

TRADEMARK ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

| | |
|-----------------------|-------------------|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | SECURITY INTEREST |

CONVEYING PARTY DATA

| Name | Formerly | Execution Date | Entity Type |
|--------------------|----------|----------------|-----------------------|
| MICROSEISMIC, INC. | | 10/03/2007 | CORPORATION: DELAWARE |

RECEIVING PARTY DATA

| | |
|-----------------|--------------------------------|
| Name: | SQUARE 1 BANK |
| Street Address: | 406 BLACKWELL STREET SUITE 240 |
| City: | DURHAM |
| State/Country: | NORTH CAROLINA |
| Postal Code: | 27701 |
| Entity Type: | CORPORATION: NORTH CAROLINA |

PROPERTY NUMBERS Total: 6

| Property Type | Number | Word Mark |
|----------------------|----------|---|
| Serial Number: | 85127895 | PASSIVE SEISMIC. ACTIVE LISTENING. |
| Registration Number: | 4156422 | MICROSEISMIC |
| Serial Number: | 85127884 | MICROSEISMIC |
| Registration Number: | 4059227 | MICROSEISMIC PASSIVE MONITORING, ACTIVE LISTENING |
| Registration Number: | 3992602 | WE LISTEN |
| Registration Number: | 3992593 | THE UNCONVENTIONAL SEISMIC RESOURCE |

CORRESPONDENCE DATA

Fax Number: 9193541278
Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.

Phone: 919-314-3086
 Email: loandocsdept@square1bank.com
 Correspondent Name: Square 1 Bank
 Address Line 1: 406 Blackwell Street
 Address Line 2: Suite 240
 Address Line 4: Durham, NORTH CAROLINA 27701

CH \$165.00 85127895

TRADEMARK

| | |
|--|-----------------|
| NAME OF SUBMITTER: | Lee Conner |
| Signature: | /leeconner-vlf/ |
| Date: | 08/31/2012 |
| Total Attachments: 5 source=MicroSeismic - IPSA updated 08.29.12#page1.tif source=MicroSeismic - IPSA updated 08.29.12#page2.tif source=MicroSeismic - IPSA updated 08.29.12#page3.tif source=MicroSeismic - IPSA updated 08.29.12#page4.tif source=MicroSeismic - IPSA updated 08.29.12#page5.tif | |

INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT is entered into as of October 3, 2007 by and between SQUARE 1 BANK ("Bank") and MicroSeismic, Inc., a Delaware corporation ("Grantor").

RECITALS

A. Bank has agreed to make certain advances of money and to extend certain financial accommodation to Grantor (the "Loans") in the amounts and manner set forth in that certain Loan and Security Agreement by and between Bank and Grantor dated of even date herewith (as the same may be amended, modified or supplemented from time to time, the "Loan Agreement"; capitalized terms used herein are used as defined in the Loan Agreement).

B. Bank is willing to extend and to continue to extend financial accommodations to Grantor, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks and Patents to secure the obligations of Grantor under the Loan Agreement.

C. Pursuant to the terms of the Loan Agreement, Grantor has granted to Bank a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement and all other agreements now existing or hereafter arising between Grantor and Bank, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure its obligations under the Loan Agreement and under any other agreement now existing or hereafter arising between Bank and Grantor, Grantor grants and pledges to Bank a security interest in all of Grantor's right, title and interest in, to and under its Intellectual Property (including without limitation those Copyrights, Patents and Trademarks listed on Exhibits A, B and C hereto), and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part thereof (collectively, "Intellectual Property Collateral").

This security interest is granted in conjunction with the security interest granted to Bank under the Loan Agreement. The rights and remedies of Bank with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Bank as a matter of law or equity. Each right, power and remedy of Bank provided for herein or in the Loan Agreement or any of the Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and

concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Bank of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Bank, of any or all other rights, powers or remedies.

Grantor represents and warrants that Exhibits A, B, and C attached hereto set forth any and all intellectual property rights in connection to which Grantor has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

Address of Grantor:

800 Tully Road, Suite 175
Houston, TX 77079

MICROSEISMIC, INC.

By: [Signature]

Title: CFO

BANK:

Address of Bank:

406 Blackwell Street, Suite 240
Durham, NC 27701
Attn: Loan Documentation Department

SQUARE 1 BANK

By: [Signature]

Title: VP

EXHIBIT A
COPYRIGHTS

| Description | Registration Number | Registration Date |
|--------------------|--------------------------------|------------------------------|
| NONE | | |

EXHIBIT B
PATENTS

| <u>Description</u> | <u>Registration/ Publication Number</u> | <u>Registration/ Publication Date</u> |
|---|---|---|
| RESERVOIR CHARACTERIZATION FROM MULTICOMPONENT MICROSEISMIC DATA | 12407894 | 03/20/2009 |
| METHOD FOR IMAGING THE EARTH'S SUBSURFACE USING PASSIVE SEISMIC INTERFEROMETRY AND ADAPTIVE VELOCITY FILTERING | 12485081 | 06/16/2009 |
| METHOD FOR SYNCHRONIZING SEISMIC DATA RECORDED BY TWO OR MORE SEPARATE RECORDING SYSTEMS | 12576589 | 10/09/2009 |
| METHOD FOR DETERMINING DISCRETE FRACTURE NETWORKS FROM PASSIVE SEISMIC SIGNALS AND ITS APPLICATION TO SUBSURFACE RESERVOIR SIMULATION | 12615783 | 11/10/2009 |
| PASSIVE SEISMIC DATA ACQUISITION AND PROCESSING USING MULTI-LEVEL SENSOR ARRAYS | 12753919 | 04/05/2010 |
| NOISE SUPPRESSION FOR DETECTION AND LOCATION OF MICROSEISMIC EVENTS USING A MATCHED FILTER | 12127205 | 05/27/2008 |
| DETERMINING ORIGIN AND MECHANISM OF MICROSEISMIC EVENTS IN THE EARTH'S SUBSURFACE BY DEVIATORIC | 12784740 | 05/21/2010 |
| METHOD FOR PASSIVE SEISMIC EMISSION TOMOGRAPHY USING ADAPTIVE VELOCITY FILTER | 8064288 | 11/22/2011 |
| METHOD FOR PASSIVE SEISMIC EMISSION TOMOGRAPHY INCLUDING POLARIZATION CORRECTION FOR SOURCE MECHANISM | 7978563 | 07/12/2011 |
| METHOD FOR IMAGING THE EARTH'S SUBSURFACE USING PASSIVE SEISMIC INTERFEROMETRY AND ADAPTIVE VELOCITY FILTERING | 8218394 | 07/10/2012 |
| METHOD FOR IMAGING THE EARTH'S SUBSURFACE USING PASSIVE SEISMIC SENSING | 12017010 | 01/19/2008 |
| METHOD FOR DETECTING OF SUBSURFACE SEISMIC EVENTS IN VERTICALLY TRANSVERSELY ISOTROPIC MEDIA | 12870906 | 08/30/2010 |

EXHIBIT C
TRADEMARKS

| <u>Description</u> | <u>Registration/ Application Number</u> | <u>Registration/ Application Date</u> |
|---|---|---|
| PASSIVE SEISMIC. ACTIVE LISTENING. | 85127895 | 09/13/2010 |
| MICROSEISMIC | 4156422 | 06/12/2012 |
| MICROSEISMIC | 85127884 | 09/13/2010 |
| MICROSEISMIC PASSIVE MONITORING, ACTIVE LISTENING | 4059227 | 11/22/2011 |
| WE LISTEN | 3992602 | 07/12/2011 |
| THE UNCONVENTIONAL SEISMIC RESOURCE | 3992593 | 07/12/2011 |