Form PTO-1594 (Rev. 06/04)
OMB Collection 0651-0027 (ex p. 8/30/2005

U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

RECORDATION FORM COVER SHEET

# TRADEMARKS ONLY

To the director of the U. S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies)/Execution Date(s):**

Ion Geophysical Corporation

☐ Individual(s) ☐ Association
☐ General Partnership ☐ Limited Partnership
☒ Corporation-State
☐ Other: ____

Citizenship (see guidelines) Delaware

Execution Date(s) August 22, 2014

Additional names of conveying parties attached? ☒ Yes ☐ No

**2. Name and address of receiving party(ies)**

Additional names, addresses, or citizenship attached? ☐ Yes ☒ No

Name: U.S. Bank National Association, as Collateral Agent

Internal Address: ____

Street Address: 5555 San Felipe, Suite 1150

City: Houston

State: Texas

Country: USA Zip: 77056

☒ Association Citizenship U.S.A.
☐ General Partnership Citizenship ____
☐ Limited Partnership Citizenship ____
☐ Corporation Citizenship
☐ Other ☐ Citizenship

If assignee is not domiciled in the United States, a domestic representative designation is attached. ☐ Yes ☒ No
(Designations must be a separate document from assignment)

**3. Nature of conveyance:**

☐ Assignment ☐ Merger
☒ Security Agreement ☐ Change of Name
☐ Other ____

**4. Application number(s) or registration number(s) and identification or description of the Trademark.**

A. Trademark Application No.(s) SEE SCHEDULE A ANNEXED HERETO

B. Trademark Registration No.(s) SEE SCHEDULE A ANNEXED HERETO

Additional sheet(s) attached? ☒ Yes ☐ No

C. Identification or Description of Trademark(s) (and Filing Date if Application or Registration Number is unknown)
SEE SCHEDULE A ANNEXED HERETO

**5. Name address of party to whom correspondence concerning document should be mailed:**

Name: Susan O'Brien

Internal Address: CT Lien Solutions

Street Address: 187 Wolf Road - Suite 101

City: Albany

State: New York Zip: 12205

Phone Number: 800-342-3676

Fax Number: 800-962-7049

Email Address: cls-udsalbany@wolterskluwer.com

**6. Total number of applications and registrations involved:** 29

**7. Total fee (37 CFR 2.6(b)(6) & 3.41) $740.00**

☒ Authorized to be charged by credit card
☐ Authorized to be charged to deposit account
☐ Enclosed

**8. Payment Information:**

a. Credit Card Last 4 Numbers 0974
Expiration Date 3/17

b. Deposit Account Number ____
Authorized User Name: ____

**9. Signature:** _____ 11/4/2014
Signature Date

Michael G. Regina
Name of Person Signing

Total number of pages including cover sheet, attachments and document: 13

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

OP $740.00 85522411

## ADDITIONAL NAMES OF CONVEYING PARTIES

| | | |
|---|---|---|
| I/O Marine Systems, Inc. | Corporation | Louisiana |
| GX Technology Corporation | Corporation | Texas |
| Ion Exploration Products (U.S.A.), Inc. | Corporation | Delaware |

3424486.1

**SCHEDULE A**

**TO**

**TRADEMARKS ONLY RECORDATION**

**TRADEMARKS AND TRADEMARK APPLICATIONS**

TRADEMARKS

| Mark | Country | Owner | Federal Registration No. | Registration Date |
|---|---|---|---|---|
| IO and design | USA | INPUT/OUTPUT, INC | 931,732 | 4/4/1972 |
| GEOCON-REED | USA | INPUT/OUTPUT, INC | 1,347,388 | 7/9/1985 |
| Digicourse dolphin logo | USA | INPUT/OUTPUT, INC | 1,900,455 | 6/20/1995 |
| I/O logo | USA | INPUT/OUTPUT, INC | 1,759,593 | 12/1/1992 |
| I/O SYSTEM TWO | USA | INPUT/OUTPUT, INC | 1,817,371 | 12/1/1992 |
| PRESEIS | USA | ION GEOPHYSICAL CORPORATION | 2,102,677 | 10/7/1997 |
| FATHTOMO | USA | ION GEOPHYSICAL CORPORATION | 2,677,071 | 1/21/2003 |
| VECTORSEIS | USA | ION GEOPHYSICAL CORPORATION | 2,472,270 | 7/24/2001 |
| SPRINT | USA | ION GEOPHYSICAL CORPORATION | 3,211,035 | 2/20/2007 |
| DIGICOURSE | USA | ION GEOPHYSICAL CORPORATION | 1,811,957 | 12/21/1993 |
| ORCA | USA | INPUT/OUTPUT, INC | 3,424,277 | 6/6/2008 |
| ION (word) | USA | ION GEOPHYSICAL CORPORATION | 3,828,674 | 8/3/2010 |
| ION GEOPHYSICAL | USA | ION GEOPHYSICAL CORPORATION | 4,204,475 | 9/11/2012 |
| ION Logo | USA | ION GEOPHYSICAL CORPORATION | 3,763,728 | 3/23/2010 |
| CHARGED TO INNOVATE. DRIVEN TO SOLVE. | USA | ION GEOPHYSICAL CORPORATION | 4,302,215 | 3/12/2013 |
| DIGIFIN | USA | ION GEOPHYSICAL CORPORATION | 3,794,007 | 5/25/2010 |
| DIGIBIRD | USA | ION GEOPHYSICAL CORPORATION | 3,794,014 | 5/25/2010 |
| CHARGED WITH INNOVATION | USA | ION GEOPHYSICAL CORPORATION | 3,769,248 | 3/30/2010 |

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| Mark | Country | Owner | Federal Registration No. | Registration Date |
|---|---|---|---|---|
| GEOVENTURES | USA | ION GEOPHYSICAL CORPORATION | 4,248,567 | 11/27/2012 |
| PRIMUS | USA | GX TECHNOLOGY CORPORATION | 3,434,755 | 5/27/2008 |
| GX TECHNOLOGY | USA | GX TECHNOLOGY CORPORATION | 3,732,046 | 12/29/2009 |
| OPTIMUS | USA | GX TECHNOLOGY CORPORATION | 3,434,756 | 5/27/2008 |
| SIRIUS | USA | GX TECHNOLOGY CORPORATION | 3,434,757 | 5/27/2008 |
| ULTIMUS | USA | GX TECHNOLOGY CORPORATION | 3,471,843 | 6/22/2008 |
| GULFSPAN | USA | GX TECHNOLOGY CORPORATION | 3,553,314 | 12/30/2008 |
| AFRICASPAN | USA | GX TECHNOLOGY CORPORATION | 3,732,368 | 12/29/2009 |
| INDIASPAN | USA | GX TECHNOLOGY CORPORATION | 3,732,384 | 12/29/2009 |
| WIBAND | USA | ION GEOPHYSICAL CORPORATION | 4,598,102 | 8/19/2014 |

TRADEMARK APPLICATIONS

| Mark | Country | Owner | Application Number | Application Date |
|---|---|---|---|---|
| CALYPSO | USA | ION GEOPHYSICAL CORPORATION | 85,522,411 | 6/12/2012 |

**EXECUTION VERSION**

# TRADEMARK SECURITY AGREEMENT

**This TRADEMARK SECURITY AGREEMENT** (this "Trademark Security Agreement"), dated as of August 22, 2014, is made by ION GEOPHYSICAL CORPORATION, formerly known as Input/Output, Inc. ("Geophysical"), I/O MARINE SYSTEMS, INC. ("Marine"), GX TECHNOLOGY CORPORATION ("GXT") and ION EXPLORATION PRODUCTS (U.S.A.), INC. ("Exploration" and together with Geophysical, Marine and GXT, collectively, the "Grantors", and each individually, a "Grantor"), in favor of U.S. BANK NATIONAL ASSOCIATION ("Grantee"), as collateral agent pursuant to that certain Second Lien Security and Pledge Agreement (as in effect on the date hereof and as amended, modified and supplemented from time to time, the "Second Lien Security Agreement"), dated as of May 13, 2013, by and among the Grantors and Grantee.

**WHEREAS,** pursuant to that certain Indenture dated as of May 13, 2013, by and among Geophysical, as issuer, Marine, GXT, and Exploration, collectively, as guarantors, the Grantee, as collateral agent, and Wilmington Trust, National Association, as trustee (the "Second Lien Representative"), Geophysical issued 8.125% Senior Secured Second Priority Notes due 2018 in an aggregate principal amount of $175,000,000 (including any related exchange notes, the "Notes");

**WHEREAS,** to induce the initial purchasers to purchase the Notes, the Grantors entered into the Second Lien Security Agreement, pursuant to which, the Grantors have granted to Grantee a security interest in, among other property, the intellectual property of the Grantors; and

**WHEREAS,** the Grantors have agreed to execute and deliver this Trademark Security Agreement for recording with national, federal and state government authorities, including, but not limited to, the United States Patent and Trademark Office ("**USPTO**").

**NOW THEREFORE,** for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantors agree with the Grantee as follows:

1. Defined Terms. All initially capitalized terms used but not otherwise defined herein have the meanings given to them in the Second Lien Security Agreement.

2. Grant of Security. Each of the Grantors hereby pledge and grant to the Grantee a security interest in and to all of the right, title and interest of such Grantor in, to and under the following, wherever located, and whether now existing or hereafter arising or acquired from time to time (the "**Trademark Collateral**"):

(a) the Trademarks and Trademark applications set forth on Schedule 1 hereto and all renewals and extensions thereof and amendments thereto and the goodwill associated therewith and with Grantors' business symbolized by the foregoing or connected therewith (the "**Trademarks**");

(b) all rights of any kind whatsoever of such Grantor accruing under any of the foregoing provided by applicable law of any jurisdiction, by international treaties and conventions and otherwise throughout the world;

(c) any and all royalties, fees, income, payments and other proceeds now or hereafter due or payable with respect to any and all of the foregoing; and

(d) any and all claims and causes of action, with respect to any of the foregoing, whether occurring before, on or after the date hereof, including all rights to and claims for damages, restitution and injunctive and other legal and equitable relief for past, present and future infringement.

misappropriation, violation, dilution, misuse, breach or default, with the right but no obligation to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.

Notwithstanding anything contained in this Trademark Security Agreement to the contrary, the term "Trademark Collateral" shall not include any United States intent-to-use trademark applications for which an amendment to allege use or statement of use has not been filed under 15 U.S.C. § 1051(c) or 15 U.S.C. § 1051(d), respectively, or if filed, has not been deemed in conformance with 15 U.S.C. § 1051(a) or examined and accepted, respectively, by the USPTO; provided, that, upon such filing and acceptance, such intent-to-use trademark application shall be considered Trademark Collateral.

3. Recordation. Each of the Grantors hereby authorizes the Commissioner for Trademarks and any other government officials to record and register this Trademark Security Agreement upon request by the Grantee.

4. Other Documents. This Trademark Security Agreement has been entered into pursuant to and in conjunction with the Second Lien Security Agreement, which is hereby incorporated by reference. The provisions of the Second Lien Security Agreement shall supersede and control over any conflicting or inconsistent provision herein. The rights and remedies of the Grantee with respect to the Trademark Collateral are as provided by the Second Lien Security Agreement and the Note Documents and nothing in this Trademark Security Agreement shall be deemed to limit such rights and remedies.

5. Special Power of Attorney. Grantors will, concurrently with the execution and delivery of this Trademark Security Agreement, execute and deliver to Grantee an original of a Special Power of Attorney for the implementation of the assignment, sale or other disposition of the Trademark Collateral pursuant to Grantee's exercise of the rights and remedies granted to Grantee hereunder and under the other Note Documents.

6. Execution in Counterparts. This Trademark Security Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of a signature page to this Trademark Security Agreement by facsimile or in electronic format (*i.e.*, "pdf" or "tif") shall be effective as delivery of a manually executed counterpart of this Trademark Security Agreement.

7. Successors and Assigns. This Trademark Security Agreement will be binding on and shall inure to the benefit of the parties hereto and their respective successors and assigns.

8. Governing Law. This Trademark Security Agreement and any claim, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Trademark Security Agreement and the transactions contemplated hereby and thereby shall be governed by, and construed in accordance with, the laws of the United States and the State of New York, without giving effect to any choice or conflict of law provision or rule (whether of the State of New York or any other jurisdiction).

9. Disputes. All claims, disputes and controversies between the Grantors and Grantee, whether in tort, contract or otherwise, arising out of or relating in any way to this Trademark Security Agreement, shall be governed by the dispute resolution provisions set forth in the Second Lien Security Agreement.

10. Intercreditor Agreement. Notwithstanding anything in this Trademark Security Agreement to the contrary, the lien and security interest granted to the Grantee pursuant to this Trademark



TRADEMARK
REEL: 005394 FRAME: 0106

Security Agreement and the exercise of any right or remedy by the Grantee hereunder are subject to the provisions of that certain Second Lien Intercreditor Agreement dated as of May 13, 2013, by and among China Merchants Bank Co., LTD., New York Branch, the Second Lien Representative, Grantee and the Grantors (as in effect on the date hereof and as amended, modified and supplemented from time to time, the "Second Lien Intercreditor Agreement"). In the event of any conflict between the terms of the Second Lien Intercreditor Agreement and this Trademark Security Agreement, the terms of the Second Lien Intercreditor Agreement shall govern and control.

[*Signature page follows*]



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**IN WITNESS WHEREOF**, each Grantor has caused this Trademark Security Agreement to be duly executed and delivered by its duly authorized officer as of the date first above written.

**ION GEOPHYSICAL CORPORATION**

By: _____
Name: Gregory J. Heinlein
Title: Senior Vice President and Chief Financial Officer

**I/O MARINE SYSTEMS, INC.**

By: _____
Name: Gregory J. Heinlein
Title: Vice President

**GX TECHNOLOGY CORPORATION**

By: _____
Name: Gregory J. Heinlein
Title: Senior Vice President

**ION EXPLORATION PRODUCTS (U.S.A.), INC.**

By: _____
Name: Gregory J. Heinlein
Title: Vice President

AGREED TO AND ACCEPTED:

**U.S. BANK NATIONAL ASSOCIATION**
as Collateral Agent

By: _____

Name: Shazia Flores

Title: Assistant Vice President

Address:

5555 San Felipe, Suite 1150
Houston, Texas 77056
Attention: Shazia Flores, Corporate Trust Services
Facsimile No.: 713-235-9213

## SCHEDULE 1
## TRADEMARKS AND TRADEMARK APPLICATIONS

(See attached.)

## TRADEMARKS AND TRADEMARK APPLICATIONS

TRADEMARKS

| Mark | Country | Owner | Federal Registration No. | Registration Date |
|---|---|---|---|---|
| IO and design | USA | INPUT/OUTPUT, INC | 931,732 | 4/4/1972 |
| IO and design | EURO COMM | INPUT/OUTPUT, INC | 849,604 | 8/7/2002 |
| GEOCON-REED | USA | INPUT/OUTPUT, INC | 1,347,388 | 7/9/1985 |
| Digicourse dolphin logo | USA | INPUT/OUTPUT, INC | 1,900,455 | 6/20/1995 |
| I/O logo | USA | INPUT/OUTPUT, INC | 1,759,593 | 12/1/1992 |
| I/O logo | EURO COMM | INPUT/OUTPUT, INC | 346,569 | 8/26/1996 |
| I/O SYSTEM TWO | USA | INPUT/OUTPUT, INC | 1,817,371 | 12/1/1992 |
| PRESEIS | USA | ION GEOPHYSICAL CORPORATION | 2,102,677 | 10/7/1997 |
| FATHTOMO | USA | ION GEOPHYSICAL CORPORATION | 2,677,071 | 1/21/2003 |
| VECTORSEIS | USA | ION GEOPHYSICAL CORPORATION | 2,472,270 | 7/24/2001 |
| VECTORSEIS | EURO COMM | ION GEOPHYSICAL CORPORATION | 1,537,414 | 3/2/00 |
| VECTORSEIS | CAN | ION GEOPHYSICAL CORPORATION | 569,770 | 10/28/2002 |
| SPRINT | USA | ION GEOPHYSICAL CORPORATION | 3,211,015 | 2/20/2007 |
| DIGICOURSE | USA | ION GEOPHYSICAL CORPORATION | 1,811,957 | 12/21/1993 |
| ORCA | USA | INPUT/OUTPUT, INC | 3,424,277 | 6/6/2008 |
| ION (word) | USA | ION GEOPHYSICAL CORPORATION | 3,828,674 | 8/3/2010 |
| ION (word) | EURO COMM | ION GEOPHYSICAL CORPORATION | 6,274,567 | 7/8/2009 |
| ION (word) | CAN | ION GEOPHYSICAL CORPORATION | 1,363,387 | 12/22/2011 |
| ION (word) | CHINA | ION GEOPHYSICAL CORPORATION | 6,316,707 | 4/28/2010 |
| ION (word) | NORW | ION GEOPHYSICAL CORPORATION | 248,845 | 11/27/2008 |
| ION (word) | RUSS | ION GEOPHYSICAL CORPORATION | 371812 | 2/10/2009 |
| ION GEOPHYSICAL | USA | ION GEOPHYSICAL CORPORATION | 4,204,475 | 9/11/2012 |

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| Mark | Country | Owner | Federal Registration No. | Registration Date |
|---|---|---|---|---|
| | | | | |
| ION GEOPHYSICAL | EURO COMM | ION GEOPHYSICAL CORPORATION | 6,274,872 | 8/18/2008 |
| ION GEOPHYSICAL | CAN | ION GEOPHYSICAL CORPORATION | 1,363,388 | 11/14/2011 |
| ION GEOPHYSICAL | CHINA | ION GEOPHYSICAL CORPORATION | 6316708 | 4/28/2010 |
| ION GEOPHYSICAL | NORW | ION GEOPHYSICAL CORPORATION | 248,847 | 11/27/2008 |
| ION GEOPHYSICAL | RUSS | ION GEOPHYSICAL CORPORATION | 367452 | 12/15/2008 |
| ION GEOPHYSICAL | UAE | ION GEOPHYSICAL CORPORATION | 108113 | 10/19/2070 |
| ION GEOPHYSICAL | UAE | ION GEOPHYSICAL CORPORATION | 108092 | 10/19/2010 |
| ION Logo | USA | ION GEOPHYSICAL CORPORATION | 3,763,728 | 3/23/2010 |
| CHARGED TO INNOVATE. DRIVEN TO SOLVE. | USA | ION GEOPHYSICAL CORPORATION | 4,302,215 | 3/12/2013 |
| DIGIFIN | USA | ION GEOPHYSICAL CORPORATION | 3,794,007 | 5/25/2010 |
| DIGIBIRD | USA | ION GEOPHYSICAL CORPORATION | 3,794,014 | 5/25/2010 |
| CHARGED WITH INNOVATION | USA | ION GEOPHYSICAL CORPORATION | 3,769,248 | 3/30/2010 |
| GEOVENTURES | USA | ION GEOPHYSICAL CORPORATION | 4,248,567 | 11/27/2012 |
| PRIMUS | USA | GX TECHNOLOGY CORPORATION | 3,434,755 | 5/27/2008 |
| GX TECHNOLOGY | USA | GX TECHNOLOGY CORPORATION | 3,732,046 | 12/29/2009 |
| OPTIMUS | USA | GX TECHNOLOGY CORPORATION | 3,434,756 | 5/27/2008 |
| SIRIUS | USA | GX TECHNOLOGY CORPORATION | 3,434,757 | 5/27/2008 |
| ULTIMUS | USA | GX TECHNOLOGY CORPORATION | 3,471,843 | 6/22/2008 |
| GULFSPAN | USA | GX TECHNOLOGY CORPORATION | 3,553,314 | 12/30/2008 |
| AFRICASPAN | USA | GX TECHNOLOGY CORPORATION | 3,732,368 | 12/29/2009 |
| INDIASPAN | USA | GX TECHNOLOGY CORPORATION | 3,732,384 | 12/29/2009 |
| WIBAND | USA | ION GEOPHYSICAL CORPORATION | 4,598,102 | 8/19/2014 |

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TRADEMARK APPLICATIONS

| Mark | Country | Owner | Application Number | Application Date |
|---|---|---|---|---|
| CALYPSO | USA | ION GEOPHYSICAL CORPORATION | 85,522,411 | 6/12/2012 |
| ION (word) | UAE | ION GEOPHYSICAL CORPORATION | 108157 | 1/20/2008 |
| ION (word) | CHINA | ION GEOPHYSICAL CORPORATION | 6,316,831 | 10/11/2007 |
| ION GEOPHYSICAL | CHINA | ION GEOPHYSICAL CORPORATION | 6316837 | 10/11/2007 |
| ION GEOPHYSICAL | INDIA | ION GEOPHYSICAL CORPORATION | 1602473 | 9/17/2007 |

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