504071514 10/28/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4118181

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DAVID FRASER HALLIDAY	09/14/2016

RECEIVING PARTY DATA

Name:	WESTERNGECO L.L.C.
Street Address:	10001 RICHMOND AVENUE
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77042

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15127334

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email:kdumas-scarber@slb.comCorrespondent Name:KRISTINE DUMAS-SCARBERAddress Line 1:10001 RICHMOND AVENUEAddress Line 4:HOUSTON, TEXAS 77042

ATTORNEY DOCKET NUMBER:	IS13.4207-US-PCT	
NAME OF SUBMITTER:	KRISTINE DUMAS-SCARBER	
SIGNATURE:	/KRISTINE DUMAS-SCARBER/	
DATE SIGNED:	10/28/2016	

Total Attachments: 4

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PATENT 504071514 REEL: 040157 FRAME: 0245

Assignment

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

David Fraser Halliday, a citizen of the United Kingdom;

Has/have invented certain new and useful improvements in

RECONSTRUCTING IMPULSIVE SOURCE SEISMIC DATA FROM TIME DISTRIBUTED FIRING AIRGUN ARRAY DATA

as described and set forth in the International application filed on March 19, 2015 under Serial Number PCT/US2015/021531, (Docket No. IS13.4207-WO-PCT). This assignment is effective as of March 19, 2015.

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.

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Docket Number IS13.4207-WO-PCT

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.

This Agreement is entered in contemplation of and shall be construed in accordance with the laws of the State of Texas, and may not be amended or modified unless in a subsequent writing executed by the **COMPANIES**.

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Docket Number IS13.4207-WO-PCT

Post Office Address

14 day 01 SEPTEPTOZIC, 2010.	David Fraser Halliday
BE IT KNOWN, that David Fraser Halliday	is known to us to be the individual described in
this assignment, that on the aforementioned date	e, we were personally present and did see him/her
sign and execute this assignment and that he/s	he acknowledged to us that he/she executed the
same as his/her free act and deed for the uses an Clandanea	Constant,
Witness CLAIRE ALLMARK	Witness Abhijit Sawent
4/8 WEST POWBURN	9 Beaton Crescant
EDINBURGH , UK	Huntingdon, PE29 1At
EM9 3EW	U·K

IN WITNESS WHEREOF I, **David Fraser Halliday**, have hereunto set my hand and seal this 14 day of SEPTEMBEN., 2016.

Post Office Address

Schedule A "COMPANIES"

WESTERNGECO L.L.C.

Corporation of: Delaware, USA

Located at: 10001 Richmond Avenue, Houston, Texas 77042-4299, USA

Assignee for applications in: The United States of America

SCHLUMBERGER CANADA LIMITED

Corporation of: Canada

Located at: 125 – 9 Avenue SE, Calgary, Alberta T2G 0P6

Assignee for applications in: Canada

SCHLUMBERGER TECHNOLOGY B.V.

Corporation of: The Netherlands

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

Assignee for applications in: GCC and all other countries not otherwise listed.

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