# 504714574 01/04/2018

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4761296

			NEW ASSIGNMENT				
NATURE OF CONVEYANCE: ASSIGNMENT							
CONVEYING PARTY DA	ATA						
		Ν	lame			Execution Date	
PHILIP D. NGUYEN				03/11/2015			
DENISE NICOLE BENOIT						03/11/2015	
GLADYS ROCIO MONTENEGRO-GA			LINDO			03/06/2015	
YUMING YANG					04/02/2015		
ZHENG LU						04/03/2015	
RECEIVING PARTY DA	ТА						
Name:		BURTC	N ENERGY SERVICES, INC				
Street Address:		3000 N. SAM HOUSTON PARKWAY E.					
City:	HOUS	HOUSTON					
State/Country:	TEXAS	TEXAS					
Postal Code:	77032-	-3219					
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PROPERTY NUMBERS	Total: 1	1					
Property Type			Number				
Property Type Application Number:		15555	950				
Application Number:	ATA	15555	950				
Application Number:	ΑΤΑ						
Application Number: CORRESPONDENCE D Fax Number:		(949)8	950 51-9348 <b>-mail address first; if that is</b>	uns	uccessf	ul, it will be sent	
Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p	e sent to	(949)8 o the e d; if tha	51-9348 -mail address first; if that is at is unsuccessful, it will be				
Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone:	e sent to	(949)8 o the e d; if tha 949-85	51-9348 -mail address first; if that is at is unsuccessful, it will be 51-0633	sen	' via US	Mail.	
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Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name:	e sent to	(949)8 o the e d; if tha 949-85 smanr MCDE	51-9348 - <i>mail address first; if that is</i> at <i>is unsuccessful, it will be</i> 51-0633 iquez@mwe.com, mweipdock RMOTT WILL & EMERY LLP	<b>sen</b> a xet@	' via US	Mail.	
Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1:	e sent to	(949)8 o the e d; if tha 949-85 smanr MCDE 4 PAR	51-9348 - <i>mail address first; if that is</i> at <i>is unsuccessful, it will be</i> 51-0633 iquez@mwe.com, mweipdock RMOTT WILL & EMERY LLP K PLAZA, SUITE 1700	<b>sen</b> a xet@	' via US	Mail.	
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Application Number: CORRESPONDENCE D. Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NU	e sent to provide	(949)8 o the e d; if tha 949-85 smanr MCDE 4 PAR IRVINI	51-9348 - <i>mail address first; if that is</i> at <i>is unsuccessful, it will be</i> 51-0633 iquez@mwe.com, mweipdock RMOTT WILL & EMERY LLP K PLAZA, SUITE 1700 E, CALIFORNIA 92614-2559 098273-1958	sen æt@	' via US	Mail.	
Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NUMARE OF SUBMITTER:	e sent to provide	(949)8 o the e d; if tha 949-85 smanr MCDE 4 PAR IRVINI	51-9348 <i>-mail address first; if that is</i> <i>at is unsuccessful, it will be</i> 51-0633 iquez@mwe.com, mweipdock RMOTT WILL & EMERY LLP K PLAZA, SUITE 1700 E, CALIFORNIA 92614-2559 098273-1958 MARK J. ITRI, REG. NO. 36,1	sen æt@	' via US	Mail.	
Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NUMATE OF SUBMITTER: SIGNATURE:	e sent to provide	(949)8 o the e d; if tha 949-85 smanr MCDE 4 PAR IRVINI	51-9348 -mail address first; if that is at is unsuccessful, it will be 51-0633 iquez@mwe.com, mweipdock RMOTT WILL & EMERY LLP K PLAZA, SUITE 1700 E, CALIFORNIA 92614-2559 098273-1958 MARK J. ITRI, REG. NO. 36,1 /Mark J. Itri/	sen æt@	' via US	Mail.	

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As the below named inventor, I hereby declare that: This declaration is directed to:

- The attached application to be filed as a United States application or PCT international application, or
- United States application or PCT international application number filed on \_\_\_\_\_; and,

entitled "FORMING PROPPANT PACKS HAVING PROPPANT-FREE CHANNELS THEREIN IN SUBTERRANEAN FORMATION FRACTURES." 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, We, 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.

And 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.

And 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 interference or other litigation.

Executed this	• <u> </u>	day of	march		, 2015
			Alex	A.	<u>KAN</u>
		Î	PHILIP D. NGU	YÉN	TY Y
STATE OF	Texas	)			
COUNTY OF	Haris	)			

Before me personally appeared said PHILIP D. NGUYEN and acknowledged the foregoing instrument to be a free act and deed this day of much, 2015.



(Notary)

As the below named inventor, I hereby declare that: This declaration is directed to:

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Executed thisii	day ofdavely	, 2015
	Ownard &	Senant
	DENISE NICOLE	BENOIT
STATE OF TERAS	2	
COUNTY OF Harris	)	

Before me personally appeared said DENISE NICOLE BENOIT and acknowledged the foregoing instrument to be a free act and deed this  $\frac{1}{2}$  day of  $\frac{2}{2}$ , 2015.



Sel Delexar

(Notary)

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And 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 interference or other litigation.

Executed this	06	day of	r <u>March</u>				
			6	adys	R.	Kontenez	<u>vo 6</u>
			GLADYS	ROCIO	MON	TENEGRØ-	GALINDO
والمناج	w.	~					

COUNTY OF Harris

Before me personally appeared said GLADYS ROCIO MONTENEGRO-GALINDO and acknowledged the foregoing instrument to be a free act and deed this  $\frac{\delta + \delta}{\delta}$  day of  $\frac{\delta + \delta}{\delta}$ , 2015.



Notary)

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Executed this 2 nd day of April . 2015 YUMING YANG STATE OF TEXAS ) COUNTY OF HAYYI'S 2020

Before me personally appeared said YUMING YANG and acknowledged the foregoing instrument to be a free act and deed this \_\_\_\_\_ day of \_\_\_\_\_\_, 2015.

Seal

(Notary)

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Executed this 3rd day of April ZHENG LU

STATE OF 12223 COUNTY OF Harris

Before me personally appeared said ZHENG LU and acknowledged the foregoing instrument to be a free act and deed this 3rd day of April, 2015.

Seal BEVERLY A DEVENPORT (Notary My Commission Expires September 19, 2016 2 of 2 OM\_US \$9205230-1.095184.0818 PATENT

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# **RECORDED: 01/04/2018**