

# PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT													
NATURE OF CONVEYANCE:	ASSIGNMENT													
CONVEYING PARTY DATA														
<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>Robert Godfrey</td> <td>07/21/2008</td> </tr> <tr> <td>Jean-Michel Gehenn</td> <td>07/29/2008</td> </tr> <tr> <td>Richard Dolman</td> <td>07/26/2008</td> </tr> <tr> <td>Michael Nickel</td> <td>08/11/2008</td> </tr> <tr> <td>Lars Sonneland</td> <td>08/12/2008</td> </tr> </tbody> </table>			Name	Execution Date	Robert Godfrey	07/21/2008	Jean-Michel Gehenn	07/29/2008	Richard Dolman	07/26/2008	Michael Nickel	08/11/2008	Lars Sonneland	08/12/2008
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RECEIVING PARTY DATA														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name:</td> <td>WesternGeco L. L. C.</td> </tr> <tr> <td>Street Address:</td> <td>10001 Richmond Avenue</td> </tr> <tr> <td>Internal Address:</td> <td>IP Dept- Jeffrey Griffin</td> </tr> <tr> <td>City:</td> <td>Houston</td> </tr> <tr> <td>State/Country:</td> <td>TEXAS</td> </tr> <tr> <td>Postal Code:</td> <td>77042</td> </tr> </table>			Name:	WesternGeco L. L. C.	Street Address:	10001 Richmond Avenue	Internal Address:	IP Dept- Jeffrey Griffin	City:	Houston	State/Country:	TEXAS	Postal Code:	77042
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Street Address:	10001 Richmond Avenue													
Internal Address:	IP Dept- Jeffrey Griffin													
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PROPERTY NUMBERS Total: 2														
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CORRESPONDENCE DATA														
<p>Fax Number: (713)689-1977</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 713-689-6265</p> <p>Email: lgoldsmith@slb.com</p> <p>Correspondent Name: WesternGeco L. L. C.</p> <p>Address Line 1: 10001 Richmond Avenue</p> <p>Address Line 2: IP Dept: Jeffrey Griffin</p> <p>Address Line 4: Houston, TEXAS 77042</p>														
ATTORNEY DOCKET NUMBER:	53.0068-US AND PRO													

**PATENT**

**500622858**

**REEL: 021399 FRAME: 0142**

CH \$80.00 12193029

NAME OF SUBMITTER:

Liangang (Mark) Ye, Reg No 48,276

**Total Attachments: 10**

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## Assignment

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

**Robert Godfrey**, a citizen of Canada, residing at Mt Pleasant Cansiron Ln, Ashurstwood East Grinstead, West Sussex RH19 3SF, UK,

**Jean-Michel Gehenn**, citizen of France, residing at 37 Rue Principale, 67140 Mittelbergheim, Alsace, France,

**Thibaut Cheret**, citizen of France, residing at 16 Lesford Road, Coley Park, Reading, Berkshire, RG1 6DX, UK,

**Richard Dolman**, citizen of The United Kingdom, residing at 31 Green Curve, Banstead, Surrey SM7 1NS, UK,

**Michael Nickel**, a citizen of Germany, residing at Klovstein veien 9A, 4041 Stavanger, Norway,

and

**Lars Sonneland**, a citizen of Norway, residing at Risabergstien 35, 4056 Tananger, Norway

Has/have invented certain new and useful improvements described in the invention disclosure entitled

### METHOD OF DERIVING FAULT TRANSMISSIVITY USING ELASTIC IMPEDANCE FLUX

(WesternGeco Docket No. 53.0068-US) and/or as described and set forth in one or more associated patent applications (filed or to be filed). The Inventor(s) hereby authorize and request WesternGeco's legal department, to insert in the space provided in Schedule A the filing date(s), application number(s), and title(s) of said application(s) when known.

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 B, 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 B;

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; and entire right, title and interest in all the intellectual property in the invention including, but not limited to, any and all ideas, discoveries, writings (including software and its source code) and improvements in the invention, together with any and all domestic and foreign design rights, trademarks, trade secrets and copyrights in such ideas.

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.

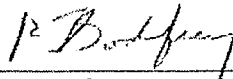
AND said Inventors do hereby authorize and request the issuing authority to issue any and all of said United States and foreign patents on said application or applications to said COMPANIES, their successors and assigns, as the assignee of the entire right, title and interest in and to the same, for 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.

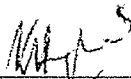
AND said Inventors, for the conditions aforesaid, do hereby covenant and agree to and with the said COMPANIES, their successors and assigns, that each Inventor, his or her executors, administrators, or other personal representatives, shall and will do all lawful acts and things, make all rightful oaths, 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.

WITNESSED:

IN WITNESS WHEREOF I, **Robert Godfrey**, have hereunto set my hand and seal this  
21 day of JULY, 2008.

  
(Signature of Inventor)

BE IT KNOWN that **Robert Godfrey** is to me known to be the individual described in the foregoing assignment and that on the aforementioned date I was personally present and did see him/her sign and execute the foregoing assignment; and, that he/she did acknowledge to me that he/she executed the same as his/her free act and deed for the uses and purposes therein set forth.

  
Witness- Signature

JOHN KIMBERLEY HUGHES  
Witness- Printed Name

2 CHRISTOPHER ROAD  
EAST CRINSTEAD RH19 3BT  
UNITED KINGDOM  
Post Office Address


  
Witness- Signature

Hüseyin Özdemir  
Witness- Printed Name

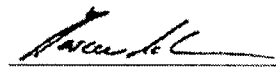
25 Danecourt Road  
CRO 5 5D  
CROYDON  
Post Office Address

WITNESSED:

IN WITNESS WHEREOF I, **Jean-Michel Gehenn**, have hereunto set my hand and seal this  
29 day of July, 2008.

  
(Signature of Inventor)

BE IT KNOWN that **Jean-Michel Gehenn** is to me known to be the individual described in the foregoing assignment and that on the aforementioned date I was personally present and did see him/her sign and execute the foregoing assignment; and, that he/she did acknowledge to me that he/she executed the same as his/her free act and deed for the uses and purposes therein set forth.



Witness- Signature

MARCUS ROBSON

Witness- Printed Name

2381 TAMAN BAYSHORE,

JALAN PANTAI PIASAU,

LUTONG, SARAWAK, MALAYSIA

Post Office Address 98100



Witness- Signature

ANTHONY YEO

Witness- Printed Name

LOT 582, JALAN USI 3

PUJUT 9, LORONG 2

98000 MIRI, SARAWAK

Post Office Address MALAYSIA,

WITNESSED:

IN WITNESS WHEREOF I, **Thibaut Cheret**, have hereunto set my hand and seal this  
\_\_\_\_\_day of \_\_\_\_\_, 2008.

\_\_\_\_\_  
(Signature of Inventor)

BE IT KNOWN that **Thibaut Cheret** is to me known to be the individual described in the foregoing assignment and that on the aforementioned date I was personally present and did see him/her sign and execute the foregoing assignment; and, that he/she did acknowledge to me that he/she executed the same as his/her free act and deed for the uses and purposes therein set forth.

\_\_\_\_\_  
Witness- Signature

\_\_\_\_\_  
Witness- Printed Name

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Post Office Address

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Witness- Signature

\_\_\_\_\_  
Witness- Printed Name

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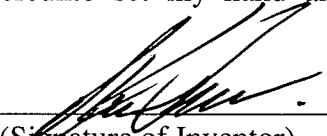
\_\_\_\_\_  
Post Office Address

PATENT

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WITNESSED:

IN WITNESS WHEREOF I, **Richard Dolman**, have hereunto set my hand and seal this 26 day of JULY, 2008.

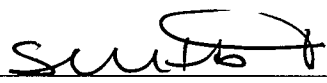
  
(Signature of Inventor)

BE IT KNOWN that **Richard Dolman** is to me known to be the individual described in the foregoing assignment and that on the aforementioned date I was personally present and did see him/her sign and execute the foregoing assignment; and, that he/she did acknowledge to me that he/she executed the same as his/her free act and deed for the uses and purposes therein set forth.

Carol P. Hartley  
Witness- Signature

(Miss) C. P. HARTLEY  
Witness- Printed Name

33 Green Curve,  
Banstead,  
Surrey. SM7 1NS.  
Post Office Address

  
Witness- Signature

SARAH HERBERT  
Witness- Printed Name

31 GREEN CURVE  
BANSTEAD  
SURREY SM7 1NS  
Post Office Address



WITNESSED:

IN WITNESS WHEREOF I, **Michael Nickel**, have hereunto set my hand and seal this 11 day  
of August, 2008.

Michael Nickel  
(Signature of Inventor)

BE IT KNOWN that **Michael Nickel** is to me known to be the individual described in the foregoing assignment and that on the aforementioned date I was personally present and did see him/her sign and execute the foregoing assignment; and, that he/she did acknowledge to me that he/she executed the same as his/her free act and deed for the uses and purposes therein set forth.

Ruth Almas  
Witness- Signature

RUTH ALMAS  
Witness- Printed Name

Postboks 76  
4098 TANANGER  
Post Office Address


Anne Louise Larsen  
Witness- Signature

ANNE LOUISE LARSEN  
Witness- Printed Name

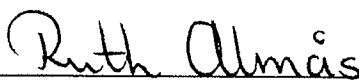
Stokkaveien 63c  
4024 STAVANGER  
Post Office Address

WITNESSED:

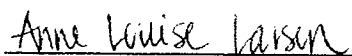
IN WITNESS WHEREOF I, **Lars Sonneland**, have hereunto set my hand and seal this  
12 day of AUGUST, 2008.

  
(Signature of Inventor)

BE IT KNOWN that **Lars Sonneland** is to me known to be the individual described in the foregoing assignment and that on the aforementioned date I was personally present and did see him/her sign and execute the foregoing assignment; and, that he/she did acknowledge to me that he/she executed the same as his/her free act and deed for the uses and purposes therein set forth.

  
Witness- Signature

RUTH ALMÅS  
Witness- Printed Name

  
Witness- Signature

ANNE LOUISE LARSEN  
Witness- Printed Name

Postboks 76  
4098 TANANGER  
Post Office Address

Stokkavæien 63C  
4024 STAVANGER  
Post Office Address

**Schedule A**  
**“APPLICATIONS”**

Filing Date	Application No.	Title
08-OCT-2007	60/978,269	DETERMINING FAULT TRANSMISSIVITY IN A SUBTERRANEAN RESERVOIR TECHNICAL FIELD
17-AUG-2008	12/193,029	DETERMINING FAULT TRANSMISSIVITY IN A SUBTERRANEAN RESERVOIR

**Schedule B**  
**“COMPANIES”**

**WESTERNGECO, L.L.C.**Corporation of: Delaware, USALocated at: 10001 Richmond Avenue, Houston, Texas 77042-4299, USAAssignee for applications in: The United States of America**SCHLUMBERGER CANADA LIMITED**Corporation of: CanadaLocated at: 525 – 3<sup>rd</sup> Avenue S.W., Calgary, Alberta, T2P 0G4 CanadaAssignee for applications in: Canada**GECO TECHNOLOGY B.V.**Corporation of: The NetherlandsLocated at: Gevers Deynootweg 61, 2586 BJ S Gravenhage, The NetherlandsAssignee for applications in: Albania, Algeria, Angola, Argentina, Australia, Austria, Azerbaijan, Brazil, Brunei, Bulgaria, China, Colombia, Czech Republic, Denmark, Ecuador, Egypt, Eurasia, Europe, Faroe Islands, France, Germany, Greece, Gulf Cooperation Council, Hungary, India, Indonesia, Ireland, Israel, Italy, Japan, Kazakhstan, Korea, Kuwait, Lithuania, Malaysia, Mexico, The Netherlands, New Zealand, Nigeria, Norway, Oman, Pakistan, Poland, Qatar, Romania, Russia, Saudi Arabia, Singapore, Slovakia, Slovenia, South Africa, Spain, Thailand, Trinidad, Tunisia, Turkey, Turkmenistan, Ukraine, United Arab Emirates, United Kingdom, Uzbekistan, Venezuela, Vietnam, and Rest of World