

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT6169180

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
WASEEM ABDULRAZZAQ	09/07/2016
REEM MOHAMMED ALBURAIKAN	08/23/2016
SANDIP PRABHAKAR PATIL	08/29/2016
VAISHALI MISHRA	08/29/2016
SHEETAL SINGH	08/29/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	HALLIBURTON ENERGY SERVICES, INC.
<b>Street Address:</b>	3000 N. SAM HOUSTON PARKWAY E.
<b>City:</b>	HOUSTON
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	77032-3219
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16880839
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<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>	2819624503
<b>Email:</b>	dmasters@ctumeylawgroup.com
<b>Correspondent Name:</b>	C. TUMEY LAW
<b>Address Line 1:</b>	P.O BOX 890226
<b>Address Line 4:</b>	HOUSTON, TEXAS 77062-9998
<b>ATTORNEY DOCKET NUMBER:</b>	1560-082408
<b>NAME OF SUBMITTER:</b>	DANIEL MASTERS
<b>SIGNATURE:</b>	/dlm/
<b>DATE SIGNED:</b>	06/24/2020
<b>Total Attachments: 10</b>	
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source=2016-IPM-100307U1PCT\_SignedDecAsmt\_098273-0729#page10.tif

**DECLARATION AND ASSIGNMENT**

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:

**HYDRATING SWELLABLE CLAYS**

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;

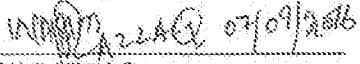
NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, by these presents do sell, assign and transfer and convey unto Assignee, its successors and assigns, the full and exclusive right, for the United States of America and its territorial 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.

**DECLARATION AND ASSIGNMENT**

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, at Assignee's expense.

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, at Assignee's expense.

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 7<sup>th</sup> day of September, 2016  
  
WASEEM ABDULRAZZAQ

STATE OF                )  
                                  )  
COUNTY OF            )

Before me personally appeared said WASEEM ABDULRAZZAQ and acknowledged the foregoing instrument to be a free act and deed this \_\_\_ day of \_\_\_\_\_, 2016.

Seal

\_\_\_\_\_  
(Notary)

**DECLARATION AND ASSIGNMENT**

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:

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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.


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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 23rd day of August, 2016

  
REEM MOHAMMED ALBURAIKAN

STATE OF )  
                  )  
COUNTY OF )

Before me personally appeared said REEM MOHAMMED ALBURAIKAN and acknowledged the foregoing instrument to be a free act and deed this \_\_\_\_ day of \_\_\_\_\_, 2016.

Seal

\_\_\_\_\_  
(Notary)

**DECLARATION AND ASSIGNMENT**

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:

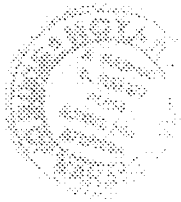
**HYDRATING SWELLABLE CLAYS**

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2016-IPM-100307 U1 PCT  
098273-0729

DECLARATION AND ASSIGNMENT

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, at Assignee's expense.

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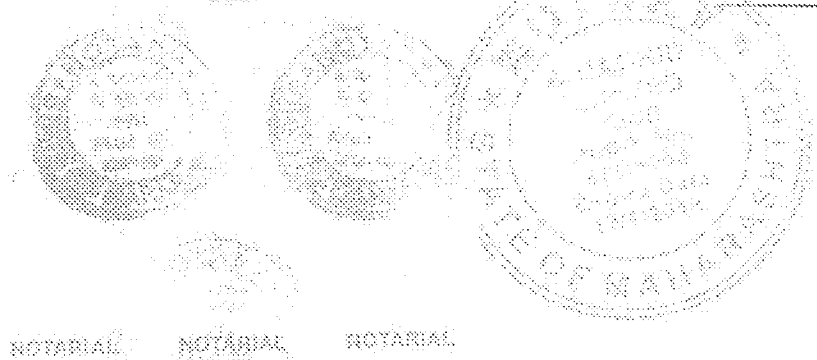
Executed this 29<sup>th</sup> day of August, 2016

  
SANDIP PRABHAKAR PATIL

STATE OF )  
                  )  
COUNTY OF )

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

Seal



(Notary)

BEFORE ME

  
A. HASHID K. SAYED  
NOTARY STATE OF MAHARASHTRA  
PUNE

29 AUG 2016

Noted & Registered  
At Sr. No. 15525/16

NOTARIAL NOTARIAL NOTARIAL



### DECLARATION AND ASSIGNMENT

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:

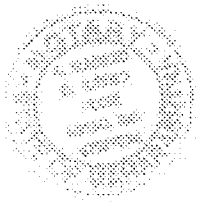
**HYDRATING SWELLABLE CLAYS**

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.



2016-IPM-100307 U1 PCT  
698273-8729

DECLARATION AND ASSIGNMENT

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, at Assignee's expense.

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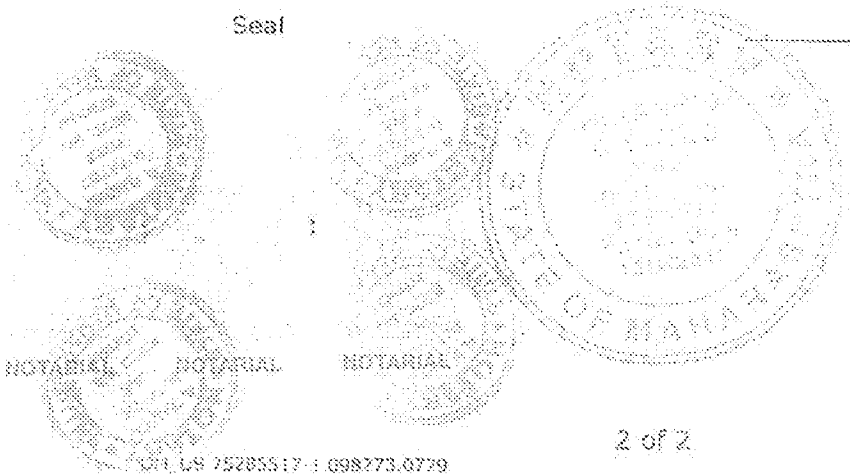
Executed this 28<sup>th</sup> day of August, 2016

Vaishali Mishra  
VAISHALI MISHRA

STATE OF )  
COUNTY OF )

Before me personally appeared said VAISHALI MISHRA and acknowledged the foregoing instrument to be a free act and deed this \_\_\_\_ day of \_\_\_\_\_, 2016.

Seal



(Notary)

BEFORE ME

A. Rashid B. Sayed  
NOTARY, STATE OF MAHARASHTRA  
PUNE

29-08-2016

Noted & Registered  
At Sr. No. 13522/16

**DECLARATION AND ASSIGNMENT**

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:

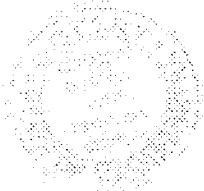
**HYDRATING SWELLABLE CLAYS**

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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.



2016-IPM-100307 U1 PCT  
098273-0729

DECLARATION AND ASSIGNMENT

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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 24 day of August, 2016

SHEETAL SINGH

STATE OF )  
                  )  
COUNTY OF )

Before me personally appeared said SHEETAL SINGH and acknowledged the foregoing instrument to be a free act and deed this \_\_\_\_ day of \_\_\_\_\_, 2016.

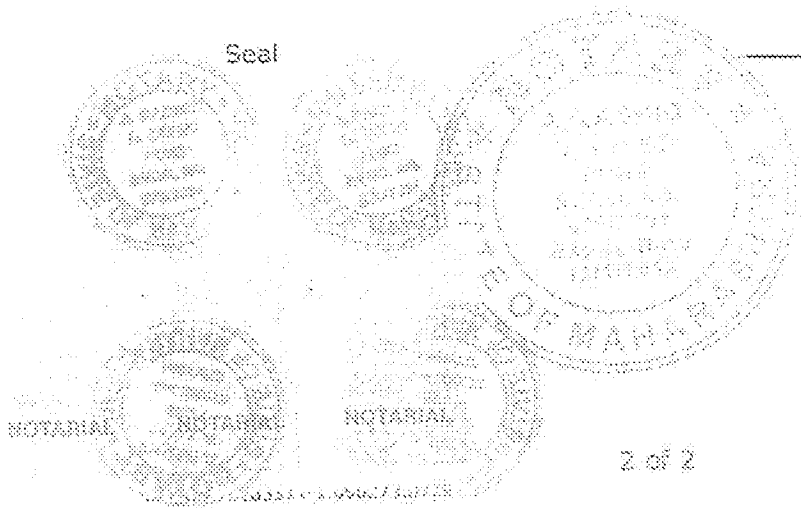
Seal

(Notary)

BEFORE ME

A. RASHID D. SAYED  
NOTARY STATE OF MICHIGAN

29 AUG 2016



2 of 2

15526/16