505182035 11/08/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5228803

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TIMOTHY B. RIGSBY	03/20/2013
FELIX E. BIRCHER	03/07/2014

RECEIVING PARTY DATA

Name:	ION GEOPHYSICAL CORPORATION	
Street Address:	2105 CITYWEST BOULEVARD, SUITE 400	
City:	HOUSTON	
State/Country:	TEXAS	
Postal Code:	77042-2839	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16184047

CORRESPONDENCE DATA

Fax Number: (612)340-8827

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.

Phone: 612-340-2600

Email: ip.docket@dorsey.com

Correspondent Name: DORSEY & WHITNEY LLP

Address Line 1: 50 SOUTH SIXTH STREET, SUITE 1500

Address Line 2: INTELLECTUAL PROPERTY PRACTICE GROUP

Address Line 4: MINNEAPOLIS, MINNESOTA 55402-1498

ATTORNEY DOCKET NUMBER:	P238254.US.04
NAME OF SUBMITTER:	EMMA HUTTON
SIGNATURE:	/Emma Hutton/
DATE SIGNED:	11/08/2018

Total Attachments: 6

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PATENT REEL: 047454 FRAME: 0289

ASSIGNMENT

WHEREAS, we, Timothy B. Rigsby, residing at 5803 Waterwalk Court, Richmond, Texas 77469, and Felix E. Bircher, residing at 420 Hammond Hwy, Suite 309, Metairie, Louisiana 70005 (hereinafter individually and collectively the "Assignor"), have invented certain new and useful systems, devices, and methods ("the Invention") disclosed and described in a provisional patent application in the United States, entitled "Power Savings Mode for Ocean Bottom Seismic Data Acquisition Systems," which can be identified in the United States Patent and Trademark Office ("USPTO") by Application No. 61/775,915, filed on March 11, 2013 with attorney docket no. P238254.US.01 (the "Provisional Application"), and

WHEREAS, Assignor desires to assign any and all right, title and interest to said Invention, said Provisional Application, and any patents, patent applications, utility models, utility model applications, or other intellectual property rights based upon or arising from the Invention and/or the Provisional Application including, but not limited to, any original, provisional, non-provisional, continuation, continuation-in-part, divisional, international, foreign, regional, and convention applications, registrations, or patents; any reissue or reexamination thereof or to be obtained therefor; any renewals, or substitutes thereof; any and all priority rights or priority claims and International Convention rights for any of the foregoing; any and all rights to collect damages, including past damages, for infringement of any and all of the foregoing; and other benefits accruing to or to accrue to Assignor with respect to the filing of applications for patents or securing of patents or other intellectual property rights in any country or region in the world (collectively 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 CityWest 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 Patent Rights;

NOW THEREFORE, for the sum of \$1.00 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 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 Patent Rights;

UPON SAID CONSIDERATION, the Assignor hereby covenants and agrees with 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, provisional, non-provisional, continuation, continuation-in-part, continuing prosecution, divisional, renewal, reissue, reexamined, or extended patents in any country or region in the world, 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 patents and other intellectual property rights associated with the Invention and/or the Provisional Application 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.

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.

The effective date of this Assignment and Acceptance thereof is March 11, 2013.

	IN WITNESS WHEREOF, the Assig	mor hereunto has executed this Assignment upon the
date in	dicated below.	
Date:	March 20 2013	By: Justy B Roly
	,	Timothy B. Rigsby
		•

Felix E. Bircher

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 set forth below.

ION Geophysical Corporation

Date:	By:	
	Name:	
•	Title:	

ASSIGNMENT

WHEREAS, we, Timothy B. Rigsby, residing at 5803 Waterwalk Court, Richmond, Texas 77469, and Felix E. Bircher, residing at 420 Hammond Hwy, Suite 309, Metairie, Louisiana 70005 (hereinafter individually and collectively the "Assignor"), have invented certain new and useful systems, devices, and methods ("the Invention") disclosed and described in a provisional patent application in the United States, entitled "Power Savings Mode for Ocean Bottom Seismic Data Acquisition Systems," which can be identified in the United States Patent and Trademark Office ("USPTO") by Application No. 61/775,915, filed on March 11, 2013 with attorney docket no. P238254.US.01 (the "Provisional Application"), and

WHEREAS, Assignor desires to assign any and all right, title and interest to said Invention, said Provisional Application, and any patents, patent applications, utility models, utility model applications, or other intellectual property rights based upon or arising from the Invention and/or the Provisional Application including, but not limited to, any original, provisional, non-provisional, continuation, continuation-in-part, divisional, international, foreign, regional, and convention applications, registrations, or patents; any reissue or reexamination thereof or to be obtained therefor; any renewals, or substitutes thereof; any and all priority rights or priority claims and International Convention rights for any of the foregoing; any and all rights to collect damages, including past damages, for infringement of any and all of the foregoing; and other benefits accruing to or to accrue to Assignor with respect to the filing of applications for patents or securing of patents or other intellectual property rights in any country or region in the world (collectively 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 CityWest 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 Patent Rights;

NOW THEREFORE, for the sum of \$1.00 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 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 Patent Rights;

UPON SAID CONSIDERATION, the Assignor hereby covenants and agrees with 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, provisional, non-provisional, continuation, continuation-in-part, continuing prosecution, divisional, renewal, reissue, reexamined, or extended patents in any country or region in the world, 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 patents and other intellectual property rights associated with the Invention and/or the Provisional Application 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.

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The effective date of this Assignment and Acceptance thereof is March 11, 2013.

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

Date:		Ву:	
		Timothy B. Rigsby	
Date:	3/7/14	By: Saly Budu	
		Felix E. Bircher	

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 set forth below.

ION Geophysical Corporation

Date:	Ву:
	Name:
	Title:

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PATENT REEL: 047454 FRAME: 0295