

PATENT ASSIGNMENT

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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>Lalitha Venkataramanan</td> <td>09/14/2012</td> </tr> <tr> <td>Tarek M. Habashy</td> <td>09/10/2012</td> </tr> <tr> <td>Denise E. Freed</td> <td>09/11/2012</td> </tr> </tbody> </table>		Name	Execution Date	Lalitha Venkataramanan	09/14/2012	Tarek M. Habashy	09/10/2012	Denise E. Freed	09/11/2012		
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<table border="1"> <tr> <td>Name:</td> <td>SCHLUMBERGER TECHNOLOGY CORPORATION</td> </tr> <tr> <td>Street Address:</td> <td>One Hampshire Street</td> </tr> <tr> <td>City:</td> <td>Cambridge</td> </tr> <tr> <td>State/Country:</td> <td>MASSACHUSETTS</td> </tr> <tr> <td>Postal Code:</td> <td>02139</td> </tr> </table>		Name:	SCHLUMBERGER TECHNOLOGY CORPORATION	Street Address:	One Hampshire Street	City:	Cambridge	State/Country:	MASSACHUSETTS	Postal Code:	02139
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CORRESPONDENCE DATA											
Fax Number: 7136892219 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: 719-689-6265 Email: lgoldsmith@slb.com Correspondent Name: SCHLUMBERGER TECHNOLOGY CORPORATION Address Line 1: 10001 Richmond Avenue Address Line 2: IP Center of Excellence Address Line 4: Houston, TEXAS 77042											
ATTORNEY DOCKET NUMBER:	60.1970-US-CNT										
NAME OF SUBMITTER:	Leslie Goldsmith										
Total Attachments: 6 source=601970USCNT_20120918_Complete-Assignment#page1.tif											

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Assignment

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

Lalitha Venkataramanan, a citizen of the United States of America, residing at 61 Webb Street, Lexington, MA 02420, US;

Tarek M. Habashy, a citizen of the United States of America, residing at 2 Kelly Farm Way, Burlington, MA 01803, US; and

Denise E. Freed, a citizen of the United States of America, residing at 15 Rogers Street, Newton Highlands, MA 01461, US

Has/have invented certain new and useful improvements in

MODIFIED PULSE SEQUENCE TO ESTIMATE PROPERTIES

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 06 Jul 2012, Serial No. 13/543393 (Docket No. 60.1970-US-CNT).

WHEREAS each of the undersigned persons warrants that no person other than these undersigned persons are inventors of the above-described invention;

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.

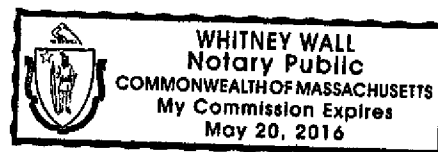
AND said Inventors, for the conditions aforesaid, do hereby covenant and agree to and with the said **COMPANIES**, their successors and assigns, that each Inventor, his or her executors, administrators, or other personal representatives, shall and will do all lawful acts and things, make all rightful 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, **Lalitha Venkataramanan**, have hereunto set my hand and seal
this 14th day of September, 2012.

COMMONWEALTH OF MASSACHUSETTS)
COUNTY OF MIDDLESEX

Seal

Whitney Hall
Notary Public

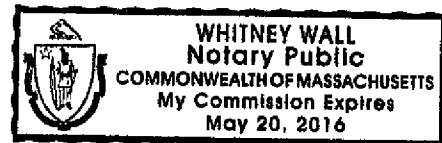


IN WITNESS WHEREOF I, **Tarek M. Habashy**, have hereunto set my hand and seal this 10th day of September, 2012.

COMMONWEALTH OF MASSACHUSETTS)
COUNTY OF MIDDLESEX

Seal

Whitney Hall
Notary Public



Schedule A

“COMPANIES”

SCHLUMBERGER CANADA LIMITED

Corporation of: Canada

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

Assignee for applications in: Canada

SCHLUMBERGER TECHNOLOGY CORPORATION

Corporation of: USA

Located at: One Hampshire Street, Cambridge, MA 02139

Assignee for applications in: USA

SERVICES PETROLIERS SCHLUMBERGER

Corporation of: France

Located at: 42 rue Saint Dominique, 75007 Paris, FR

Assignee for applications in: France

SCHLUMBERGER HOLDINGS LIMITED

Corporation of: British Virgin Islands

Located at: PO Box 71, Craigmuir Chambers, Road Town, Tortola, BVI

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, Azarbaijan, Brunei, Bulgaria, Colombia, Czech Republic, Denmark, Faroe Islands, Germany, Greece, Hungary, Indonesia, Ireland, Israel, Italy, Kazakhstan, Korea, Kuwait, Lithuania, Malaysia, Mexico, New Zealand, Norway, Oman, Pakistan, Poland, Qatar, Romania, Russia, Slovakia, Slovenia, South Africa, Thailand, Trinidad, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan, Venezuela

PRAD RESEARCH AND DEVELOPMENT LIMITED

Corporation of: British Virgin Islands

Located at: PO Box 71, Craigmuir Chambers, Road Town, Tortola, BVI

Assignee for applications in: Countries not Otherwise Listed