

**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>  |                                     |
| <b>Name</b>  | <b>Execution Date</b>               |
| Jon-Fredrik Hopperstad   | 11/24/2010                          |
| <b>RECEIVING PARTY DATA</b>  |                                     |
| <b>Name:</b>   | WesternGeco LLC                     |
| <b>Street Address:</b>   | 10001 Richmond Avenue               |
| <b>City:</b>   | Houston                             |
| <b>State/Country:</b>  | TEXAS                               |
| <b>Postal Code:</b>  | 77042                               |
| <b>PROPERTY NUMBERS Total: 1</b>   |                                     |
| <b>Property Type</b>   | <b>Number</b>                       |
| <b>Application Number:</b>   | 12988863                            |
| <b>CORRESPONDENCE DATA</b>   |                                     |
| <b>Fax Number:</b>   | (617)768-2402                       |
| <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>   |                                     |
| <b>Phone:</b>  | 617-768-2000                        |
| <b>Email:</b>  | sfernandez4@slb.com                 |
| <b>Correspondent Name:</b>   | Schlumberger Technology Corporation |
| <b>Address Line 1:</b>   | One Hampshire Street                |
| <b>Address Line 4:</b>   | Cambridge, MASSACHUSETTS 02139      |
| <b>ATTORNEY DOCKET NUMBER:</b>   | 57.0833 US PCT1                     |
| <b>NAME OF SUBMITTER:</b>  | James McAleenan                     |
| <b>Total Attachments: 3</b><br>source=570833USPCT1_exec_assignment_submitted#page1.tif<br>source=570833USPCT1_exec_assignment_submitted#page2.tif<br>source=570833USPCT1_exec_assignment_submitted#page3.tif |                                     |

CH \$40.00 12988863

## Assignment

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

**Jon-Fredrik Hopperstad**, a citizen of Norway, residing at 3 Emery Street, Cambridge CB1 2AX, UK.

Has/have invented certain new and useful improvements in

### POSITION DETERMINATION OF A SEISMIC SOURCE ARRAY

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 October 21, 2010, Serial No. 12/988,863 (Docket No. 57.0833 US PCT1).

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

AND WHEREAS, WESTERNGECO L.L.C., its successors and assigns (COMPANY), a Delaware Limited Liability Company, and having a place of business at 10001 Richmond Avenue, Houston, Texas 77042, U.S.A., wants to acquire or confirm its acquisition of the entire right, title and interest in this invention, inventions or improvements, application, and any patent, both in the United States and all foreign countries;

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 COMPANY, 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 COMPANY,

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 **COMPANY**, 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 **COMPANY**, 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 **COMPANY**, 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 **COMPANY**, 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, Jon-Fredrik Hopperstad, have hereunto set my hand and seal this 24 day of November, 2010.

[Handwritten Signature]  
(Signature of Inventor)

WITNESSED:

BE IT KNOWN, that Jon-Fredrik Hopperstad is known to us to be the individual described in this assignment, that on this 24th day of November, 2010, we were personally present and did see him/her sign and execute this assignment and that he/she acknowledged to us that he/she executed the same as his/her free act and deed for the uses and purposes therein set forth.

[Handwritten Signature]  
First Witness (Signature)

Anna Bruce  
Second Witness (Signature)

19 RAWLYN ROAD

94 Columbine Road, Ely,

CAMBRIDGE

Cambridgeshire CB6 3WN

CB5 8NL UK

United Kingdom

Post Office Address

Post Office Address