

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4922541

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
FRANCOIS AUZERAIS	02/21/2017
MENG QU	02/06/2017
SHITONG S. ZHU	03/01/2017
AGATHE ROBISSON	03/31/2017
YUCUN LOU	03/02/2017
SYED AFAQ ALI	04/29/2017
BRUCE ALEXANDER MACKAY	03/01/2017
SANDEEP VERMA	03/01/2017
SHARATH CHANDRA MAHAVADI	03/01/2017
RECEIVING PARTY DATA	
Name:	SCHLUMBERGER TECHNOLOGY CORPORATION
Street Address:	300 SCHLUMBERGER DRIVE
City:	SUGAR LAND
State/Country:	TEXAS
Postal Code:	77478
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15766473
CORRESPONDENCE DATA	
Fax Number:	
<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>	
Email:	kdumas-scarber@slb.com
Correspondent Name:	KRISTINE DUMAS-SCARBER
Address Line 1:	10001 RICHMOND AVENUE
Address Line 2:	ROOM 4720
Address Line 4:	HOUSTON, TEXAS 77042
ATTORNEY DOCKET NUMBER:	IS15.0918-US-PCT
NAME OF SUBMITTER:	KRISTINE DUMAS-SCARBER

SIGNATURE:	/KRISTINE DUMAS-SCARBER/
DATE SIGNED:	04/19/2018
Total Attachments: 12 source=IS150918USPCT_20180419_Signed_Assignment#page1.tif source=IS150918USPCT_20180419_Signed_Assignment#page2.tif source=IS150918USPCT_20180419_Signed_Assignment#page3.tif source=IS150918USPCT_20180419_Signed_Assignment#page4.tif source=IS150918USPCT_20180419_Signed_Assignment#page5.tif source=IS150918USPCT_20180419_Signed_Assignment#page6.tif source=IS150918USPCT_20180419_Signed_Assignment#page7.tif source=IS150918USPCT_20180419_Signed_Assignment#page8.tif source=IS150918USPCT_20180419_Signed_Assignment#page9.tif source=IS150918USPCT_20180419_Signed_Assignment#page10.tif source=IS150918USPCT_20180419_Signed_Assignment#page11.tif source=IS150918USPCT_20180419_Signed_Assignment#page12.tif	

Assignment

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

Francois Auzerals, a citizen of the United States of America;

Meng Qu, a citizen of China;

Shitong S. Zhu, a citizen of the United States of America;

Agathe Robisson, a citizen of France;

Yucun Lou, a citizen of China;

Syed Afaq Ali, a citizen of the United States of America;

Bruce Alexander MacKay, a citizen of Canada;

Sandeep Verma, a citizen of the United States of America; and

Sharath Chandra Mahavadi, a citizen of Canada;

Has/have invented certain new and useful improvements in

IN SITU SOLID ORGANIC PILLAR PLACEMENT IN HYDRAULIC FRACTURE NETWORKS

as described and set forth in an application identified as International Application No. PCT/US2016/043976, (Docket No. IS15.0918-WO-PCT) filed July 26, 2016. This assignment is effective as of July 26, 2016.

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.

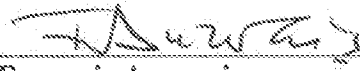
AND said Inventors do hereby authorize and request the issuing authority to issue any and all of said United States and foreign patents on said application or applications to said **COMPANIES**, their successors and assigns, as the assignee of the entire right, title and interest in and to the same,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

This Agreement is entered in contemplation of and shall be construed in accordance with the laws of the State of Texas, and may not be amended or modified unless in a subsequent writing executed by the **COMPANIES**.

IN WITNESS WHEREOF I, Francois Auzerais, have hereunto set my hand and seal this 21st
day of February, 2017.



Francois Auzerais

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF MIDDLESEX

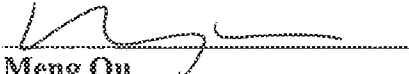
BEFORE ME this 21st day of February, 2017, personally appeared Francois Auzerais, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he/she executed the same of his/her own free will for the purpose therein expressed.

Seal



Notary Public *My Commission Expires*
 March 31, 2021

IN WITNESS WHEREOF I, Meng Qu, have hereunto set my hand and seal this 6 day of February, 2017.

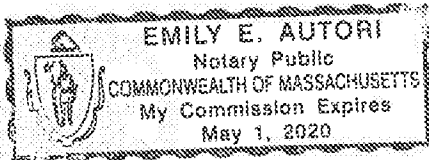

Meng Qu

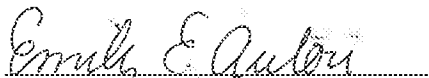
COMMONWEALTH OF MASSACHUSETTS

COUNTY OF MIDDLESEX

BEFORE ME this 6th day of February, 2017, personally appeared Meng Qu, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he/she executed the same of his/her own free will for the purpose therein expressed.

Seal




Notary Public

IN WITNESS WHEREOF I, Shitong S. Zhu, have hereunto set my hand and seal this 1
day of March, 2017.

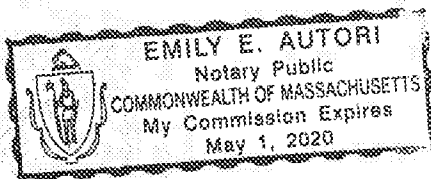

Shitong S. Zhu

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF MIDDLESEX

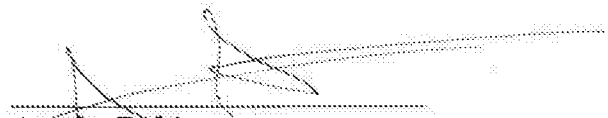
BEFORE ME this 1st day of March, 2017, personally appeared Shitong S. Zhu, to
me known to be the person who is described in and who executed the foregoing assignment
instrument and acknowledged to me that he/she executed the same of his/her own free will for
the purpose therein expressed.

Seal




Notary Public

IN WITNESS WHEREOF I, **Agathe Robisson**, have hereunto set my hand and seal this 31th
day of March, 2017.

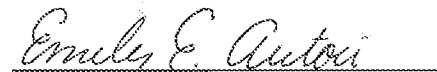

Agathe Robisson

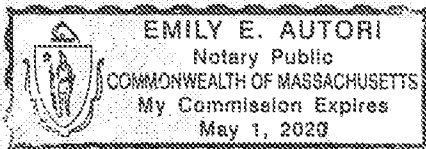
COMMONWEALTH OF MASSACHUSETTS

COUNTY OF MIDDLESEX

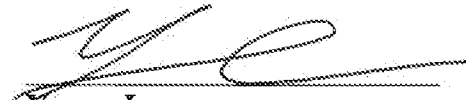
BEFORE ME this 31st day of March, 2017, personally appeared **Agathe Robisson**,
to me known to be the person who is described in and who executed the foregoing assignment
instrument and acknowledged to me that he/she executed the same of his/her own free will for
the purpose therein expressed.

Seal


Notary Public



IN WITNESS WHEREOF I, Yucun Lou, have hereunto set my hand and seal this second day of March, 2017.


Yucun Lou

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF MIDDLESEX

BEFORE ME this 2nd day of March, 2017, personally appeared Yucun Lou, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he/she executed the same of his/her own free will for the purpose therein expressed.

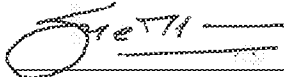
Seal


Notary Public



DEBRA JUNE DAVIS
Notary Public
Commonwealth of Massachusetts
My Commission Expires
April 10, 2020

IN WITNESS WHEREOF I, Syed Afaq Ali, have hereunto set my hand and seal this 29th day of April, 2017.



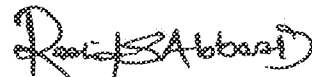
Syed Afaq Ali

STATE OF TEXAS

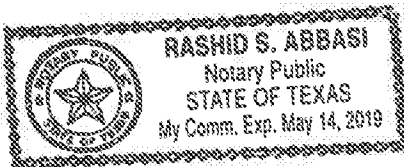
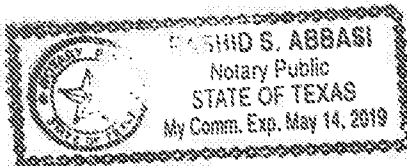
COUNTY OF FORT BEND

BEFORE ME this 29th day of APRIL, 2017, personally appeared Syed Afaq Ali, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he/she executed the same of his/her own free will for the purpose therein expressed.

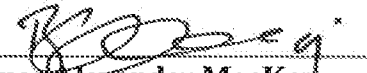
Seal



Notary Public



IN WITNESS WHEREOF I, **Bruce Alexander MacKay**, have hereunto set my hand and seal
this 1st day of March, 2017.



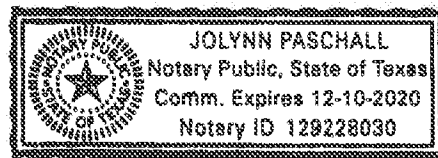
Bruce Alexander MacKay

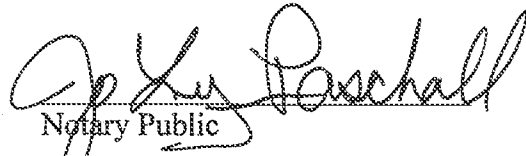
STATE OF TEXAS

COUNTY OF FORT BEND

BEFORE ME this 1 day of March, 2017, personally appeared **Bruce Alexander MacKay**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he/she executed the same of his/her own free will for the purpose therein expressed.

Seal





Notary Public

IN WITNESS WHEREOF I, **Sandeep Verma**, have hereunto set my hand and seal this 1
day of March, 2017.

Sandeep Verma
Sandeep Verma

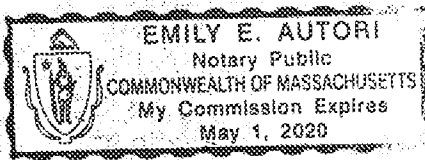
COMMONWEALTH OF MASSACHUSETTS

COUNTY OF MIDDLESEX

BEFORE ME this 1st day of March, 2017, personally appeared **Sandeep Verma**,
to me known to be the person who is described in and who executed the foregoing assignment
instrument and acknowledged to me that he/she executed the same of his/her own free will for
the purpose therein expressed.

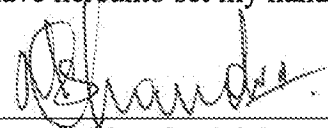
Seal

Emily E. Autori
Notary Public



Schubert & Partners

IN WITNESS WHEREOF I, **Sharath Chandra Mahavadi**, have hereunto set my hand and seal
this 01 day of March, 2017.



Sharath Chandra Mahavadi

COMMONWEALTH OF MASSACHUSETTS

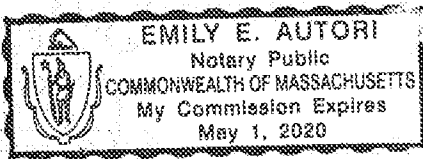
COUNTY OF MIDDLESEX

BEFORE ME this 1st day of March, 2017, personally appeared **Sharath Chandra Mahavadi**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he/she executed the same of his/her own free will for the purpose therein expressed.

Seal



Notary Public



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 TECHNOLOGY B.V.

Corporation of: The Netherlands

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

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