes above set forth and referred to and shall inure to the benefit of ASSIGNEE or anyone it may properly designate.

If any provision of this assignment is held by any court to be unenforceable, such provision shall be interpreted to accomplish the objectives of the original provision to the fullest extent allowed by law and the remainder of this assignment shall remain in full force and effect.

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**ASSIGNMENT**

**EXECUTED** on behalf of ASSIGNEE and effective as of the latest date of the ASSIGNOR signature(s) below:



Maryann Maas  
Assistant Secretary – Patent  
UOP LLC

**EXECUTED** as of the date(s) set forth below on behalf of the ASSIGNOR:

\_\_\_\_\_  
Sanford Allan Victor

Date: \_\_\_\_\_



\_\_\_\_\_  
Phillip F. Daly

Date: 4/22/2018

\_\_\_\_\_  
Ian G. Horn

Date: \_\_\_\_\_

US Application No. 15/937,535 filed March 27, 2018

(Rev.03/20/2012)

**RECORDED: 06/15/2018**

**PATENT**  
**REEL: 046102 FRAME: 0542**