

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4852037

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
FRACTURE ID, INC.	02/16/2018
RECEIVING PARTY DATA	
Name:	SILICON VALLEY BANK
Street Address:	3003 TASMAN DRIVE
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054
PROPERTY NUMBERS Total: 6	
Property Type	Number
Patent Number:	9664039
Application Number:	14850710
Application Number:	15263244
Application Number:	15263278
Application Number:	15616742
PCT Number:	US2016051381
CORRESPONDENCE DATA	
Fax Number:	(404)885-3900
<i>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.</i>	
Phone:	4048853868
Email:	rusty.close@troutmansanders.com
Correspondent Name:	CHRISTOPHER CLOSE
Address Line 1:	TROUTMAN SANDERS LLP
Address Line 2:	600 PEACHTREE STREET NE, SUITE 5200
Address Line 4:	ATLANTA, GEORGIA 30308-2216
ATTORNEY DOCKET NUMBER:	220763.002457
NAME OF SUBMITTER:	CHRISTOPHER C CLOSE, JR.
SIGNATURE:	/Christopher C. Close Jr./
DATE SIGNED:	03/06/2018

Total Attachments: 8

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INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT (“**Agreement**”) is entered into as of February 16, 2018 by and between SILICON VALLEY BANK, a California corporation (“**Bank**”) and FRACTURE ID, 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 the Effective Date (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). Bank is willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks, Patents, and Mask Works (as each term is described below) to secure the obligations of Grantor under the Loan Agreement.

B. 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, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

1. Grant of Security Interest. To secure its obligations under the Loan Agreement, 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 (all of which shall collectively be called the “**Intellectual Property Collateral**”), including, without limitation, the following:

(a) Any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held, including without limitation those set forth on Exhibit A attached hereto (collectively, the “**Copyrights**”);

(b) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;

(c) Any and all design rights that may be available to Grantor now or hereafter existing, created, acquired or held;

(d) All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto and any patents and patent applications claiming the priority benefit of the patents and patent applications set forth on Exhibit B attached hereto (collectively, the “**Patents**”);

(e) Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Grantor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the “**Trademarks**”);

(f) All mask works or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired, including, without limitation those set forth on Exhibit D attached hereto (collectively, the “**Mask Works**”);

(g) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

(h) All licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or rights;

(i) All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and

(j) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

2. Recordation. Grantor authorizes the Commissioner for Patents, the Commissioner for Trademarks and the Register of Copyrights and any other government officials to record and register this Agreement upon request by Bank.

3. Authorization. Grantor hereby authorizes Bank to (a) modify this Agreement unilaterally by amending the exhibits to this Agreement to include any Intellectual Property Collateral which Grantor obtains subsequent to the date of this Agreement, and (b) file a duplicate original of this Agreement containing amended exhibits reflecting such new Intellectual Property Collateral.

4. Loan Documents. This Agreement has been entered into pursuant to and in conjunction with the Loan Agreement, which is hereby incorporated by reference. The provisions of the Loan Agreement shall supersede and control over any conflicting or inconsistent provision herein. The rights and remedies of Bank with respect to the Intellectual Property Collateral are as provided by the Loan Agreement and related documents, and nothing in this Agreement shall be deemed to limit such rights and remedies.

5. Execution in Counterparts. This 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 Agreement by facsimile or in electronic (i.e., “pdf” or “tif” format) shall be effective as delivery of a manually executed counterpart of this Agreement.

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

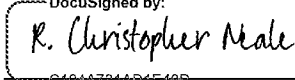
7. Governing Law. This Agreement and any claim, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Agreement and the transactions contemplated hereby and thereby shall be governed by, and construed in accordance with, the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

[Signature page follows.]

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:

FRACTURE ID, INC.

By: 
C104A731A31E40B...
Name: R. Christopher Neale
Title: President

BANK:

SILICON VALLEY BANK

By: 
159ACB5636F2435...
Name: Derek Hofmeister
Title: Vice President

EXHIBIT A
Copyrights

Description	Registration Number	Application Number
None		

EXHIBIT B**Patents**

Description	Application Number	Registration Number
Apparatus and Method Using Measurements Taken While Drilling to Map Mechanical Boundaries and Mechanical Rock Properties Along a Borehole		9,664,039 (05/30/2017)
Apparatus and Method Using Measurements Taken While Drilling to Map Mechanical Boundaries and Mechanical Rock Properties Along a Borehole	14/850,710 (09/10/2015)	
Apparatus and Method Using Measurements Taken While Drilling to Map Mechanical Boundaries and Mechanical Rock Properties Along a Borehole	15/263,244 (09/12/2016)	
Apparatus and Method of Using Measurement While Drilling Data to Generate Mechanical Rock-Strength Properties and Map Mechanical Rock-Strength Properties Along a Borehole	15/263,278 (09/12/2016)	
Apparatus and Method Using Measurements Taken While Drilling Cement to Obtain Absolute Values of Mechanical Rock Properties Along a Borehole	15/616,742 (06/07/2017)	
Apparatus and Method of Using Measurement While Drilling Data to Generate Mechanical Rock-Strength Properties	PCT US2016051381 (09/12/2016)	

EXHIBIT C

Trademarks

Description	Serial Number	Registration Number
DRILLBIT GEOMECHANICS		5,178,495 (04/04/2017)

EXHIBIT D

Mask Works

Description	Application	Registration
None		