# 505338610 02/21/2019 PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	ASSIGNMENT		
CONVEYING PARTY DATA			
	Name	Execution Date	
LI GAO	Name	Execution Date   10/24/2016	

#### **RECEIVING PARTY DATA**

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

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

Property Type	Number
Application Number:	16326965

## **CORRESPONDENCE DATA**

**Fax Number:** 

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:	713-658-1818
Email:	Patents@chamberlainlaw.com
Correspondent Name:	CHAMBERLAIN HRDLICKA HALLIBURTON ENERGY
Address Line 1:	1200 SMITH ST., 14TH FLOOR
Address Line 4:	HOUSTON, TEXAS 77002

NAME OF SUBMITTER:	COLLIN A. ROSE
SIGNATURE:	/Collin A. Rose/
DATE SIGNED:	02/21/2019

## **Total Attachments: 6**

source=2015-IPM-099635 U1 PCT\_2018-03-20\_Assignments Recorded\_140846-039700WO-1#page1.tif source=2015-IPM-099635 U1 PCT\_2018-03-20\_Assignments Recorded\_140846-039700WO-1#page2.tif source=2015-IPM-099635 U1 PCT\_2018-03-20\_Assignments Recorded\_140846-039700WO-1#page3.tif source=2015-IPM-099635 U1 PCT\_2018-03-20\_Assignments Recorded\_140846-039700WO-1#page4.tif source=2015-IPM-099635 U1 PCT\_2018-03-20\_Assignments Recorded\_140846-039700WO-1#page5.tif source=2015-IPM-099635 U1 PCT\_2018-03-20\_Assignments Recorded\_140846-039700WO-1#page5.tif

## ASSIGNMENT

For good and valuable consideration given to me by Halliburton Energy Services, Inc., and any other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, Li Gao ("ASSIGNOR"), having jointly or solely made an invention in "Methods and Systems for Determining Fluid Density by Distributed Acoustic Sensing" ("INVENTION"), while in the employ or hire either as an employee or consultant of Halliburton Energy Services, Inc., a Corporation organized and existing under the laws of the State of Delaware, doing business at 3000 North Sam Houston Parkway East, Houston, Texas 77032-3219 ("ASSIGNEE"), do hereby assign, sell, and convey to ASSIGNEE, its successors, and assigns, ASSIGNOR's entire right, title, and interest throughout the world in and to:

- 1. Said INVENTION in "Methods and Systems for Determining Fluid Density by Distributed Acoustic Sensing;"
- Patent Cooperation Treaty patent application on said INVENTION entitled, "Methods and Systems for Determining Fluid Density by Distributed Acoustic Sensing," filed as: <sup>1</sup>

PCT Patent Application No. PCT/US2016/058266 on October 21, 2016

Attorney's Reference No. 140846-039700WO

- 3. All applications for patent or like protection on the INVENTION that have now been or may in the future be made anywhere in the world, including any continuation, continuation-in-part, and any other utility applications;
- 4. All patents and like protection that have now been or may in the future be granted on the INVENTION anywhere in the world;
- 5. All substitutions, divisions, continuations, continuations-in-part, renewals, reissues, extensions, and the like of the applications and patents and like grants, including without limitation, those obtained or permissible under past, present, and future laws and statutes;
- 6. All rights of action on account of past, present, and future unauthorized use of the INVENTION and for infringement of the patents and like protection anywhere in the world;

<sup>&</sup>lt;sup>1</sup> ASSIGNOR further authorizes the handling attorneys to insert the serial number and filing date of the patent application identified by the listed file numbed as soon as it is known as well as to attach and update a schedule of any further application serial numbers or patent numbers related to the INVENTION as they become known.

- 7. The right in ASSIGNEE to file in its name applications for patents and like protection for the INVENTION in any country or countries in the world; and
- 8. All rights of priority associated with the INVENTION, applications, patents, and like protection anywhere in the world.

ASSIGNOR covenants that ASSIGNOR, its heirs, legal representatives, assigns, administrators, and executors will, at the expense of ASSIGNEE, its successors, and assigns, execute all papers and perform such other acts as may be reasonably necessary to give ASSIGNEE, its successors, and assigns, the full benefit of this Assignment. Further, ASSIGNOR warrants that the INVENTION is not encumbered by another assignment or obligation of assignment to a third-party and that ASSIGNOR has the full ability and authority to assign and encumber the INVENTION.

	AA
ASSIGNOR:	
Name: Li Gao	

Date: \_\_ 10-24-2016

THE STATE OF: TEXAS

COUNTY OF: Harris

Before me, the undersigned authority, on this day personally appeared Li Gao, known to me 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 the  $24^{\pm}$  day of October. 2016.



Xnds Xaid Jondong Notary Public in and for the State & Texas

My commission expires: 4-18-2016

[SEAL]

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## ASSIGNMENT

For good and valuable consideration given to me by Halliburton Energy Services, Inc., and any other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, Christopher L. Stokely ("ASSIGNOR"), having jointly or solely made an invention in "Methods and Systems for Determining Fluid Density by Distributed Acoustic Sensing" ("INVENTION"), while in the employ or hire either as an employee or consultant of Halliburton Energy Services, Inc., a Corporation organized and existing under the laws of the State of Delaware, doing business at 3000 North Sam Houston Parkway East, Houston, Texas 77032-3219 ("ASSIGNEE"), do hereby assign, sell, and convey to ASSIGNEE, its successors, and assigns, ASSIGNOR's entire right, title, and interest throughout the world in and to:

- 1. Said INVENTION in "Methods and Systems for Determining Fluid Density by Distributed Acoustic Sensing;"
- Patent Cooperation Treaty patent application on said INVENTION entitled, "Methods and Systems for Determining Fluid Density by Distributed Acoustic Sensing," filed as: 1

PCT Patent Application No. PCT/US2016/058266 on October 21, 2016

Attorney's Reference No. 140846-039700WO

- 3. All applications for patent or like protection on the INVENTION that have now been or may in the future be made anywhere in the world, including any continuation, continuation-in-part, and any other utility applications;
- 4. All patents and like protection that have now been or may in the future be granted on the INVENTION anywhere in the world;
- All substitutions, divisions, continuations, continuations-in-part, renewals, reissues, extensions, and the like of the applications and patents and like grants, including without limitation, those obtained or permissible under past, present, and future laws and statutes;
- 6. All rights of action on account of past, present, and future unauthorized use of the INVENTION and for infringement of the patents and like protection anywhere in the world;

<sup>&</sup>lt;sup>1</sup> ASSIGNOR further authorizes the handling attorneys to insert the serial number and filing date of the patent application identified by the listed file numbed as soon as it is known as well as to attach and update a schedule of any further application serial numbers or patent numbers related to the INVENTION as they become known.

- 7. The right in ASSIGNEE to file in its name applications for patents and like protection for the INVENTION in any country or countries in the world; and
- 8. All rights of priority associated with the INVENTION, applications, patents, and like protection anywhere in the world.

ASSIGNOR covenants that ASSIGNOR, its heirs, legal representatives, assigns, administrators, and executors will, at the expense of ASSIGNEE, its successors, and assigns, execute all papers and perform such other acts as may be reasonably necessary to give ASSIGNEE, its successors, and assigns, the full benefit of this Assignment. Further, ASSIGNOR warrants that the INVENTION is not encumbered by another assignment or obligation of assignment to a third-party and that ASSIGNOR has the full ability and authority to assign and encumber the INVENTION.

ASSIGNOR:	Augur	all and the second	Stoler
Name: Christop	her L. Stokely		

Date: March 16, 2018

THE STATE OF: TEXAS

COUNTY OF:

Before me, the undersigned authority, on this day personally appeared Christopher L. Stokely, known to me 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 the // day of // day of // 2018.



[SEAL]

My commission expires: <u> x/u/2020</u></u>