

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:

NEW ASSIGNMENT

NATURE OF CONVEYANCE:

ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Murtaza Ziauddin	10/25/2006
Bhavani Raghuraman	10/30/2006
Li Jiang	10/25/2006
Xuefei Sun	10/27/2006
Sebastien Fremont	10/26/2006
Ballard Andrews	10/25/2006
Robert Schroeder	10/30/2006
Stephen Hill	10/30/2006
Mahmuda Afroz	10/26/2006
Frank Espinosa	10/26/2006
Michael Orlet	11/14/2006
John Lovell	11/17/2006
Steve Davies	10/25/2006

RECEIVING PARTY DATA

Name:	Schlumberger Technology Corporation
Street Address:	110 Schlumberger Drive
City:	Sugar Land
State/Country:	TEXAS
Postal Code:	77478

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11551310

CORRESPONDENCE DATA

Fax Number: (281)285-8569

*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.*

CH \$40.00 11551310

PATENT

500190920

REEL: 018603 FRAME: 0273

Phone: 281-285-8606  
Email: pmohan@slb.com  
Correspondent Name: David Cate  
Address Line 1: 110 Schlumberger Drive, MD-1  
Address Line 4: Sugar Land, TEXAS 77478

ATTORNEY DOCKET NUMBER:

56.0894

NAME OF SUBMITTER:

David Cate

**Total Attachments: 16**

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## ASSIGNMENT

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

**Murtaza Ziauddin**, a citizen of United States of America, whose post office address is 2711 Millers Falls Court, Richmond, TX 77469, U.S.A.;

**Bhavani Raghuraman**, a citizen of the United States of America, whose post office address is 20 Holmes Road, Lexington, MA 02420, U.S.A.;

**Li Jiang**, a citizen of the United Kingdom, whose post office address is 8 Cook Close, Ridgefield, CT 06877, U.S.A.;

**Xuefei Sun**, a citizen of China, whose post office address is 5240 Tennyson Pkwy, Suite 207, Plano, TX 75024, U.S.A.;

**Sebastien Fremont**, a citizen of France, whose post office address is 7 rue Theophile Gautier, Apt 719, 92120 Montrouge, France;

**Ballard Andrews**, a citizen of the United States of America, whose post office address is 133 Indian Hill Road, Wilton, CT 06897, U.S.A.;

**Robert Schroeder**, a citizen of the United States of America, whose post office address is 71 Castle Hill Road, Newtown, CT 06470, U.S.A.;

**Stephen Hill**, a citizen of the United States of America, whose post office address is 2705 Sunnycreek Lane, Pearland, TX 77584, U.S.A.;

**Mahmuda Afroz**, a citizen of Bangladesh, whose post office address is 6410 Schmidt Lane, Apt. C206, El Cerrito, CA 94530, U.S.A.;

**Frank Espinosa**, a citizen of the United States of America, whose post office address is 602 Misty Creek Dr., Richmond, TX 77469, U.S.A.;

**Michael Orlet**, a citizen of the United States of America, whose post office address is 4123 Underwood Street, Houston, TX 77025, U.S.A.;

**John Lovell**, a citizen of the United Kingdom, whose post office address is 2603 Commonwealth Avenue, Houston, TX 77006, U.S.A.; and

**Steve Davies**, a citizen of the United Kingdom, whose post office address is 4410 Three Rivers Drive, Sugar Land, TX 77478, U.S.A.;

Has/have invented certain new and useful improvements in

### **Method of Monitoring Fluid Placement during Stimulation Treatments**

as described and set forth in an application for Letters Patent of the United States of America, filed October 20, 2006 under Attorney Docket No. 56.0894 assigned serial number 11/551,310.

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,

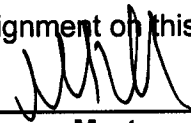
TO HAVE AND TO HOLD the same to the full end of the term or terms for which any and all such United States and foreign patents and grants may be issued on said invention, inventions or improvements.

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.

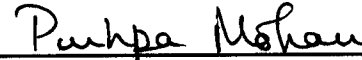
IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 25<sup>th</sup> day of October, 2006.



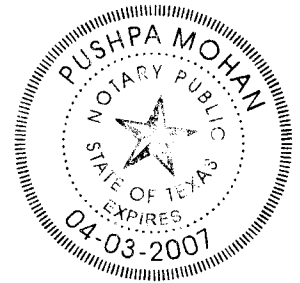
**Murtaza Ziauddin**

STATE of TEXAS       §  
                                  §  
COUNTY of FORT BEND   §

Subscribed and sworn to before me this 25 day of October, 2006.



Notary Public in and for the State of Texas



IN TESTIMONY WHEREOF, I have duly executed this Assignment on this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

**Bhavani Raghuraman**

STATE of MASSACHUSETTS   §  
                                  §  
COUNTY of \_\_\_\_\_   §

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

Notary Public in and for the State of  
Massachusetts

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
**Murtaza Ziauddin**

STATE of TEXAS           §  
                                     §  
COUNTY of FORT BEND   §

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Notary Public in and for the State of Texas

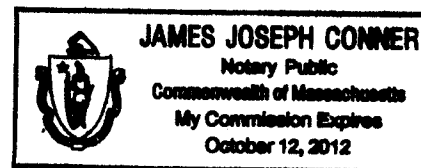
IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 30 day of October, 2006.

Bhavani Raghuraman  
**Bhavani Raghuraman**

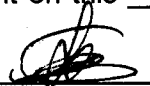
~~Commonwealth~~  
~~STATE~~ of MASSACHUSETTS   §  
                                     §  
COUNTY of Middlesex   §

Subscribed and sworn to before me this 30 day of October, 2006.

James Joseph Conner  
Notary Public in and for the State of  
Massachusetts



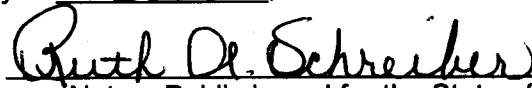
IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 25<sup>th</sup> day of October, 2006.

  
\_\_\_\_\_  
Li Jiang

STATE of CONNECTICUT §

COUNTY of Fairfield §

Subscribed and sworn to before me this 25<sup>th</sup> day of October, 2006.

  
\_\_\_\_\_  
Notary Public in and for the State of  
Connecticut

**RUTH A. SCHREIBER**  
**NOTARY PUBLIC - CONNECTICUT**  
**My Commission Expires July 31, 2010**

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Xuefei Sun

STATE of TEXAS §

COUNTY of \_\_\_\_\_ §

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Notary Public in and for the State of Texas

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
**Li Jiang**

STATE of CONNECTICUT   §  
                                     §  
COUNTY of \_\_\_\_\_ §

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Notary Public in and for the State of  
Connecticut

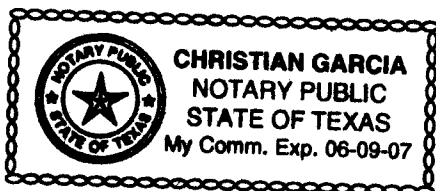
IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 26<sup>th</sup> 27<sup>th</sup> Cr day of October, 2006.

\_\_\_\_\_  
**Xuefei Sun**  
**Xuefei Sun**

STATE of TEXAS       §  
                                     §  
COUNTY of Collin   §

Subscribed and sworn to before me this 27<sup>th</sup> 26<sup>th</sup> day of Oct., 2006.

\_\_\_\_\_  
Notary Public in and for the State of Texas

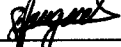




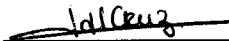
IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 26<sup>th</sup> day of October, 2006.

  
**Sebastien Fremont**

WITNESSES:

Signature   
Name: HAUGUEL Sonia  
Address: 38, rue du Fond Lauet  
92500 Rueil-Malmaison  
FRANCE

Date: 10/26/2006

Signature   
Name: de la Cruz Julia  
Address: 11 Rue Berteaux  
92500 Rueil Malmaison  
FRANCE

Date: 10/26/2006

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
**Ballard Andrews**

STATE of CONNECTICUT §  
§  
COUNTY of \_\_\_\_\_ §

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Notary Public in and for the State of  
Connecticut

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
**Sebastien Fremont**

WITNESSES:

Signature \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: \_\_\_\_\_

Signature \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: \_\_\_\_\_

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 25 day of October, 2006.

\_\_\_\_\_  
**Ballard Andrews**

STATE of CONNECTICUT §

COUNTY of Fairfield §

Subscribed and sworn to before me this 25<sup>th</sup> day of October, 2006.

\_\_\_\_\_  
**Ruth A. Schreiber**  
Notary Public in and for the State of  
Connecticut

**RUTH A. SCHREIBER**  
**NOTARY PUBLIC - CONNECTICUT**  
My Commission Expires July 31, 2010

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 30 day of October, 2006.

Robert Schroeder  
Robert Schroeder

STATE of CONNECTICUT §

COUNTY of Fairfield §

Subscribed and sworn to before me this 30<sup>th</sup> day of October, 2006.

Ruth A. Schreiber  
Notary Public in and for the State of  
Connecticut

**RUTH A. SCHREIBER**  
**NOTARY PUBLIC - CONNECTICUT**  
**My Commission Expires July 31, 2010**

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
**Stephen Hill**

STATE of TEXAS §

COUNTY of FORTBEND §

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Notary Public in and for the State of Texas

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
**Robert Schroeder**

STATE of CONNECTICUT §  
§  
COUNTY of \_\_\_\_\_ §

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Notary Public in and for the State of  
Connecticut

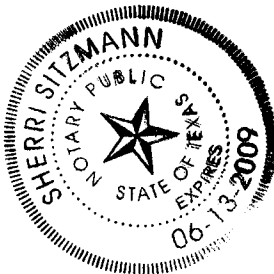
IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 30<sup>th</sup> day of October, 2006.

*Stephen Hill*  
**Stephen Hill**

STATE of TEXAS §  
§  
COUNTY of FORTBEND §

Subscribed and sworn to before me this 30<sup>th</sup> day of October, 2006.

*Shari Sitzmann*  
Notary Public in and for the State of Texas



IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 26 day of October, 2006.

Mahmuda Afroz  
Mahmuda Afroz

STATE of CALIFORNIA §  
COUNTY of Contra Costa §

Subscribed and sworn to before me this 26 day of October, 2006.

Camille A. Chico  
Notary Public in and for the State of  
California



IN TESTIMONY WHEREOF, I have duly executed this Assignment on this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Frank Espinosa

STATE of TEXAS §  
COUNTY of FORT BEND §

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Notary Public in and for the State of Texas

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
**Mahmuda Afroz**

STATE of CALIFORNIA     §  
                                     §  
COUNTY of \_\_\_\_\_ §

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Notary Public in and for the State of  
California

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 26 day of October, 2006.

\_\_\_\_\_  
**Frank Espinosa**

STATE of TEXAS     §  
                                     §  
COUNTY of FORT BEND §

Subscribed and sworn to before me this 26<sup>th</sup> day of October, 2006.

\_\_\_\_\_  
Notary Public in and for the State of Texas

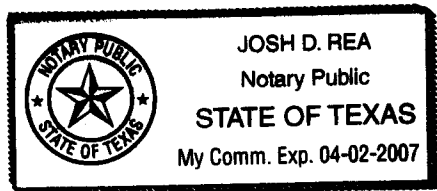


IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 11/14/06 day of \_\_\_\_\_, 2006.

Michael Orlet  
Michael Orlet

STATE of TEXAS       §  
                                  §  
COUNTY of Harris   §

Subscribed and sworn to before me this 14th day of November, 2006.



Notary Public in and for the State of Texas

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

John Lovell

STATE of TEXAS       §  
                                  §  
COUNTY of HARRIS   §

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

Notary Public in and for the State of Texas

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
**Michael Orlet**

STATE of TEXAS           §  
                                     §  
COUNTY of \_\_\_\_\_ §

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Notary Public in and for the State of Texas

IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 17<sup>th</sup> day of Nov, 2006.

\_\_\_\_\_  
**John Lovell**

STATE of TEXAS           §  
                                     §  
COUNTY of BRAZORIA §

Subscribed and sworn to before me this 17<sup>th</sup> day of Nov, 2006.

\_\_\_\_\_  
Notary Public in and for the State of Texas





IN TESTIMONY WHEREOF, I have duly executed this Assignment on this 25<sup>th</sup> day of October, 2006.

Steve Davies

Steve Davies

STATE of TEXAS §

§

COUNTY of FORT BEND §

Subscribed and sworn to before me this 25 day of October, 2006.

Pushpa Mohan

Notary Public in and for the State of Texas



SCHEDULE A  
"COMPANIES"

**SCHLUMBERGER CANADA LIMITED**

Corporation of: Canada

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

Assignee for applications in: Canada

**SCHLUMBERGER HOLDINGS LIMITED**

Corporation of: the Netherlands

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

Assignee for applications in: Great Britain, Japan, The Netherlands

**SCHLUMBERGER TECHNOLOGY CORPORATION**

Corporation of: USA

Located at: 110 Schlumberger Drive, Sugar Land, TX 77478 US

Assignee for applications in: United States of America

**SERVICES PETROLIERS SCHLUMBERGER**

Corporation of: France

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

Assignee for applications in: France

**SCHLUMBERGER TECHNOLOGY B.V.**

Corporation of: the Netherlands

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

Assignee for applications in: Every country except Canada, Great Britain, Japan, The Netherlands, United States of America and France