#### 503738277 03/15/2016

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3784920

| SUBMISSION TYPE:      | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT     |

#### **CONVEYING PARTY DATA**

| Name           | Execution Date |
|----------------|----------------|
| SHARATH SAVARI | 10/14/2013     |
| BHARGAV GAJJI  | 10/08/2013     |
| SOMESH KURELLA | 10/09/2013     |

#### **RECEIVING PARTY DATA**

| Name:           | HALLIBURTON ENERGY SERVICES, INC. |  |
|-----------------|-----------------------------------|--|
| Street Address: | 10200 BELLAIRE BOULEVARD          |  |
| City:           | HOUSTON                           |  |
| State/Country:  | TEXAS                             |  |
| Postal Code:    | 77072                             |  |

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

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 15022165 |

#### CORRESPONDENCE DATA

Fax Number: (713)229-2880

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: 713 229-1234

Email: susan.stewart@bakerbotts.com

**Correspondent Name:** BAKER BOTTS L.L.P.

Address Line 1: 910 LOUISIANA STREET, ONE SHELL PLAZA

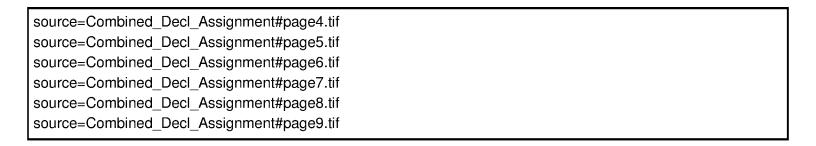
Address Line 4: HOUSTON, TEXAS 77002

| ATTORNEY DOCKET NUMBER: 063718.6048 |  |  |
|-------------------------------------|--|--|
| NAME OF SUBMITTER: SUSAN STEWART    |  |  |
| SIGNATURE:                          | /Susan Stewart/  |  |
| DATE SIGNED:                        | 03/15/2016   |  |
|                                     | This document serves as an Oath/Declaration (37 CFR 1.63). |  |

#### **Total Attachments: 9**

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> **PATENT REEL: 037990 FRAME: 0176** 503738277



PATENT REEL: 037990 FRAME: 0177

#### DECLARATION/ASSIGNMENT-STATEMENT

This declaration and assignment are directed to United States application or PCT international application identified as follows:

This declaration and assignment are directed to:

\_\_\_\_ United States application or PCT international application identified as follows:

| SERIAL NO. | DATE FILED | TITLE |
|------------|------------|-------|
|            |            |       |

or X the invention described in the attached patent application entitled:

# APPARATUS AND METHODS FOR DETERMINING SWELLING REACTIVITY OF MATERIALS UNDER SUBTERRANIAN WELLBORE CONDITIONS

#### DECLARATION

As the below named inventor, I hereby declare that:

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 to the application. I have reviewed and understand the subject matter of the above-identified application including the claims.

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. I am aware of an acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

#### ASSIGNMENT

Whereas, I, Sharath Savari, of Stafford, Fort Bend County, Texas, USA, have solely or jointly invented a new and useful process, machine, manufacture or composition of matter, or an improvement thereof, disclosed in and for which the above-identified Patent Application was made for Letters Patent:

DECLARATION/ASSIGNMENT-STATEMENT

Page 1

Docket No. 2012-IP-067658U1 PCT

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072, 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 HALLIBURTON ENERGY SERVICES, INC., 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 above-referenced Patent Application, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, 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 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 HALLIBURTON ENERGY SERVICES, INC., 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 day of Ottowy, 2013.

Sharath Savari

## NOTARY STATEMENT

Before me personally appeared said Sharath Savari and acknowledged the foregoing instrument to be their free act and deed this \(\frac{\text{U}}{2}\) day of \(\frac{\text{Colored}}{2}\). 2013.

(Seal)



#### DECLARATION/ASSIGNMENT-STATEMENT

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| SERIAL NO. | DATE FILED | TITLE |
|------------|------------|-------|
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or X the invention described in the attached patent application entitled:

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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 to the application. I have reviewed and understand the subject matter of the above-identified application including the claims.

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### ASSIGNMENT

Whereas, I, Bhargav Gajji, of Pune, Maharastra, India, have solely or jointly invented a new and useful process, machine, manufacture or composition of matter, or an improvement thereof, disclosed in and for which the above-identified Patent Application was made for Letters Patent;

PATENT REEL: 037990 FRAME: 0181

Docket No. 2012-IP-067658U1 PCT

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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 HALLIBURTON ENERGY SERVICES, INC., 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 above-referenced Patent Application, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, 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 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 HALLIBURTON ENERGY SERVICES, INC., 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 of day of O (27), 2013.

Bhargav Gajji

Witness Address

### ACKNOWLEDGEMENT

| Before me, the undersigned witness, on this day personally appeared said                   |
|--|
| Bhargav Gajji, 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, the foregoing instrument to be his free act and deed this |
|  |
| Witness Signature  |
| Harned James   |
| Witness Name   |
|  |
|  |
|  |
|  |

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| SERIAL NO. | DATE FILED | TITLE |
|------------|------------|-------|
|            |            |       |

or X the invention described in the attached patent application entitled:

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I believe that I am the original inventor or an original joint inventor of a claimed invention to the application. I have reviewed and understand the subject matter of the above-identified application including the claims.

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#### ASSIGNMENT

Whereas, I, Somesh Kurella, of Pune, Maharastra, India, have solely or jointly invented a new and useful process, machine, manufacture or composition of matter, or an improvement thereof, disclosed in and for which the above-identified Patent Application was made for Letters Patent;

DECLARATION/ASSIGNMENT-STATEMENT

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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 HALLIBURTON ENERGY SERVICES, INC., 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.

Somest Livella

#### ACKNOWLEDGEMENT

Before me, the undersigned witness, on this day personally appeared said Somesh Kurella, 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, the foregoing instrument to be his free act and deed this O9 day of OCTOBER, 2013.

and c V

Witness Signature

SHASHANK M. GHAG

Witness Name

5/32 SPRING MILL'S COMPOUND

G.D. AMBEKAR ROAD,

NAIGAON, MUMBAI-400014

Witness Address

DECLARATION/ASSIGNMENT-STATEMENT

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