

# 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>Colin Longfield</td> <td>09/01/2009</td> </tr> <tr> <td>David Wei Wang</td> <td>09/17/2009</td> </tr> <tr> <td>Gary L. Rytlewski</td> <td>09/29/2009</td> </tr> </tbody> </table>		Name	Execution Date	Colin Longfield	09/01/2009	David Wei Wang	09/17/2009	Gary L. Rytlewski	09/29/2009		
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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
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<b>City:</b>	SUGAR LAND										
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<b>PROPERTY NUMBERS Total: 2</b>											
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<b>CORRESPONDENCE DATA</b>											
<p>Fax Number: (281)285-5537</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 281-285-5534</p> <p>Email: ABrown15@slb.com</p> <p>Correspondent Name: Schlumberger Reservoir Completions</p> <p>Address Line 1: 14910 Airline Road</p> <p>Address Line 2: Autrey Brown</p> <p>Address Line 4: Rosharon, TEXAS 77583</p>											
<b>ATTORNEY DOCKET NUMBER:</b>	69.5748										
<b>NAME OF SUBMITTER:</b>	Kevin Brayton McGoff										

CH \$80.00 61081465

**501003258**

**PATENT**  
**REEL: 023452 FRAME: 0722**

**Total Attachments: 6**

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## Assignment

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

**Colin Longfield**, a citizen of the United States of America, residing at 4331 April Meadow Way; Sugar Land, Texas 77479, United States of America;

**David Wei Wang**, a citizen of the People's Republic of China, residing at 5703 Bahama Cove Ct., Sugar Land, Texas 77479, United States of America;

and

**Gary L. Rytlewski**, a citizen of the United States of America, residing at 4757 Oakmont Court, League City, Texas 77573, United States of America;

Has/have invented certain new and useful improvements in

### DOWNHOLE PIEZOELECTRIC DEVICES

as described and set forth in a United States Provisional Patent Application filed on July 17, 2008 under Serial Number 61/081,465, and an application for Letters Patent of the United States of America, filed with the United States Patent and Trademark Office on July 17, 2009, Serial No. 12/505, 340, (Docket No.69.5748); **this assignment is effective as of July 17, 2008.**

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,

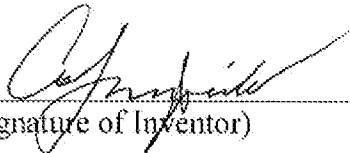
TO HAVE AND TO HOLD the same to the full end of the term or terms for which any and all such United States and foreign patents and grants may be issued on said invention, inventions or improvements.

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.

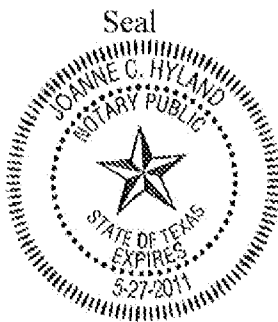
IN WITNESS WHEREOF I, **Colin Longfield**, have hereunto set my hand and seal this  
1 day of September, 2009.

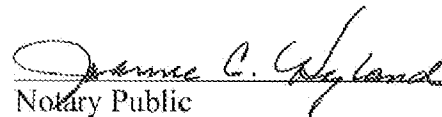
  
(signature of Inventor)

STATE OF TEXAS

COUNTY OF BRAZORIA

BEFORE ME this 1 day of September, 2009, personally appeared **Colin Longfield**, 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

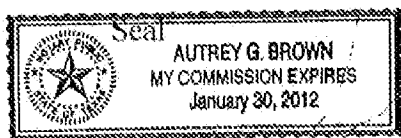
IN WITNESS WHEREOF I, **David Wei Wang**, have hereunto set my hand and seal this  
17 day of September, 09.

David Wei Wang  
(signature of Inventor)

STATE OF TEXAS

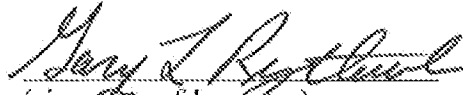
COUNTY OF BRAZORIA

BEFORE ME this 17<sup>th</sup> day of September, 2009, personally appeared **David Wei Wang**, 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.



Autrey G. Brown  
Notary Public

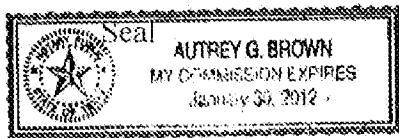
IN WITNESS WHEREOF I, Gary L. Rytlewski, have hereunto set my hand and seal this  
29 day of Sept, 2009.

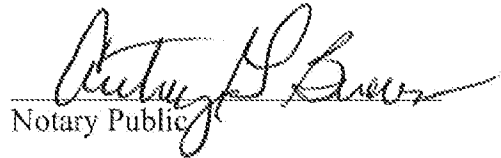
  
(signature of Inventor)

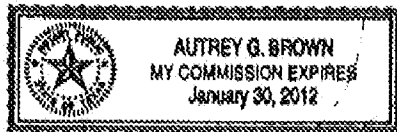
STATE OF TEXAS

COUNTY OF BRAZORIA

BEFORE ME this 29<sup>th</sup> day of September, 2009, personally appeared Gary L. Rytlewski, 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

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: the Netherlands

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

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

**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 Netherlands Antilles

Located at: Craigmuir Chambers, Road Town, Tortola, British Virgin Islands.

Assignee for applications in: Algeria, Angola, Brazil, China, Ecuador, Egypt, Eurasia, Gulf Cooperation Council, India, Nigeria, Singapore, Ukraine, United Arab Emirates, and Rest of World