

## PATENT ASSIGNMENT

Electronic Version v1.1  
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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>John Edward Grant</td> <td>07/12/2012</td> </tr> <tr> <td>Stuart Maxwell Darling</td> <td>07/16/2012</td> </tr> <tr> <td>Thomas Cheriyan</td> <td>07/11/2012</td> </tr> <tr> <td>Desmond John Flynn</td> <td>07/12/2012</td> </tr> </tbody> </table>		Name	Execution Date	John Edward Grant	07/12/2012	Stuart Maxwell Darling	07/16/2012	Thomas Cheriyan	07/11/2012	Desmond John Flynn	07/12/2012		
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RECEIVING PARTY DATA													
<table border="1"> <tr> <td>Name:</td> <td>ION Geophysical Corporation</td> </tr> <tr> <td>Street Address:</td> <td>2105 City West Boulevard</td> </tr> <tr> <td>Internal Address:</td> <td>Suite 400</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>77042-2839</td> </tr> </table>		Name:	ION Geophysical Corporation	Street Address:	2105 City West Boulevard	Internal Address:	Suite 400	City:	Houston	State/Country:	TEXAS	Postal Code:	77042-2839
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PROPERTY NUMBERS Total: 2													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13479173</td> </tr> <tr> <td>PCT Number:</td> <td>US2012039210</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13479173	PCT Number:	US2012039210						
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Application Number:	13479173												
PCT Number:	US2012039210												
CORRESPONDENCE DATA													
Fax Number:	3036293450												
Phone:	303-629-3400												
Email:	bump.stefan@dorsey.com												
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>													
Correspondent Name:	Lee R. Osman / Dorsey & Whitney LLP												
Address Line 1:	1400 Wewatta Street												
Address Line 2:	Suite 400												
Address Line 4:	Denver, COLORADO 80202-5549												
ATTORNEY DOCKET NUMBER:	P222660.US.02												

CH \$80.00 13479173

NAME OF SUBMITTER:

Stefan T. Bump

**Total Attachments: 9**

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**ASSIGNMENT**

WHEREAS, we, John Edward Grant, residing at 5 Saltcoats Gardens, Bellsquarry, Livingston, EH54 9JD, United Kingdom, Stuart Maxwell Darling, residing at Flat 5, 119 High Street, Glasgow, G1 1PH, United Kingdom, and Thomas Cheriyan, residing at 1315 Shady Bend Drive, Sugar Land, Texas 77479, United States (hereinafter individually and collectively the "Assignor") have invented certain new and useful systems, devices, and methods (the "Invention") disclosed and described in:

a utility application for Letters Patent in the United States ("U.S."), entitled **"METHOD AND APPARATUS FOR DETERMINING A LOCATION TO ACQUIRE GEOPHYSICAL DATA,"** filed on May 23, 2012 (the "Utility Application"), which Utility Application is identified in the United States Patent and Trademark Office ("USPTO") by Application No. 13/479,173; and

a PCT International Application No. PCT/US2012/039210, entitled **"METHOD AND APPARATUS FOR DETERMINING A LOCATION TO ACQUIRE GEOPHYSICAL DATA,"** filed on May 23, 2012 (the "International Application");

which Utility Application and International Application both claim priority to U.S. Provisional Application No. 61/489,040 entitled **"METHOD AND APPARATUS FOR DETERMINING A LOCATION TO ACQUIRE GEOPHYSICAL DATA"** filed on May 23, 2011 (the "Provisional Application");

WHEREAS, Assignor desires to assign any and all right, title and interest to the Utility Application, the International Application, the Provisional Application, and the underlying Invention, and any provisional, non-provisional, continuation, continuation-in-part, divisional, international, foreign, regional and convention applications corresponding thereto, and any and all Letters Patent of the United States and countries and regions foreign thereto which may grant or have granted thereto or be lodged in relation thereto, any reissue or reexamination thereof or to be obtained therefor, any renewals, or substitutes thereof, and any and all priority rights or priority claims, International Convention rights, any and all rights to collect past damages for infringement of any and all Letters Patent of the United States and countries and regions foreign thereto which may be published, which may grant, or have granted thereto or be lodged in relation thereto, and other benefits accruing to or to accrue to Assignor with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto (the "Patent Rights");

WHEREAS, ION Geophysical Corporation, a corporation organized and existing under the laws of the State of Delaware, and having its principal place of business at 2105 City West Boulevard, Suite 400, Houston, Texas 77042-2839 (the "Assignee"), desires to acquire any and all, right, title, and interest of Assignor in and to the Invention, the Patent Rights, and in, to, and under any and all Letters Patent to be obtained therefor;

WHEREAS, the effective date of the Assignment is May 23, 2011; and

NOW THEREFORE, for the sum of \$10.00 and other good and valuable consideration to Assignor in hand paid, the receipt and sufficiency of which are hereby acknowledged, Assignor has sold, assigned, and transferred and by these presents does hereby sell, assign and transfer to Assignee, and said Assignee's legal representatives, successors and assigns, any and all of

the entire right, title and interest in and to the Invention, Patent Rights, and any and all Letters Patent to be obtained therefor;

UPON SAID CONSIDERATION, the Assignor hereby covenants and agrees with the said Assignee that it will not execute any writing or do any act whatsoever conflicting with these presents, and that it will, at any time upon request, without further or additional consideration, but at the expense of the said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, provisionals, non-provisionals, continuations, continuations-in-part, continuing prosecutions, divisionals, renewals, reissues, reexamined or extended Letters Patent of the United States, or of any and all foreign countries, on said Patent Rights, and execute confirmatory assignments or acknowledgments of this assignment as necessary for full enjoyment of the Patent Rights and for recording in foreign patent offices, and in enforcing any rights or choses in action accruing as a result of such Patent Rights, by giving testimony in any proceedings or transactions involving such Patent Rights, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of both parties;

UPON SAID CONSIDERATION, Assignor represents and warrants that Assignor has the right, title, and authority to execute this Assignment and to convey any and all right, title, and interest in the Patent Rights, and that Assignor has not conveyed nor will convey hereafter all or part of the Patent Rights to a third party;

ASSIGNOR HEREBY AUTHORIZES said Assignee, its successors, and assigns, or anyone it may properly designate, to apply for Letters Patent in the U.S. and any and all foreign countries and regions, in its own name if desired, and additionally to claim priority to the filing date of the Utility Application, the International Application, and Provisional Application and otherwise take advantage of the provisions of any international conventions.

This Assignment may be executed in two or more counterparts and by facsimile, all of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Assignor hereunto has executed this Assignment upon the date indicated below.

Date: 12th July 2012

By:   
John Edward Grant

IN WITNESS WHEREOF, the Assignor hereunto has executed this Assignment upon the date indicated below.

Date: 16th July 2012

By:   
Stuart Maxwell Darling

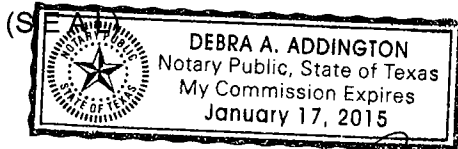
IN WITNESS WHEREOF, the Assignor hereunto has executed this Assignment upon the date indicated below.

Date: JULY 11, 2012

By:   
Thomas Cheriyan

STATE OF TEXAS )  
COUNTY OF HARRIS ) ss.

On this 11<sup>th</sup> day of July, 2012, before me a Notary Public in and for said county, personally appeared Thomas Cheriyan who executed the foregoing instrument and acknowledged that he signed, sealed and delivered the same instrument as a free and voluntary act for the purposes and considerations therein expressed.



  
Notary Public

My commission expires: Jan 17, 2015.

**ACCEPTANCE OF ASSIGNMENT**

The Assignee hereby acknowledges and accepts the foregoing assignment of rights by Assignor.

IN TESTIMONY WHEREOF, the Assignee, by its undersigned officer, confirms its acceptance on the date and in the place set forth below.

ION Geophysical Corporation

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

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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

COUNTY OF \_\_\_\_\_ ) ss.

On this \_\_\_\_\_ day of \_\_\_\_\_, 2012, before me a Notary Public in and for said county, personally appeared \_\_\_\_\_, the above-mentioned representative of the Assignee, ION Geophysical Corporation, who executed the foregoing patent Assignment, and represented and acknowledged that he/she had the requisite corporate authority to execute and accept this patent Assignment and the same was executed as a free act and deed.

(S E A L)

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_.

4820-0572-8527\1

**ASSIGNMENT**

WHEREAS, I, Desmond John Flynn, residing at 3 Peatville Terrace, Edinburgh, EH14 2EB, United Kingdom (hereinafter the "Assignor"), have invented certain new and useful systems, devices, and methods (the "Invention") disclosed and described in:

a utility application for Letters Patent in the United States ("U.S."), entitled **"METHOD AND APPARATUS FOR DETERMINING A LOCATION TO ACQUIRE GEOPHYSICAL DATA,"** filed on May 23, 2012 (the "Utility Application"), which Utility Application is identified in the United States Patent and Trademark Office ("USPTO") by Application No. 13/479,173; and

a PCT International Application No. PCT/US2012/039210, entitled **"METHOD AND APPARATUS FOR DETERMINING A LOCATION TO ACQUIRE GEOPHYSICAL DATA,"** filed on May 23, 2012 (the "International Application");

which Utility Application and International Application both claim priority to U.S. Provisional Application No. 61/489,040 entitled **"METHOD AND APPARATUS FOR DETERMINING A LOCATION TO ACQUIRE GEOPHYSICAL DATA"** filed on May 23, 2011 (the "Provisional Application");

WHEREAS, ION Geophysical Corporation, a corporation organized and existing under the laws of the State of Delaware, and having its principal place of business at 2105 City West Boulevard, Suite 400, Houston, Texas 77042-2839 (the "Assignee"), by an earlier Assignment by Assignor to Assignee dated June 21, 2011 (attached hereto as Exhibit A, and referred to hereinafter as the "Provisional Assignment"), owns all right, title and interest of Assignor in and to the Provisional Application and the Invention as described therein;

WHEREAS, in and to the extent that Assignor now owns any right, title and interest in the Invention, including as described and claimed in the Utility Application and the International Application, not already transferred to ION Geophysical Corporation by the Provisional Assignment, Assignor is desirous of assigning such interest in the Utility Application, the International Application, and the underlying Invention, and any provisional, non-provisional, continuation, continuation-in-part, divisional, international, foreign, regional and convention applications corresponding thereto, and any and all Letters Patent of the United States and countries and regions foreign thereto which may grant or have granted thereto or be lodged in relation thereto, any reissue or reexamination thereof or to be obtained therefor, any renewals, or substitutes thereof, and any and all priority rights or priority claims, International Convention rights, any and all rights to collect past damages for infringement of any and all Letters Patent of the United States and countries and regions foreign thereto which may be published, which may grant, or have granted thereto or be lodged in relation thereto, and other benefits accruing to or to accrue to Assignor with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto (the "Patent Rights"); and

WHEREAS, Assignee desires to acquire any and all, right, title, and interest of Assignor in and to the Invention, the Patent Rights, and in, to, and under any and all Letters Patent to be obtained therefor;

WHEREAS, the effective date of the Assignment is May 23, 2012; and

NOW THEREFORE, for the sum of \$10.00 and other good and valuable consideration to Assignor in hand paid, the receipt and sufficiency of which are hereby acknowledged, Assignor has sold, assigned, and transferred and by these presents does hereby sell, assign and transfer

to Assignee, and said Assignee's legal representatives, successors and assigns, any and all of the entire right, title and interest in and to the Invention, Patent Rights, and any and all Letters Patent to be obtained therefor;

UPON SAID CONSIDERATION, the Assignor hereby covenants and agrees with the said Assignee that it will not execute any writing or do any act whatsoever conflicting with these presents, and that it will, at any time upon request, without further or additional consideration, but at the expense of the said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, provisionals, non-provisionals, continuations, continuations-in-part, continuing prosecutions, divisionals, renewals, reissues, reexamined or extended Letters Patent of the United States, or of any and all foreign countries, on said Patent Rights, and execute confirmatory assignments or acknowledgments of this assignment as necessary for full enjoyment of the Patent Rights and for recording in foreign patent offices, and in enforcing any rights or choses in action accruing as a result of such Patent Rights, by giving testimony in any proceedings or transactions involving such Patent Rights, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of both parties;

UPON SAID CONSIDERATION, Assignor represents and warrants that Assignor has the right, title, and authority to execute this Assignment and to convey any and all right, title, and interest in the Patent Rights, and that Assignor has not conveyed nor will convey hereafter all or part of the Patent Rights to a third party;

ASSIGNOR HEREBY AUTHORIZES said Assignee, its successors, and assigns, or anyone it may properly designate, to apply for Letters Patent in the U.S. and any and all foreign countries and regions, in its own name if desired, and additionally to claim priority to the filing date of the Utility Application and the International Application and otherwise take advantage of the provisions of any international conventions.

IN WITNESS WHEREOF, the Assignor hereunto has executed this Assignment upon the date indicated below.

Date: 12<sup>TH</sup> JULY 2012

By: 

Desmond John Flynn



**ACCEPTANCE OF ASSIGNMENT**

The Assignee hereby acknowledges and accepts the foregoing assignment of rights by Assignor.

IN TESTIMONY WHEREOF, the Assignee, by its undersigned officer, confirms its acceptance on the date and in the place set forth below.

ION Geophysical Corporation

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

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) ss.

On this \_\_\_\_\_ day of \_\_\_\_\_, 2012, before me a Notary Public in and for said county, personally appeared \_\_\_\_\_, the above-mentioned representative of the Assignee, ION Geophysical Corporation, who executed the foregoing patent Assignment, and represented and acknowledged that he/she had the requisite corporate authority to execute and accept this patent Assignment and the same was executed as a free act and deed.

(S E A L)

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_.

4813-5331-7391\1

EXHIBIT A

Attorney Docket No. P222660.US.01

ASSIGNMENT

WHEREAS, We, Desmond John Flynn, residing at 3 Peaville Terrace, Edinburgh, EH54 9UD, United Kingdom, Stuart Maxwell Darling, residing at Flat 5, 119 High Street, Glasgow, G1 1PH, United Kingdom, and Thomas Chanyan, residing at 1315 Shady Bend Drive, Sugar Land, TX 77479, US (hereinafter individually and collectively the "Assignor"), have invented certain new and useful systems, devices, and methods disclosed and described in a provisional patent application titled "METHOD AND APPARATUS FOR DETERMINING A LOCATION TO ACQUIRE GEOPHYSICAL DATA", which can be identified in the United States Patent and Trademark Office ("USPTO") by Application No. 61/489,040, filed on May 23, 2011 (the "Provisional Application") with attorney docket no. P222660.US.01; and

WHEREAS, Assignor desires to assign any and all right, title and interest to said Provisional Application, and any provisional, non-provisional, continuation, continuation-in-part, divisional, international, foreign, regional and convention applications corresponding thereto, and any and all Letters Patent of the United States and countries and regions foreign thereto which may grant or have granted thereto or be lodged in relation thereto, any renewal or reexamination thereof or to be obtained therefor, any renewals, or substitutes thereof, and in and to any and all priority rights or priority claims, International Convention rights, any and all rights to collect past damages for infringement of any and all Letters Patent of the United States and countries and regions foreign thereto which may be published, which may grant, or have granted thereto or be lodged in relation thereto, and other benefits accruing to or to accrue to Assignor with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto (the "Patent Rights");

WHEREAS, ION Geophysical Corporation, a corporation organized and existing under the laws of the State of Delaware, and having its principal place of business at 2105 City West Boulevard, Suite 400, Houston, TX 77042-2839 (the "Assignee"), desires to acquire any and all right, title, and interest of Assignor in and to the invention(s), the Patent Rights, and in, to, and under any and all Letters Patent to be obtained therefor;

NOW THEREFORE, for the sum of \$1.00 and other good and valuable consideration to me in hand paid, the receipt and sufficiency of which are hereby acknowledged, Assignor has sold, assigned, and transfer and by these presents does hereby sell, assign and transfer to the said Assignee, and said Assignee's legal representatives, successors and assigns, any and all of the entire right, title and interest in and to the invention, Patent Rights, and any and all Letters Patent to be obtained therefor;

UPON SAID CONSIDERATION, the Assignor hereby covenants and agrees with the said Assignee that it will not execute any writing or do any act whatsoever conflicting with these presents, and that it will, at any time upon request, without further or additional consideration, but at the expense of the said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, provisionals, non-provisionals, continuations, continuations-in-part, continuing prosecutions, divisionals, renewals, reissues, reexamined or extended Letters Patent of the United States, or of any and all foreign countries, on said Patent Rights, and execute confirmatory assignments or acknowledgments of this assignment as necessary for full enjoyment of the Patent Rights and for recording in foreign patent offices, and in enforcing any rights or choses in action accruing as a result of such Patent Rights, by giving

Attorney Docket No. P222660.US.01

testimony in any proceedings or transactions involving such Patent Rights, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigne and legal representatives of both parties;

UPON SAID CONSIDERATION, Assignor represents and warrants that Assignor has the right, title, and authority to execute this Assignment and to convey any and all right, title, and interest in the Patent Rights, and that Assignor has not conveyed nor will convey hereafter all or part of the Patent Rights to a third party;

ASSIGNOR HEREBY AUTHORIZES said Assignee, its successors, and assigns, or anyone it may properly designate, to apply for Letters Patent in the U.S. and any and all foreign countries and regions, in its own name if desired, and additionally to claim priority to the filing date of the Provisional Application and otherwise take advantage of the provisions of any international conventions.

IN WITNESS WHEREOF, the Assignor hereunto has executed this Assignment upon the date indicated below.

Date: 21.6.11 By: Desmond John Flynn

IN WITNESS WHEREOF, the Assignor hereunto has executed this Assignment upon the date indicated below.

Date: By: John Edward Grant

IN WITNESS WHEREOF, the Assignor hereunto has executed this Assignment upon the date indicated below.

Date: By: Stuart Maxwell Darling

IN WITNESS WHEREOF, the Assignor hereunto has executed this Assignment upon the date indicated below.

Date: By: Thomas Chanyan

EXHIBIT A (continued)

Attorney Docket No. P222660 US.01

STATE OF \_\_\_\_\_ ss.  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 2011, before me a Notary Public in and for said county, personally appeared Thomas Chertyan who executed the foregoing instrument and acknowledged that he signed, sealed and delivered the same instrument as a free and voluntary act for the purposes and considerations therein expressed.

(S E A L)

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

Attorney Docket No. P222660.US.01

ACCEPTANCE OF ASSIGNMENT

The Assignee hereby acknowledges and accepts the foregoing assignment of rights by Assignor.

IN TESTIMONY WHEREOF, the Assignee, by its undersigned officer, confirms its acceptance on the date and in the place set forth below.

ION Geophysical Corporation

Date: \_\_\_\_\_ By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

STATE OF \_\_\_\_\_ ss.  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 2011, before me a Notary Public in and for said county, personally appeared \_\_\_\_\_ the above-mentioned representative of the Assignee, ION Geophysical Corporation, who executed the foregoing patent Assignment, and represented and acknowledged that he/she had the requisite corporate authority to execute and accept this patent Assignment and the same was executed as a free act and deed.

(S E A L)

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

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4818-1173-43776

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