

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT | | | | | | | | | | |
|---|-------------------------------------|---------------|-------------------------------------|-----------------------|------------------------|------------------|------------|------------------|------------|----------------------|------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT | | | | | | | | | | |
| CONVEYING PARTY DATA | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Roberto Suarez-Rivera</td> <td>06/30/2010</td> </tr> <tr> <td>Dean M. Willberg</td> <td>06/29/2010</td> </tr> <tr> <td>Timothy M. Lesko</td> <td>05/27/2010</td> </tr> <tr> <td>Marc Jean Thiercelin</td> <td>05/28/2010</td> </tr> </tbody> </table> | | Name | Execution Date | Roberto Suarez-Rivera | 06/30/2010 | Dean M. Willberg | 06/29/2010 | Timothy M. Lesko | 05/27/2010 | Marc Jean Thiercelin | 05/28/2010 |
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| Timothy M. Lesko | 05/27/2010 | | | | | | | | | | |
| Marc Jean Thiercelin | 05/28/2010 | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | |
| <table border="1"> <tr> <td>Name:</td> <td>SCHLUMBERGER TECHNOLOGY CORPORATION</td> </tr> <tr> <td>Street Address:</td> <td>300 Schlumberger Drive</td> </tr> <tr> <td>City:</td> <td>Sugar Land</td> </tr> <tr> <td>State/Country:</td> <td>TEXAS</td> </tr> <tr> <td>Postal Code:</td> <td>77478</td> </tr> </table> | | Name: | SCHLUMBERGER TECHNOLOGY CORPORATION | Street Address: | 300 Schlumberger Drive | City: | Sugar Land | State/Country: | TEXAS | Postal Code: | 77478 |
| Name: | SCHLUMBERGER TECHNOLOGY CORPORATION | | | | | | | | | | |
| Street Address: | 300 Schlumberger Drive | | | | | | | | | | |
| City: | Sugar Land | | | | | | | | | | |
| State/Country: | TEXAS | | | | | | | | | | |
| Postal Code: | 77478 | | | | | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13515229</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13515229 | | | | | | |
| Property Type | Number | | | | | | | | | | |
| Application Number: | 13515229 | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | |
| <p>Fax Number: 7136892219 Phone: 719-689-6265 Email: lgoldsmith@slb.com</p> <p><i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: SCHLUMBERGER TECHNOLOGY CORPORATION Address Line 1: 10001 Richmond Avenue Address Line 2: IP Center of Excellence Address Line 4: Houston, TEXAS 77042</p> | | | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 114.0019-US-PCT | | | | | | | | | | |
| NAME OF SUBMITTER: | Leslie Goldsmith | | | | | | | | | | |

CH \$40.00 13515229

Total Attachments: 7

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PATENT

REEL: 028942 FRAME: 0456

Assignment

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

Roberto Suarez-Rivera, a citizen of USA, residing at 2212E Melodie Ann Way, Salt Lake City, UT 84124, USA;

Dean Michael Willberg, a citizen of Canada, residing at 10548 East Cerulean Way, Tucson AZ, 85747, USA;

Timothy M. Lesko, a citizen of USA, residing at 2032 E. Branch Hollow Drive, Carrollton, TX, 75007, USA; and

Marc J. Thiercelin, a citizen of France, residing at 6908 Vineridge Drive, Dallas, TX 75248, USA

Have invented certain new and useful improvements in

METHOD FOR INCREASING FRACTURE AREA, DURING HYDRAULIC FRACTURING, AND ENHANCED HYDROCARBON PRODUCTION

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 December 9, 2009, Application No. 61/282,061, (Docket No.114.0019US PSP).

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.

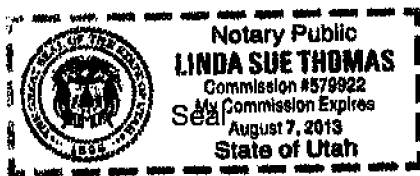
IN WITNESS WHEREOF I, Roberto Suarez-Rivera (Roberto Suarez-Rivera) have
hereunto set my hand and seal this 30 day of June, 2010.

Roberto Suarez-Rivera
(Roberto Suarez-Rivera)

STATE OF Utah

COUNTY OF Salt Lake City

BEFORE ME this 30 day of June, 2010, personally appeared Roberto Suarez-Rivera, 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.



Linda Sue Thomas
Notary Public

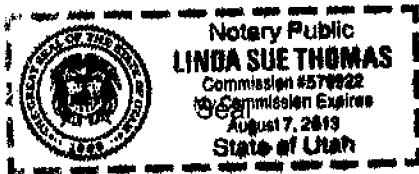
IN WITNESS WHEREOF I, Dean Michael Willberg (Dean Michael Willberg) have
hereunto set my hand and seal this 29 day of June, 2010.

Dean Michael Willberg
(Dean Michael Willberg)

STATE OF Utah

COUNTY OF Salt Lake

BEFORE ME this 29 day of June, 2010, personally appeared Dean Willberg, 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.



Linda Sue Thomas
Notary Public

IN WITNESS WHEREOF I, Timothy M. Lesko (Timothy M. Lesko) have
hereunto set my hand and seal this 27 day of MAY, 2010.


(Timothy M. Lesko)

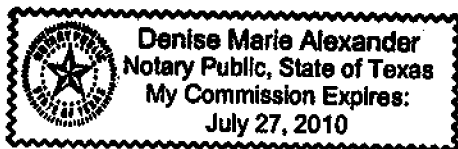
STATE OF Texas

COUNTY OF Dallas

BEFORE ME this 27th day of May, 2010, personally appeared Tim Lesko, 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, MARC THIERCELIN (Marc J. Thiercelin) have
hereunto set my hand and seal this 28th day of May, 2010.

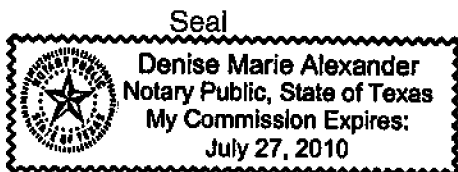



(Marc J. Thiercelin)

STATE OF TEXAS

COUNTY OF DALLAS

BEFORE ME this 28th day of May, 2010, personally appeared Marc Thiercelin, 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.





Notary Public

Schedule A
"COMPANIES"

SCHLUMBERGER TECHNOLOGY CORPORATION

Corporation of: United States of America (Texas)

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 (Ontario)

Located at: 525-3rd Avenue S.W., Calgary, Alberta, Canada T2P 0G4

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, Tortola, British Virgin Islands

Assignee for applications in: Japan, Netherlands, Netherlands Antilles, UK, Saudi Arabia

SCHLUMBERGER TECHNOLOGY B.V.

Corporation of: the Netherlands

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

Assignee for applications in: Albania, Argentina, Australia, Azerbaijan, Brunei, Bulgaria, Chad, Colombia, Czech Republic, Denmark, Equatorial Guinea, Faroe Islands, Germany, Greece, Hungary, Indonesia, Ireland, Israel, Italy, Kazakhstan, Korea, Kuwait, Lithuania, Malaysia, Mexico, Myanmar, New Zealand, Norway, Oman, Pakistan, Poland, Qatar, Romania, Russia, Slovakia, Slovenia, South Africa, Thailand, Trinidad, Tunisia, Turkey, Turkmenistan, Uzbekistan, Venezuela

PRAD RESEARCH AND DEVELOPMENT LIMITED

Corporation of: the British Virgin Islands

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

Assignee for applications in: Countries not Otherwise Listed