

<b>PATENT ASSIGNMENT COVER SHEET</b>
--------------------------------------

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3172216

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MURTAZA ZIAUDDIN	12/15/2014
DANIEL DIAS	12/31/2014
DANILA KUZNETSOV	12/15/2014
PAUL NACCACHE	01/07/2015
MARIE ANN GIDDINS	01/05/2015
SUHAS BODWADKAR	12/17/2014
ABIMBOLA OWODUNNI	01/06/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	SCHLUMBERGER TECHNOLOGY CORPORATION
<b>Street Address:</b>	300 SCHLUMBERGER DRIVE
<b>City:</b>	SUGAR LAND
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	77478
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14243051
<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>Email:</b>	kdumas-scarber@slb.com
<b>Correspondent Name:</b>	KRISTINE DUMAS-SCARBER
<b>Address Line 1:</b>	10001 RICHMOND AVENUE
<b>Address Line 2:</b>	ROOM 4720
<b>Address Line 4:</b>	HOUSTON, TEXAS 77042
<b>ATTORNEY DOCKET NUMBER:</b>	IS14.8055-US-NP
<b>NAME OF SUBMITTER:</b>	KRISTINE DUMAS-SCARBER
<b>SIGNATURE:</b>	/KRISTINE DUMAS-SCARBER/
<b>DATE SIGNED:</b>	01/07/2015

**Total Attachments: 10**

source=IS148055USNP\_20150107\_Signed\_Assignment#page1.tif  
source=IS148055USNP\_20150107\_Signed\_Assignment#page2.tif  
source=IS148055USNP\_20150107\_Signed\_Assignment#page3.tif  
source=IS148055USNP\_20150107\_Signed\_Assignment#page4.tif  
source=IS148055USNP\_20150107\_Signed\_Assignment#page5.tif  
source=IS148055USNP\_20150107\_Signed\_Assignment#page6.tif  
source=IS148055USNP\_20150107\_Signed\_Assignment#page7.tif  
source=IS148055USNP\_20150107\_Signed\_Assignment#page8.tif  
source=IS148055USNP\_20150107\_Signed\_Assignment#page9.tif  
source=IS148055USNP\_20150107\_Signed\_Assignment#page10.tif

**Assignment**

WHEREAS, the undersigned inventors hereinafter referred to as the "Inventors" each said Inventor's address being listed below:

**Murtaza Ziauddin**, a citizen of the United States of America, residing at 5215 Red Oak Valley Dr., Katy TX, 77494;

**Daniel Dias**, a citizen of Brazil, residing at Abingdon, UK;

**Danila Kuznetsov**, a citizen of the Russian Federation, residing at Abingdon, UK;

**Paul Naccache**, a citizen of the United Kingdom, residing at Oxford, UK;

**Marie Ann Giddins**, a citizen of the United Kingdom, residing at Abingdon, UK;

**Suhas Bodwadkar**, a citizen of the United States of America, residing at Gerrards Cross, UK;

and

**Abimbola Owodunni**, a citizen of Nigeria, residing at Oxford, UK;

Has/have invented certain new and useful improvements in

**WELL STIMULATION**

as described and set forth in an Application for Letters Patent of the United States of America, filed with the United States Patent and Trademark Office on April 2, 2014, Serial No. 14/243,051, (Docket No. IS14.8055-US-NP). **This assignment is effective as of April 2, 2014.**

AND WHEREAS, the "**COMPANIES**", listed in **Schedule A**, are desirous of acquiring or confirming their acquisition of the entire right, title and interest in and to said invention, inventions or improvements, and in and to said application, and in and to any and all patents, both of the United States and of all foreign countries, that may be obtained therefore **as outlined in Schedule A**;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN, that the undersigned Inventors, for good and valuable considerations, the receipt and sufficiency of which hereby acknowledge, have sold, assigned, transferred and conveyed, and by this assignment do sell, assign, transfer and convey, unto said COMPANIES, their successors and assigns, the entire right, title and interest throughout the world, in and to the above-described invention, inventions or improvements described or set forth in said application, in any form or embodiment thereof, and in and to said application, and in and to any applications filed in any foreign country based thereon, including the right to file foreign applications under the provisions of any convention or treaty; and in and to any confirmation, divisional, continuation,

continuation-in-part, or substitute application which may be filed on said invention, inventions or improvements in the United States or in any foreign country; and in and to any and all patents, certificates, utility models, reissues, extensions, additions or confirmations thereof which may be granted in the United States or in any foreign country upon said invention, inventions or improvements,

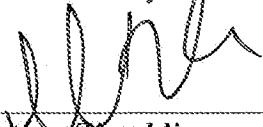
TO HAVE AND TO HOLD the same to the full end of the term or terms for which any and all such United States and foreign patents and grants may be issued on said invention, inventions or improvements.

AND said Inventors do hereby authorize and request the issuing authority to issue any and all of said United States and foreign patents on said application or applications to said **COMPANIES**, their successors and assigns, as the assignee of the entire right, title and interest in and to the same, for the sole use and benefit of said **COMPANIES**, their successors and assigns.

AND said Inventors do hereby covenant and warrant that said Inventors have full right to convey the entire right, title and interest herein assigned free and clear of all licenses, encumbrances and liens whatsoever, and that no said Inventors has executed and will execute any instruments in conflict herewith.

AND said Inventors, for the conditions aforesaid, do hereby covenant and agree to and with the said **COMPANIES**, their successors and assigns, that each Inventor, his or her executors, administrators, or other personal representatives, shall and will do all lawful acts and things, make all rightful oaths, and make, execute and deliver any and all other instruments in writing, and any and all further applications, papers, powers, affidavits, assignments, disclaimers and other documents, which in the opinion of counsel for said **COMPANIES**, their successors and assigns, may be required or necessary in this or in any foreign country more effectually to secure to and vest in said **COMPANIES**, their successors and assigns, the entire right, title and interest in and to said invention, inventions or improvements, application or applications, patents, rights, titles, benefits, privileges, and advantages hereby sold, assigned, confirmed, transferred and conveyed.

IN WITNESS WHEREOF I, **Murtaza Ziauddin**, have hereunto set my hand and seal this 15 day of Dec, 2014.

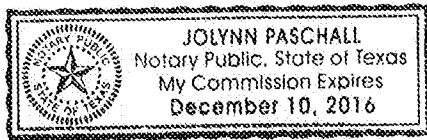
  
\_\_\_\_\_  
**Murtaza Ziauddin**

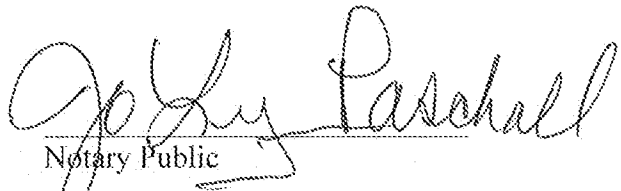
STATE OF TEXAS

COUNTY OF FORT BEND

BEFORE ME this 15 day of December 2014, personally appeared **Murtaza Ziauddin**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Seal



  
\_\_\_\_\_  
Notary Public

IN WITNESS WHEREOF I, **Daniel Dias**, have hereunto set my hand and seal this 31<sup>st</sup> day of December, 2014.

Daniel Dias  
Daniel Dias

BE IT KNOWN that **Daniel Dias**, is to me known to be the individual described in the foregoing assignment, that on this 31<sup>st</sup> day of December, 2014, I was personally present and did see him sign and execute the foregoing assignment; and, that he did acknowledge to me that he executed the same as his free act and deed for the uses and purposes therein set forth.

Janina Regina J de Brito  
Witness

Thelma Yvonne Sufjan  
Witness

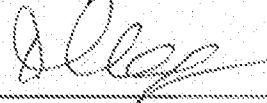
Av Julio de Mesquita, 959  
apto 11

Av Julio de Mesquita,  
2054 - Arb JOA

13025-061 Campinas, SP  
Brasil  
Post Office Address

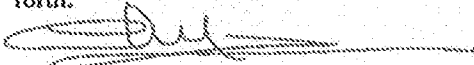
13025-061 - Campinas - SP  
BRASIL  
Post Office Address

IN WITNESS WHEREOF I, Danila Kuznetsov, have hereunto set my hand and seal this  
15 day of December, 2014.



Danila Kuznetsov

BE IT KNOWN that Danila Kuznetsov, is to me known to be the individual described in the foregoing assignment, that on this 15 day of December, 2014, I was personally present and did see him sign and execute the foregoing assignment; and, that he did acknowledge to me that he executed the same as his free act and deed for the uses and purposes therein set forth.



Christopher John Makowsky  
Witness

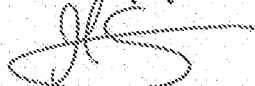
13 BAILE CLOVE

AES, WY, DON

OXFORDSHIRE

U.K. OX14 5RF

Post Office Address



MARTINA DIESTE LAÍSO  
Witness

36 SHERMAN ROAD

READING, RG1 2P7

BERKSHIRE

Post Office Address

IN WITNESS WHEREOF I, Paul Naccache, have hereunto set my hand and seal this 7<sup>th</sup> day of January 2015.

Paul Naccache  
Paul Naccache

BE IT KNOWN that Paul Naccache, is to me known to be the individual described in the foregoing assignment, that on this 7<sup>th</sup> day of January 2015, I was personally present and did see him sign and execute the foregoing assignment; and, that he did acknowledge to me that he executed the same as his free act and deed for the uses and purposes therein set forth.

Meintjes Bekker  
Witness

MEINTJES BEKKER

22 INKERMAN CLOSE

ABINGDON

OXFORD, UNITED KINGDOM  
Post Office Address

Kiesley Burton  
Witness

KIESLEY BURTON

10 MANOR RD

WOOTTON, ABINGDON

OX13 6DG, UK  
Post Office Address



IN WITNESS WHEREOF I, Marie Ann Giddins, have hereunto set my hand and seal this  
6th day of January, 2014. 2015

M. A. Giddins  
Marie Ann Giddins

BE IT KNOWN that Marie Ann Giddins, is to me known to be the individual described in the foregoing assignment, that on this 5th day of January, 2015, 2014 I was personally present and did see him sign and execute the foregoing assignment; and, that he did acknowledge to me that he executed the same as his free act and deed for the uses and purposes therein set forth.

T. Smith  
Witness

[Signature]  
Witness

T. J. WILLIAMS

Corieen RAT

2, BUCKINGHAM AVENUE

407 chemin de la FUYE

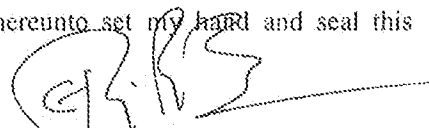
PETERSFIELD

37400 ANBOISE

HANTSHPHIRE GU32 2EF, UK.  
Post Office Address


FRANCE  
Post Office Address

IN WITNESS WHEREOF I, **Suhas Bodwadkar**, have hereunto set my hand and seal this 17 day of DECEMBER, 2014.



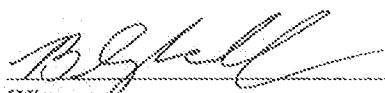
**Suhas Bodwadkar**

BE IT KNOWN that **Suhas Bodwadkar**, is to me known to be the individual described in the foregoing assignment, that on this 17 day of DECEMBER, 2014, I was personally present and did see him sign and execute the foregoing assignment; and, that he did acknowledge to me that he executed the same as his free act and deed for the uses and purposes therein set forth.



Witness

STEFAN ATANASIO  
33 TROMPSGREEN AVENUE  
VIRGINIA WATER  
GURZ YEP, U.K.  
Post Office Address



Witness

Bradley Campbell  
Harte Lodge  
Brochenhurst Rd.  
Ascot SL5 9HA U.K.  
Post Office Address

IN WITNESS WHEREOF I, **Abimbola Owodunni**, have hereunto set my hand and seal this 6 day of January, 2016.

[Signature]  
Abimbola Owodunni

BE IT KNOWN that **Abimbola Owodunni**, is to me known to be the individual described in the foregoing assignment, that on this 6 day of JANUARY, 2016, I was personally present and did see him sign and execute the foregoing assignment; and, that he did acknowledge to me that he executed the same as his free act and deed for the uses and purposes therein set forth.

[Signature]  
Witness

VICTORY HOUSE  
CHURCHILL COURT  
CRAWLEY RHIOGLU

Post Office Address

[Signature]  
Witness

VICTORY HOUSE  
CHURCHILL COURT  
CRAWLEY RHIOGLU

Post Office Address

**Schedule A**  
**“COMPANIES”**

**SCHLUMBERGER TECHNOLOGY CORPORATION**

Corporation of: United States of America

Located at: 300 Schlumberger Drive, Sugar Land, Texas 77478 U.S.A.

Assignee for applications in: United States of America

**SCHLUMBERGER CANADA LIMITED**

Corporation of: Canada

Located at: 125 -- 9 Avenue SE, Calgary, Alberta T2G 0P6

Assignee for applications in: Canada

**SERVICES PETROLIERS SCHLUMBERGER**

Corporation of: France

Located at: 42 rue Saint Dominique, 75007 Paris, France

Assignee for applications in: France

**SCHLUMBERGER HOLDINGS LIMITED**

Corporation of: British Virgin Islands

Located at: P.O. Box 71, Craigmuir Chambers, Road Town, 1110 Tortola, British Virgin Islands

Assignee for applications in: Japan, The Netherlands, United Kingdom

**PRAD RESEARCH AND DEVELOPMENT LIMITED**

Corporation of: British Virgin Islands

Located at: P.O. Box 71, Craigmuir Chambers, Road Town, 1110 Tortola, British Virgin Islands

Assignee for applications in: Angola, Bahrain, Bangladesh, Benin, Cambodia, Cameroon, Chad, China, Congo, Gabon, Ghana, Guinea-Bissau, India, Ivory Coast, Jordan, Libya, Mauritania, Morocco, Mozambique, Myanmar, Namibia, Nigeria, Philippines, Senegal, Sudan, Syria, Taiwan, Togo, UAE, Vietnam, Zaire.

**SCHLUMBERGER TECHNOLOGY B.V.**

Corporation of: the Netherlands

Located at: Parkstraat 83-89, 2514 JG The Hague, The Netherlands

Assignee for applications in: GCC and all other countries not otherwise listed.