

# PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT										
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT										
<b>CONVEYING PARTY DATA</b>											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Peter T. Wu</td> <td>11/02/2011</td> </tr> <tr> <td>Weixin Dong</td> <td>11/02/2011</td> </tr> <tr> <td>Thomas D. Barber</td> <td>11/02/2011</td> </tr> <tr> <td>Dean M. Homan</td> <td>11/02/2011</td> </tr> </tbody> </table>		Name	Execution Date	Peter T. Wu	11/02/2011	Weixin Dong	11/02/2011	Thomas D. Barber	11/02/2011	Dean M. Homan	11/02/2011
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<b>RECEIVING PARTY DATA</b>											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Name:</b></td> <td>Schlumberger Technology Corporation</td> </tr> <tr> <td><b>Street Address:</b></td> <td>300 Schlumberger Drive</td> </tr> <tr> <td><b>City:</b></td> <td>Sugar Land</td> </tr> <tr> <td><b>State/Country:</b></td> <td>TEXAS</td> </tr> <tr> <td><b>Postal Code:</b></td> <td>77478</td> </tr> </table>		<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>Name:</b>	Schlumberger Technology Corporation										
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<b>PROPERTY NUMBERS Total: 1</b>											
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<b>CORRESPONDENCE DATA</b>											
<p>Fax Number: (713)689-2219</p> <p>Phone: 713 806 1644</p> <p>Email: kmarquez@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 OILFIELD SERVICES</p> <p>Address Line 1: 10001 Richmond Avenue</p> <p>Address Line 2: IP Administration Center of Excellence</p> <p>Address Line 4: Houston, TEXAS 77042</p>											
<b>ATTORNEY DOCKET NUMBER:</b>	20.3224										
<b>NAME OF SUBMITTER:</b>	Darla P. Fonseca										

CH \$40.00 13217983

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**PATENT**  
**REEL: 027206 FRAME: 0044**

**Total Attachments: 7**

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## Assignment

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

**Peter T. Wu**, a citizen of United States of America, residing at 3023 Cotter Lake Circle, Missouri City, Texas 77459 USA.;

**Weixin Dong**, a citizen of U.S.A., residing at 9007 Lavender Field Ct., Sugar Land, Texas 77479 USA;

**Thomas D. Barber**, a citizen of United States of America, residing at 6324 Westchester, Houston, Texas 77005 USA;

and

**Dean M. Homan**, a citizen of United States of America, residing at 16503 Ember Hollow Lane, Sugar Land, Texas 77479 USA;

Has/have invented certain new and useful improvements in

Real-Time Fracture Detection and Fracture Orientation Estimation Using Tri-Axial Induction Measurements

as described and set forth in a United States Provisional Patent Application filed on September 15, 2010 under Serial Number 61/383125, and an application for Letters Patent of the United States of America, filed with the United States Patent and Trademark Office on August 25, 2011, Serial No. 13/217983, (Docket No. 20.3224-US-NP). **This assignment is effective as of September 15, 2010.**

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,

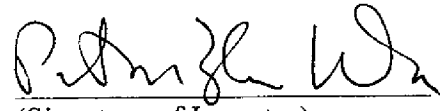
TO HAVE AND TO HOLD the same to the full end of the term or terms for which any and all such United States and foreign patents and grants may be issued on said invention, inventions or improvements.

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.

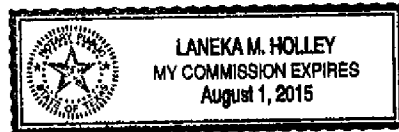
IN WITNESS WHEREOF I, **Peter T. Wu**, have hereunto set my hand and seal this  
2nd day of Nov., 2011.

  
(Signature of Inventor)

STATE OF Texas  
COUNTY OF Fort Bend

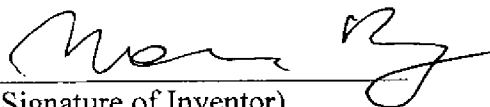
BEFORE ME this 2 day of November, 2011, personally appeared **Peter T. Wu**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Seal



  
Notary Public

IN WITNESS WHEREOF I, **Weixin Dong**, have hereunto set my hand and seal this  
2<sup>nd</sup> day of November, 2011.

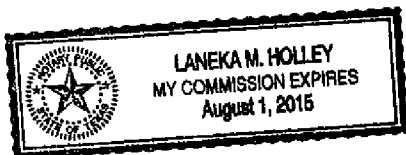
  
(Signature of Inventor)

STATE OF Texas

COUNTY OF Fort Bend

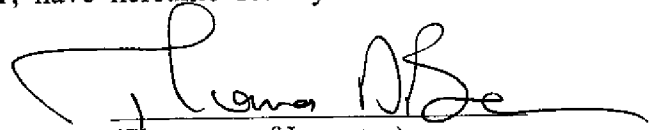
BEFORE ME this 2 day of November, \_\_\_\_\_, personally appeared **Weixin Dong**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Seal



  
Notary Public

IN WITNESS WHEREOF I, **Thomas D. Barber**, have hereunto set my hand and seal this  
2 day of November, 2011.

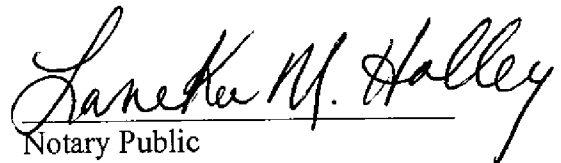
  
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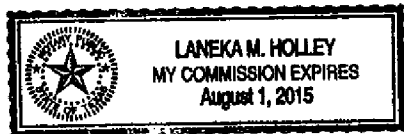
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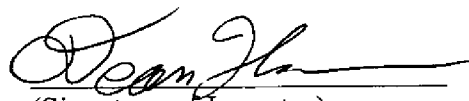
BEFORE ME this 2 day of November, \_\_\_\_\_, personally appeared **Thomas D. Barber**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

Seal

  
Notary Public



IN WITNESS WHEREOF I, **Dean M. Homan**, have hereunto set my hand and seal this  
2 day of Nov., 2011.

  
(Signature of Inventor)

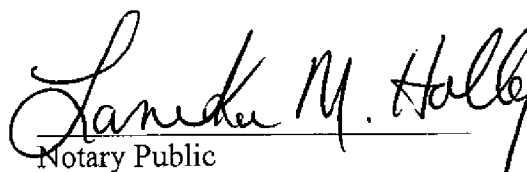
STATE OF Texas

COUNTY OF Fort Bend

BEFORE ME this 2 day of November, \_\_\_\_\_, personally appeared **Dean M. Homan**, 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



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: 525-3<sup>rd</sup> 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, 1110 Tortola, British Virgin Islands

Assignee for applications in: Japan, The Netherlands, Netherlands Antilles, United Kingdom, 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, and Venezuela

**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: Eurasia, Gulf Cooperation Council, and Countries not otherwise listed.