

## 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>Yu ZHANG</td> <td>04/08/2013</td> </tr> <tr> <td>Graham ROBERTS</td> <td>04/08/2013</td> </tr> <tr> <td>Lian DUAN</td> <td>04/08/2013</td> </tr> </tbody> </table>		Name	Execution Date	Yu ZHANG	04/08/2013	Graham ROBERTS	04/08/2013	Lian DUAN	04/08/2013		
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>CGGVeritas Services SA</td> </tr> <tr> <td>Street Address:</td> <td>27, Avenue Carnot</td> </tr> <tr> <td>City:</td> <td>Massy Cedex</td> </tr> <tr> <td>State/Country:</td> <td>FRANCE</td> </tr> <tr> <td>Postal Code:</td> <td>91341</td> </tr> </table>		Name:	CGGVeritas Services SA	Street Address:	27, Avenue Carnot	City:	Massy Cedex	State/Country:	FRANCE	Postal Code:	91341
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PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13859807</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13859807						
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CORRESPONDENCE DATA											
Fax Number: 9193610734 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: 5403611863 Email: Tina@ppglaw.com Correspondent Name: POTOMAC PATENT GROUP PLLC Address Line 1: P.O. Box 270 Address Line 4: FREDERICKSBURG, VIRGINIA 22404											
ATTORNEY DOCKET NUMBER:	0336-156-2/100333US-2										
NAME OF SUBMITTER:	Steven M. duBois										
Signature:	/Steven M. duBois/										
Date:	04/10/2013										

OP \$40.00 13859807

**Total Attachments: 4**

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ASSIGNMENT

In accordance with my obligations under an Employee Innovation and Proprietary Information Agreement or (as applicable) arising out of other agreements (such as, but not limited to, the Services Agreement between CGGVeritas, a French Corporation, and my employer), and/or for other good and valuable consideration of which I/we acknowledge receipt, I/we,

**Yu ZHANG** of Katy, TX, USA

**Graham ROBERTS** of Forest Row, UK

**Lian DUAN** of Crawley, West Sussex, GREAT BRITIAN

hereby sell and assign to **CGGVeritas Services SA**, having an address at 27, Avenue Carnot, 91341 Massy Cedex, France, hereinafter referred to as "Company", its successors and assigns my/our entire respective rights, titles and interests in and to the invention and improvements invented and originated by me and described in the US Patent Application No. 13/859,807 for United States Patent currently entitled:

**SEISMIC DATA PROCESSING INCLUDING COMPENSATING FOR SOURCE AND RECEIVER GHOST EFFECTS IN REVERSE TIME MIGRATION**

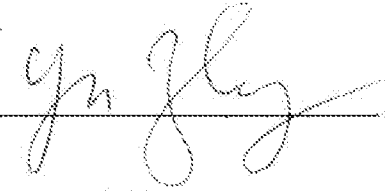
filed on April 10, 2013,

and any and all applications for patent and patents therefrom in any and all countries, including all divisions, continuations, reexaminations and reissues thereof, and all rights of priority resulting from the filing of said United States application, and authorize and request any official whose duty it is to issue patents, to issue any patent on said inventions and improvements resulting therefrom to said Company, or its successors or assigns and agree that on request and without further consideration, but at the expense of said Company, I/we will communicate to said Company or its representatives or nominees any facts known to me respecting said inventions and improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, reexamination and reissue applications, make all rightful oaths and generally do everything possible to aid said Company, its successors, assigns, and nominees to obtain and enforce proper patent protection for said invention and its improvements in all countries.

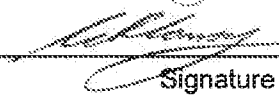
The undersigned hereby grant(s) the law firm of Potomac Patent Group the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

**TITLE: SEISMIC DATA PROCESSING INCLUDING COMPENSATING FOR SOURCE  
AND RECEIVER GHOST EFFECTS IN REVERSE TIME MIGRATION**

INVENTOR 1

Signature:   
Yu ZHANG


Date: 08/04/2013

Witnessed by: 

Date: 08/04/2013

Signature

GRAHAM CONROY  
Printed Name of Witness

Witnessed by: 

Date: 8/4/2013

Signature

GORDON POOLE  
Printed Name of Witness

**SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY**

\_\_\_\_\_  
Yu ZHANG

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

STATE OF \_\_\_\_\_

ss. \_\_\_\_\_

COUNTY OF \_\_\_\_\_

This \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me personally came the above-named Yu ZHANG, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.

Seal

\_\_\_\_\_  
(Notary Public)

**TITLE: SEISMIC DATA PROCESSING INCLUDING COMPENSATING FOR SOURCE  
AND RECEIVER GHOST EFFECTS IN REVERSE TIME MIGRATION**

INVENTOR 2

Signature: G. Roberts  
Graham ROBERTS

Date: 8/04/2013

Witnessed by: G. Conroy  
Signature

Date: 08/04/2013

GRAHAM CONROY  
Printed Name of Witness

Witnessed by: G. Poole  
Signature

Date: 8/4/2013

GORDON POOLE  
Printed Name of Witness

**SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY**

\_\_\_\_\_  
Graham ROBERTS

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

STATE OF

ss.

COUNTY OF

This \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me personally came the above-named **Graham ROBERTS**, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.

Seal

\_\_\_\_\_  
(Notary Public)

**TITLE: SEISMIC DATA PROCESSING INCLUDING COMPENSATING FOR SOURCE  
AND RECEIVER GHOST EFFECTS IN REVERSE TIME MIGRATION**

INVENTOR 3

Signature: 段炼  
Lian DUAN

Date: 08/04/2013

Witnessed by: [Signature]  
Signature

Date: 08/02/2013

GRAHAM CONROY  
Printed Name of Witness

Witnessed by: G. Poole  
Signature

Date: 8/4/2013

GORDON POOLE  
Printed Name of Witness

**SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY**

\_\_\_\_\_  
Lian DUAN

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

STATE OF

ss.

COUNTY OF

This \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me personally came the above-named **Lian DUAN**, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.

Seal

\_\_\_\_\_  
(Notary Public)