

## PATENT ASSIGNMENT COVER SHEET

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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>COLIN DALY</td><td>05/16/2013</td></tr><tr><td>DANIEL M. TETZLAFF</td><td>04/26/2013</td></tr></tbody></table>		Name	Execution Date	COLIN DALY	05/16/2013	DANIEL M. TETZLAFF	04/26/2013				
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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
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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
Fax Number:											
Email: kdumas-scarber@slb.com											
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>											
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:	IS11.0698-US-NP										
NAME OF SUBMITTER:	KRISTINE DUMAS-SCARBER										
Signature:	/Kristine Dumas-Scarber/										
Date:	02/14/2014										

**Total Attachments: 5**

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## Assignment

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

**Colin Daly**, a citizen of Ireland, residing at 10 Arc Court, Friern Barnet Road, London, N11 1PT, UK;

and

**Daniel M. Tetzlaff**, a citizen of the United States of America, residing at 9538 Beverlyhill Street, Houston, TX 77063, USA;

Have invented certain new and useful improvements in

### ROTATIONS FROM GRADIENT DIRECTIONS

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 November 28, 2012, Serial No. 13/686948, (Docket No. IS11.0698-US-NP).

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 Effective as of November 28, 2012, 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,

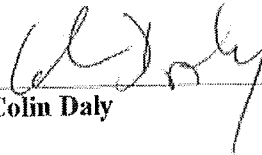
TO HAVE AND TO HOLD the same to the full end of the term or terms for which any and all such United States and foreign patents and grants may be issued on said invention, inventions or improvements.

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 Daly**, have hereunto set my hand and seal this 1 6  
day of MAY, 2013.

  
Colin Daly

BE IT KNOWN that **Colin Daly** is to me known to be the individual described in the foregoing assignment, that on this 16 day of MAY, 2013, I was personally present and did see him sign and execute the foregoing assignment; and, that he did acknowledge to me that he executed the same as his free act and deed for the uses and purposes therein set forth.

  
Witness Signature

DAVID PSATLA  
Printed Name

133 SEAFORD RD.  
EALING  
LONDON W13 9HS  
Post Office Address

  
Witness Signature

DAVID MARQUEZ  
Printed Name

Jacob Aallsgate GC  
0348 Oslo  
Norway  
Post Office Address

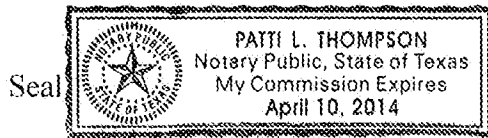
IN WITNESS WHEREOF I, **Daniel M. Tetzlaff**, have hereunto set my hand and seal this 26<sup>th</sup> day of April, 2013.

  
\_\_\_\_\_  
**Daniel M. Tetzlaff**

STATE OF TEXAS

COUNTY OF HARRIS

BEFORE ME this 26<sup>th</sup> day of April, 2013, personally appeared **Daniel M. Tetzlaff**, 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**, 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 525 – 3rd Ave. S.W., Calgary, Alberta, Canada T2P 0G4  
**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**

**Logined 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 S Gravenhage, The Netherlands  
**as assignee for Albania, Algeria, Argentina, Australia, Austria, Azerbaijan, Bahrain, Brunei, Brazil, Bulgaria, Cameroon, Colombia, Czech Republic, Denmark, Ecuador, Egypt, Eurasia, EPO, Faroe Islands, Gabon, Germany, Great Britain, Greece, Gulf Cooperation Council, Hungary, Indonesia, Ireland, Israel, Italy, Japan, Kazakhstan, Korea, Kuwait, Libya, Lithuania, Malaysia, Mexico, Myanmar, Netherlands, New Zealand, Norway, Oman, Pakistan, Poland, Portugal, Qatar, Romania, Russia, Saudi Arabia, Slovakia, Slovenia, South Africa, Spain, Thailand, Trinidad, Tunisia, Turkey, Turkmenistan, Ukraine, United Arab Emirates, Uzbekistan, Venezuela and Yemen.**

**PRAD Research and Development Limited**, a corporation organized and existing under and by the laws of the British Virgin Islands, having a place of business at P.O. Box 71, Craigmuir Chambers, Road Town, Tortola, British Virgin Islands  
**as assignee for all other countries not designated above.**