504796704 02/28/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4843436

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------|----------------|
| XIAOWEI WENG | 11/11/2016 |
| CHARLES-EDOUARD COHEN | 11/14/2016 |
| GEORGE ALAN WATERS | 11/14/2016 |

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: | 15750945 |

CORRESPONDENCE DATA

Fax Number:

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.

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: | IS15.0912-US-PCT | |
|-------------------------|--------------------------|--|
| NAME OF SUBMITTER: | KRISTINE DUMAS-SCARBER | |
| SIGNATURE: | /KRISTINE DUMAS-SCARBER/ | |
| DATE SIGNED: | 02/28/2018 | |

Total Attachments: 6

source=IS150912USPCT_20180228_Signed_Assignment#page1.tif source=IS150912USPCT_20180228_Signed_Assignment#page2.tif source=IS150912USPCT_20180228_Signed_Assignment#page3.tif source=IS150912USPCT_20180228_Signed_Assignment#page4.tif

PATENT 504796704 REEL: 045057 FRAME: 0663

source=IS150912USPCT_20180228_Signed_Assignment#page5.tif source=IS150912USPCT_20180228_Signed_Assignment#page6.tif

Assignment

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

Xiaowei Weng, a citizen of the United States of America;

Charles-Edouard Cohen, a citizen of France; and

George Alan Waters, a citizen of the United States of America;

Has/have invented certain new and useful improvements in

METHOD OF PERFORMING COMPLEX FRACTURE OPERATIONS AT A WELLSITE HAVING LEDGED FRACTURES

as described and set forth in an application identified as International Application No. PCT/US2016/045688, (Docket No. IS15.0912-WO-PCT) filed August 5, 2016. This assignment is effective as of August 5, 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.

Rev. 9-7-15

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.

2

Rev. 9-7-16

| IN WITNESS WHEREOF I, Xiaowei Weng, have hereunto set my hand and seal this day of Abrember, 2016. |
|--|
| 25 horas |
| Xiaowei Weng |
| STATE OF TEXAS |
| COUNTY OF FORT BEND |
| BEFORE ME this \(\) day of \(\frac{\lambda_{\text{Vember}}}{\text{per}} \), 2016, personally appeared Xiaowei Weng , 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 Seal Seal Notary Public, State of Texas Comm. Expires 12-10-2616 Notary ID 12922803-0 Notary Public Notary Public |

| | Charles-Edouard Cohen |
|--|--|
| BE IT KNOWN that Charles-Edouard Cohen, the foregoing assignment, that on the aforement him sign and execute the foregoing assignment executed the same as his free act and deed for the | oned date, I was personally present and did see t; and, that he did acknowledge to me that he |
| Rob Ro Gin Witness | Ocoranna F. Carhur |
| Romes P. Lauran | Rua Bambino, 146/202 |
| RUA VIULA LAUSEDA, 243/908 | BO104000 2225HO50 |
| 862. AUARITA, RJ. 22261030 | Dr. / Brazil |
| Post Office Address | Post Office Address |

| IN WITNESS WHEREOF I, George Alan Waters, 1 | have hereunto set my hand and seal this |
|--|---|
| | George Man Waters |
| STATE OF OKLAHOMA | % |
| COUNTY OF Octahoma2 | |
| BEFORE ME this 146 day of November 2 Waters, to me known to be the person who is descr assignment instrument and acknowledged to me that h for the purpose therein expressed. | ibed in and who executed the foregoing |
| of the second se | (A) |
| Seal | Must Battage |
| MARY BATTAGLIA Notary Public State of Oklahoma Commission # 13005786 My Commission Expires Jun 24, 2017 | |

Schedule A "COMPANIES"

Schlumberger Technology Corporation, a corporation duly organized, incorporated and existing under the laws of the State of Texas and having a place of business at 300 Schlumberger Drive, Sugar Land, Texas 77478, United States of America

as assignee for the United States

Schlumberger Canada Limited, a corporation duly organized, incorporated and existing under the laws of Canada and having a place of business at 125 – 9 Avenue SE, Calgary, Alberta, Canada T2G 0P6 as assignee for Canada

Services Petroliers Schlumberger, a corporation duly organized, incorporated and existing under the laws of France and having a place of business at 42, rue Saint Dominique, 75007 Paris, France as assignee for France

GeoQuest Systems B.V., a corporation duly organized, incorporated and existing under the laws of The Netherlands and having a place of business at Gevers Deynootweg 61, 2586 BJ, The Hague, The Netherlands as assignee for GCC and all other countries not otherwise listed.

6

Rev. 9-7-16

RECORDED: 02/28/2018