

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3039231

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MARK VINCENT COLLINS	04/02/2012
ARTHUR CHENG	04/02/2012
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	HALLIBURTON ENERGY SERVICES, INC.
<b>Street Address:</b>	10200 BELLAIRE BOULEVARD
<b>City:</b>	HOUSTON
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	77072
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14388197
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(888)712-9587
<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>	281-825-5235
<b>Email:</b>	VY@KIPATENTS.COM
<b>Correspondent Name:</b>	KRUEGER ISELIN LLP
<b>Address Line 1:</b>	P.O. BOX 1906
<b>Address Line 4:</b>	CYPRESS, TEXAS 77410-1906
<b>ATTORNEY DOCKET NUMBER:</b>	1391-865.08
<b>NAME OF SUBMITTER:</b>	VY NGUYEN
<b>SIGNATURE:</b>	/Vy Nguyen/
<b>DATE SIGNED:</b>	09/25/2014
<b>Total Attachments: 3</b>	
source=HAL-86501_ASG-E#page1.tif	
source=HAL-86501_ASG-E#page2.tif	
source=HAL-86501_ASG-E#page3.tif	

## ASSIGNMENT

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN, that the undersigned inventor(s), for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, MARK V. COLLINS and ARTHUR CHENG, having made an invention in "ACOUSTIC LOGGING SYSTEMS AND METHODS EMPLOYING MULTI-MODE INVERSION FOR ANISOTROPY AND SHEAR SLOWNESS", while in the employ of HALLIBURTON ENERGY SERVICES, INC., a corporation organized and existing under the laws of the State of Delaware, doing business at 10200 Bellaire Boulevard, Houston, Texas 77072, (sometimes hereinafter called "ASSIGNEE"), do hereby ASSIGN, SELL and CONVEY to said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to:

1. Said invention in "ACOUSTIC LOGGING SYSTEMS AND METHODS EMPLOYING MULTI-MODE INVERSION FOR ANISOTROPY AND SHEAR SLOWNESS";

2. The International PCT Patent Application on said invention, filed concurrently herewith or as PCT Patent Application No. PCT/US12/31912 filed April 2, 2012, (Attorney's File No. 1391-865.00; attorney is authorized to fill in the application number and filing date after the USPTO assigns them), entitled "ACOUSTIC LOGGING SYSTEMS AND METHODS EMPLOYING MULTI-MODE INVERSION FOR ANISOTROPY AND SHEAR SLOWNESS";

3. All applications for patent or like protection on said invention that have now been or may in the future be made by us or our legal representatives, whether in the United States of America or any other place anywhere in the world;

4. All patents and like protection that have now been or may in the future be granted on said invention to us or our legal representatives, whether in the United States of America or in any other country or place anywhere in the world;

5. All substitutions for and divisions, continuations, continuations-in-part, renewals, reissues, extensions, and the like of said applications and patents and like grants, including without limitations, those obtained or permissible under past, present and future law and statutes;

6. All rights of action on account of past, present and future unauthorized use of said invention for infringement of said patents and like protection;

7. The right to ASSIGNEE to file in its name applications for patents and like protection for said invention in any country or countries foreign to the United States; and

8. All international rights of priority associated with said invention, applications, patents and like protection; and

I (or We) covenant that I (or We), my (our) 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.

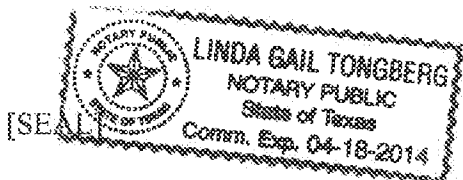
EXECUTED at Harris County, TX, on the 2<sup>nd</sup> day of April, 2012.

Mark Collins  
MARK V. COLLINS

STATE OF Texas §  
COUNTY OF Harris §

BEFORE ME, the undersigned authority, on this day personally appeared MARK V. COLLINS, 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 2<sup>nd</sup> day of April, 2012.



Linda Gail Tongberg  
Notary Public

My Commission Expires: 4-18-2014

EXECUTED at Lewis County, Texas, on the 2 day of April, 2012.

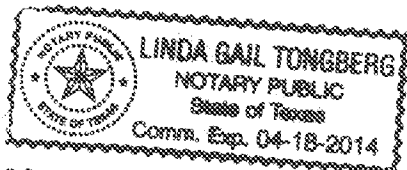
Arthur Cheng  
ARTHUR CHENG

STATE OF Texas §  
COUNTY OF Harris §

BEFORE ME, the undersigned authority, on this day personally appeared ARTHUR CHENG, 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 2nd day of April, 2012.

Linda Gail Tongberg  
Notary Public



[SEAL]

My Commission Expires: 4-18-2014