PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

1.1 EPAS ID: PAT5303201

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MICHAEL VAN DE COTTE	03/22/2018
IAN G HORN	12/21/2018

RECEIVING PARTY DATA

Name:	UOP LLC
Street Address:	UOP LLC - PATENT DEPARTMENT
Internal Address:	25 EAST ALGONQUIN ROAD
City:	DES PLAINES
State/Country:	ILLINOIS
Postal Code:	60017-5017

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15935872

CORRESPONDENCE DATA

Fax Number: (202)824-3001

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: (202) 824-3000

Email: bwptopat@bannerwitcoff.com, dcoleman@bannerwitcoff.com

Correspondent Name: BANNER & WITCOFF, LTD.

Address Line 1: 1100 13TH ST. NW

Address Line 2: STE 1200

Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER:	H0060170-8501
NAME OF SUBMITTER:	R. GREGORY ISRAELSEN
SIGNATURE:	/Greg Israelsen/
DATE SIGNED:	12/28/2018

Total Attachments: 4

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PATENT 505256429 REEL: 047870 FRAME: 0884

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PATENT REEL: 047870 FRAME: 0885 therein:

for which application for patent in the United States:

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

EARLY SURGE DETECTION OF ROTATING EQUIPMENT IN A PETROCHEMICAL PLANT OR REFINERY

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has been execut	ted on even date herewith;			
was executed on				
X was filed on Ma	<u>arch 26, 2018</u> and assigned t	J.S. Appl. No. <u>15/93</u>	<u>5,872</u> ;	
	S, the "Assigned Property"			
	t (the "Application"), (ii) all in it throughout the world directe			
or priority arising from	n the Application or from such	i other applications, i	unger the Maris C	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

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.

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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:

Date: Michael Van de Cotte

Date: 21/ Dec 12016

15/935,872 filed March 26, 2018 US Application No.

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

EARLY SURGE DETECTION OF ROTATING EQUIPMENT IN A PETROCHEMICAL PLANT OR REFINERY

tor which application	on for patent in	the United State	es:			
has been exe	cuted on even	date herewith;				
was executed	d on		;			
	March 26, 2018	and assigned		No	15/935,872	,
was filed on		_ and assigned	U.S. Appl.	No.	***************************************	

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, titte, 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.

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

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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

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Michael Van de Cotte	Date:	3/22/18
lan G. Horn	Date:	^^

US Application No. 15/935,872 filed March 26, 2018

RECORDED: 12/28/2018