03/18/2019 505379772

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5426565

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XINWEI LAN	01/20/2018
LI GAO	01/04/2018
DANIEL STARK	01/04/2018
YENNY NATALI MARTINEZ	02/02/2018
MICHEL JOSEPH LEBLANC	01/22/2018
GIREESH K BHAT	01/23/2018

RECEIVING PARTY DATA

Name:	HALLIBURTON ENERGY SERVICES, INC.
Street Address:	3000 N. SAM HOUSTON PARKWAY E.
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77032-3219

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16333140

CORRESPONDENCE DATA

Fax Number: (713)973-1170

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: (713)465-2340 Email: info@hspeight.com HOWARD L. SPEIGHT **Correspondent Name:** Address Line 1: 742 CENTRAL AVENUE Address Line 4: NAPA, CALIFORNIA 94558

ATTORNEY DOCKET NUMBER:	2016-IPM-100864 U1 US
NAME OF SUBMITTER:	HOWARD L. SPEIGHT
SIGNATURE:	/Howard L. Speight, Reg. No. 37733/
DATE SIGNED:	03/18/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).

PATENT REEL: 048623 FRAME: 0447

505379772

Total Attachments: 12

source=2016IPM100864DeclarationandAssignmentU1Lan#page1.tif source=2016IPM100864DeclarationandAssignmentU1Lan#page2.tif source=2016IPM100864DeclarationandAssignmentU1Gao#page1.tif source=2016IPM100864DeclarationandAssignmentU1Gao#page2.tif source=2016IPM100864DeclarationandAssignmentU1Stark#page1.tif source=2016IPM100864DeclarationandAssignmentU1Stark#page2.tif source=2016IPM100864DeclarationandAssignmentU1Martinez#page1.tif source=2016IPM100864DeclarationandAssignmentU1Martinez#page2.tif source=2016IPM100864DeclarationandAssignmentU1LeBlanc#page1.tif source=2016IPM100864DeclarationandAssignmentU1LeBlanc#page2.tif source=2016IPM100864DeclarationandAssignmentU1Bhat#page1.tif source=2016IPM100864DeclarationandAssignmentU1Bhat#page2.tif

PATENT REEL: 048623 FRAME: 0448

Title of invention: Detecting a Fraction of a Component in a Fluid

Attorney Docket Number: 001001.2016-IPM-100864 PCT

As a below named inventor, I hereby declare that:

This declaration is directed to PCT international application number PCT/US17/68495 filed on December 27, 2017.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above.

I am aware of and acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

WHEREAS, the undersigned has made certain new and useful inventions and improvements described in the above-identified application.

WHEREAS, Halliburton Energy Services, Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 3000N. Sam Houston Parkway E., Houston, TX 77032-3219 (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor.

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, I have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the above-identified application, and in and to the above-identified application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights, including the right to claim priority, under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and I do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignce of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

Declaration and Assignment for Xinwei Lan for 001001, 2015-IPM-100854 PCT

AND, furthermore, I covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me.

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of January, 2018.

an constance.	The state of the s
Name:	Xinwei Lan
Residence Address:	28215 Madelin Manor Lane, Spring, TX 77386, United States
Citizenship:	<u>CN</u>
Signature:	Date: 1/20/w18
State of Fernis Peni	reybonia e
State of Pexas Penr County of Harris Mo	appowery &
Before me, SHY	ANA PARAMESU, on this day personally appeared Xinwel Lan
	ed to me through presentation of a driver's license) to be the person whose name is
subscribed to the foreg	oing instrument and acknowledged to me that he executed the same for the purposes
and consideration there	ein expressed
Given under my hand a	and seal of office this <u>&Oth</u> day of <u>JANVanY</u> , <u>2018</u> .
Signature of Notary Pu	Win Taul
(Personalized Seal)	

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL
SHYAMA PARAMESH, NOTARY PUBLIC
WEST NORRITON TWP, MONTGOMERY COUNTY
MY COMMISSION EXPIRES AUG. 22, 2021

Title of Invention: Detecting a Fraction of a Component in a Fluid

Attorney Docket Number: 001001.2016-IPM-100864 PCT

As a below named inventor, I hereby declare that:

This declaration is directed to PCT international application number PCT/US17/68495 filed on December 27, 2017.

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NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, I have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the above-identified application, and in and to the above-identified application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights, including the right to claim priority, under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and I do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

Declaration and Assignment for Li Gao for 001001.2016-IPM-100864 PCT

AND, furthermore, I covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me.

IN TESTIMONY WHEREOF, I have hereunto set my hand this ____ day of January, 2018.

<u>Li Gao</u>
5618 Grandwood Lane, Katy, TX 77450, United States
<u>US</u>
Date: 1-4-2018
§
§ §
, on this day personally appeared Li Gao, known through presentation of a driver's license) to be the person whose name is subscribed ament and acknowledged to me that he executed the same for the purposes and expressed. And seal of office this 4 day of Januar, 2018. Ablic: And
LINDA GAIL TONGBERG Notary Public, State of Texas My Commission Expires April 18, 2018

Title of Invention:

Detecting a Fraction of a Component in a Fluid

Attorney Docket Number:

001001.2016-IPM-100864 PCT

As a below named inventor, I hereby declare that:

This declaration is directed to PCT international application number PCT/US17/68495 filed on December 27, 2017.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

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NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, I have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the above-identified application, and in and to the above-identified application, all divisions, continuations, continuations—impart, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights, including the right to claim priority, under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and I do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

Declaration and Assignment for Daniel Stark for 001001.2016-IPM-100864 PCT

PATENT REEL: 048623 FRAME: 0453

AND, furthermore, I covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me.

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of January, 2018. Name: Daniel Stark Residence Address: \$423 Heart Drive, Apt. 3, Houston, Texas 77854, Citizenship: US State of Texas County of Harris Before me, Denise Bryant, on this day personally appeared Daniel Stark, known to me (or proved to me through presentation of a driver's license) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed. Given under my hand and seal of office this 4th day of January, 2018.

Signature of Notary Public: 4th ER (Personalized Seal) DENISE ELSIE BRYANT Notary ID #12462862-5 My Commission Expires August 16, 2021

Title of Invention: Detecting a Fraction of a Component in a Fluid

Attorney Docket Number: 001001.2016-IPM-100864 PCT

As a below named inventor, I hereby declare that:

This declaration is directed to PCT international application number PCT/US17/68495 filed on December 27, 2017.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

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NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, I have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the above-identified application, and in and to the above-identified application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights, including the right to claim priority, under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and I do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

Declaration and Assignment for Yenny Natali Martinez for 001001.2016-IPM-100864 PCT

AND, furthermore, I covenant and agree with said Assignce, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me.

IN TESTIMONY WHEREOF, I have hereunto set my hand this _____ day of January, 2018.

Name:	Yenny Natali Martinez
Residence Address:	21717 Inverness Forest Blvd., Apt. 1105, Houston, TX 77074, United States
Citizenship:	<u>us</u>
Signature: \	Mathy Date: 2 February 2018
State of Texas	§ 2
County of Harris	\$ \$
Before me, And	119 <u>Squa</u> , on this day personally appeared <u>Yenny Natal</u>
Martinez, known to n name is subscribed to	ne (or proved to me through presentation of a driver's license) to be the person whose the foregoing instrument and acknowledged to me that he executed the same for the ation therein expressed.
Given under my hand	and seal of office this 2 day of 400042018.
Signature of Notary P	ublic; ++++++++++++++++++++++++++++++++++++
(Personalized Scal)	A The second sec
	ANDREA SEGURA Noisy Public STATE OF TEXAS

Title of Invention: Detecting a Fraction of a Component in a Fluid

Attorney Docket Number: 001001.2016-IPM-100864 PCT

As a below named inventor, I hereby declare that:

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Declaration and Assignment for Michel Joseph LeBlanc for 001001.2016-IPM-100864 PCT

AND, furthermore, I covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 22day of January, 2018.

Name:	Michel Joseph	LeBlanc

8510 Parmer, Houston, TX 77064, United States Residence Address:

Citizenship: <u>US</u>

State of Texas

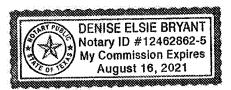
County of Harris

Before me, 1505 E. By ant, on this day personally appeared Michel Joseph LeBlanc, known to me (or proved to me through presentation of a driver's license) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this 22ND day of January, 2018.

Signature of Notary Public: 4 Company & Box & Company & Company

(Personalized Seal)



Title of Invention: Detecting a Fraction of a Component in a Fluid

Attorney Docket Number: <u>001001.2016-IPM-100864 PCT</u>

As a below named inventor, I hereby declare that:

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NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, I have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the above-identified application, and in and to the above-identified application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights, including the right to claim priority, under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and I do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

Declaration and Assignment for Gireesh K. Bhat for 001001.2016-IPM-100864 PCT

AND, furthermore, I covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 23 day of January, 2018.

Name:	Gireesh K. Bhat
Residence Address:	62 WYATT OAKS DR, TOMBALL, TX 77375
Citizenship:	US INDIA
Signature: G	Date: 01/23/2018
State of Texas	§
County of Harris	§ §
	proved to me through presentation of a driver's license) to be the person whose e foregoing instrument and acknowledged to me that he executed the same for the
Given under my hand a	nd seal of office this 23rd day of Januan, 2018.
Signature of Notary Pub	olic: LOV
(Personalized Seal)	LILIA ROMAN Notary ID #12929603-7 My Commission Expires March 30, 2021

Declaration and Assignment for Gireesh K. Bhat for 001001.2016-IPM-100864 PCT

PATENT REEL: 048623 FRAME: 0460

RECORDED: 03/18/2019