PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MING GU	10/14/2015
JOHN ANDREW QUIREIN	10/14/2015
MEHDI EFTEKHARIFAR	10/14/2015

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:	15038762

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: 202 756 8000

Email: mweipdocket@mwe.com, ipdockethouston@mwe.com

Correspondent Name: MCDERMOTT WILL & EMERY LLP Address Line 1: THE MCDERMOTT BUILDING

Address Line 2: 500 NORTH CAPITOL STREET, N.W.

Address Line 4: WASHINGTON, D.C. 20001

ATTORNEY DOCKET NUMBER:	098273-0680
NAME OF SUBMITTER:	IONA N. KASIER
SIGNATURE:	/lona N. Kaiser/
DATE SIGNED:	05/24/2016
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 6

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PATENT 503839460 REEL: 038696 FRAME: 0100

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> PATENT REEL: 038696 FRAME: 0101

As the	e below named inventor, I hereby declare that:
This c	declaration is directed to:
\boxtimes	The attached application to be filed as a United States application or PCT
	international application, or
	United States application or PCT international application number
	; and,
Entitled:	
,, <u> </u>	NATION MODEL FOR PREDICTING STIFFNESS COEFFICIENTS FOR TONELEY WAVE VELOCITY DATA

Regarding that application, I declare the following:

- 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.

Moreover, Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 3000 N. Sam Houston Parkway E., Houston, TX 77032-3219 (hereinafter "Assignee") is desirous of acquiring an interest therein;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, by these presents do sell, assign and transfer and convey unto Assignee, its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application identified above, and any national phase, divisional, continuing, continuation-in-part, or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefore; said invention, application and any and all Letters Patent issuing there from to be held and enjoyed by Assignee, for its own use and benefit, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

1 of 2

I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

I do further agree to communicate to Assignee, its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any patent office proceeding or litigation.

I do further grant the power to amend the following information on this document: the title of the application and the filing designation (attached or by reference to an application number) as required by or in view of any rules or requirements of the United States Patent and Trademark Office or any other patent regulatory authority.

Executed this	;	_day of	Oc	L	, 2015
				prod	and the same of th
		Ì	MING GU		
STATE OF	TX)			
COUNTY OF	Harris)			

Before me personally appeared said MING GU and acknowledged the foregoing instrument to be a free act and deed this 11 day of GC tober, 2015.

Seal

STEFANIE JOHNSON
Notary Public, State of Texas
My Commission Expires
December 15, 2018

(Notary)

As the	e below named inventor, I hereby declare that:		
This d	declaration is directed to:		
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	international application, or		
	United States application or PCT international application number		
	; and,		
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STATE OF TEXAS)
COUNTY OF Williamson)

Before me personally appeared said JOHN ANDREW QUIREIN and acknowledged the foregoing instrument to be a free act and deed this 14 day of ontober

Seal

(Notary)

STEFANIE JOHNSON Notary Public, State of Texas My Commission Expires December 15, 2018

As th	ne below named inventor, I hereby declare that:		
This	declaration is directed to:		
\boxtimes	The attached application to be filed as a United States application or PCT		
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	United States application or PCT international application number		
	; and,		
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Executed this	_day of, 2015
	Audul'
	MEHDI ÉFTEKHARIFAR
STATE OF Texas)
COUNTY OF Harris)

Before me personally appeared said MEHDI EFTEKHARIFAR and acknowledged the foregoing instrument to be a free act and deed this 4 day of october, 2015.

Seal

(Notary)

STEFANIE JOHNSON Notary Public, State of Texas My Commission Expires December 15, 2018

RECORDED: 05/24/2016