PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3544931

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SQUARE 1 BANK	09/28/2015

RECEIVING PARTY DATA

Name:	SQUARE 1 BANK	
Street Address:	406 BLACKWELL STREET, SUITE 240	
City:	DURHAM	
State/Country:	NORTH CAROLINA	
Postal Code:	27701	

PROPERTY NUMBERS Total: 32

Property Type	Number
Patent Number:	8401354
Patent Number:	7999946
Patent Number:	8240207
Patent Number:	8701481
Patent Number:	9097505
Application Number:	13263850
Patent Number:	8983287
Application Number:	13414157
Application Number:	13577070
Application Number:	13577083
Patent Number:	9088372
Application Number:	14114288
Application Number:	61682795
Application Number:	14115665
Application Number:	14115921
Application Number:	14184111
Application Number:	61941539
Application Number:	14273776
Application Number:	62024044
PCT Number:	US2014053782

PATENT REEL: 036668 FRAME: 0438

503498306

Property Type	Number
Application Number:	14607716
Application Number:	14744866
Application Number:	14741977
Application Number:	14798537
Application Number:	14798716
Application Number:	14798813
Application Number:	14840768
Patent Number:	7673312
Patent Number:	7994469
Patent Number:	8153956
Patent Number:	8330096
Patent Number:	8766167

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NAME OF SUBMITTER:	ROBIN DUNN	
SIGNATURE:	/Robin Dunn/	
DATE SIGNED:	09/28/2015	

Total Attachments: 6

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RECORDATION FORM COVER SHEET PATENTS ONLY

#4 – Patent Applications and Patent Numbers

CASE	PATENT#	APPLICATION #	CATEGORY	DESCRIPTION
3001	8,401,354	12850005	SECURITY	FIBER OPTIC SECURITY SYSTEMS
3003	7,999,946	12253161	o/G	FIBER OPTIC PARTICLE MOTION SYSTEM
3017	8,240,207	13190516	O/G	FIBER OPTIC PARTICLE MOTION SYSTEM
3018	8,701,481	13176210	O/G	BOREHOLE SENSING AND CLAMPLING
3020	9,097,505	13263342	SECURITY	FIBER OPTIC TRANSDUCERS, FIBER
3021		13263850	O/G	FIBER OPTIC MICROSEISMIC SENSING
3022	8,983,287	13321856	COMMS/TRACKING	FIBER OPTIC PERSONNEL SAFETY SYSTEMS
3026		13414157	HYDROHONE ARRAY	FIBER OPTIC ACOUSTIC SENSOR ARRAYS
3028		2778614	O/G	FIBER OPTIC TRANSDUCERS, FIBER
3030	·	1209294.6	O/G	FIBER OPTIC TRANSDUCERS, FIBER
3031		2,778,691	O/G	FIBER OPTIC TRANSDUCERS, FIBER
3033	GB2487883	12091.2	O/G	FIBER OPTIC MICROSEISMIC SENSING
3035		13577070	SECURITY	OPTICAL DETECTION SYSTEMS
3036		13577083	SECURITY	FIBER OPTIC PIPELINE MONITORING
3038		1216541.1	SECURITY	FIBER OPTIC PIPELINE MONITORING
3046	9,088,372	13775324	SECURITY	FIBER OPTIC SECURITY SYSTEMS
3049		14114288	SECURITY	FIBER OPTIC SENSING SYSTEMS
3051		61682795	COMMS/TRACKING	LIGHT POWERED COMMUNICATION
3052		14115665	O/G	REMOTELY ACTUATED CLAMPING DEVICES
3054		14115921	O/G	NOISE COMPENSATED FIBER OPTIC
3056		14184111	HYDROPHONE	FIBER OPTIC ACOUSTIC SENSOR ARRAYS

CASE	PATENT#	APPLICATION #	CATEGORY	DESCRIPTION
			ARRA	
3059		61941539	O/G	ELECTRO-HYDRAULIC CLAMP SYSTEM
3060		14273776	COMMS/TRACKING	FIBER OPTIC RECEIVER, TRANSMITTER
3063		62024044	O/G	PASSIVE CLAMPING SYSTEM
3067		PCT/US2014/053782	O/G	INTERFEROMETRIC SENSING SYSTEM WITH POLARIZATIO
3069		2880396	SECURITY	FIBER OPTIC SENSING SYSTEMS
3071		142587.5	SECURITY	FIBER OPTIC SENSING SYSTEMS
3073		14607716	COMMS/TRACKING	FIBER OPTIC PERSONNEL SAFETY
3077		14744866	O/G	DAMPED FIBER OPTIC ACCELEROMETERS
3078		14741977	SECURITY	FIBER OPTIC SECURITY SYSTEMS
3079		14798537	O/G	FIBER OPTIC TRANSDUCERS
3080		14798716	O/G	BOREHOLE CLAMPING SYSTEMS
3081		14798813	o/G	FIBER OPTIC BACKSCATTER SENSING
3082		14840768	SECURITY	OPTICAL DETECTION SYSTEMS
	7,673,312	14/260,591		Wind Turbine Monitoring
	7,994,469	14/260,591		Wind Turbine Monitoring
	8,153,956	14/260,591		Wind Turbine Monitoring
	8,330,096	14/260,591		Wind Turbine Monitoring
	8,766,167	14/260,591		Wind Turbine Monitoring
		13/414,157		Marine hydrophone systems
		14/184,111		Marine hydrophone systems

PATENT ASSIGNMENT

This Patent Assignment (this "Assignment") is entered into as of September 28, 2015, by and between Square 1 Bank, a North Carolina State Bank ("Transferor"), and Square 1 Bank, a North Carolina State Bank ("Transferee").

WHEREAS, pursuant to that certain Loan and Security Agreement between Transferor and US Seismic Systems, Inc. ("Debtor"), dated as of November 8, 2012 (the "Loan Agreement"), Transferor possesses a security interest in all of Debtor's assets, including without limitation all of Debtor's patents and patent applications (collectively, the "Patents"), including without limitation the Patents set forth on the attached Schedule A; and

WHEREAS, Debtor has defaulted on its obligations under the Loan Agreement and, as a result, Transferor has the right to sell all of Debtor's right, title and interest in and to the Patents; and

WHEREAS, Transferee wishes to acquire, and Transferor wishes to transfer to Transferee, all of Debtor's right, title and interest in and to the Patents.

NOW THEREFOR, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Transferor does hereby sell, convey, transfer, assign and deliver to Transferee, free and clear of any lien, security interest, pledge, adverse interest or other encumbrance of any kind, Debtor's right, title and interest in and to the Patents, for the United States and for all foreign countries, and the inventions they claim (including subject matter capable of being reduced to a patent claim in a reissue or reexamination proceeding relating to any of the Patents and subject matter that could have been included as a claim in any of the Patents), and any and all continuations, divisionals, continuations-in-part, provisionals, reissues, reexaminations, extensions, international applications or foreign equivalents thereof which may be obtained therefrom, and the priority rights thereto, for its own use and enjoyment, and for the use and enjoyment of its successors, assigns or other legal representatives, as fully and entirely as the same would have been held and enjoyed by Debtor if this Assignment had not been made; together with all income, royalties, damages or payments due or payable as of the date hereof or thereafter, including, without limitation, all claims for damages by reason of past, present or future infringement or other unauthorized use of the Patents, with the right to sue for, and collect the same for its own use and enjoyment, and for the use and enjoyment of its successors, assigns, or other legal representatives.

Transferor authorizes and requests the appropriate governmental authority to record Transferee as owner of the Patents, including any continuations, divisionals, continuations-in-part, provisionals, reissues, reexaminations, international applications or extensions thereof, and to issue any and all letters patent thereon to Transferee, as assignee of the entire right, title and interest in, to and under the same, for the sole use and enjoyment of Transferee, its successors, assigns or other legal representatives.

Transferor agrees that from time to time, at the reasonable request of Transferee and at Transferee's expense, Transferor shall execute and deliver such other documents and take such other actions as Transferee may reasonably request to effectuate Transferor's assignment, transfer, and conveyance of the Patents and the transactions contemplated by this Assignment (including any documentation to perfect and record the rights granted hereunder in the Patents in any jurisdiction through the world).

[Signatures on Following Page]

IN WITNESS WHEREOF, the parties hereto have caused this Assignment to be executed as of the date first written above by their respective authorized representatives.

Title

[Signature Page to Patent Assignment]

Transferor:

Transferee:

Square 1 Bank

Square 1 Bank

By_______Title_____

EXHIBIT A

to

PATENT ASSIGNMENT

Patents and Patent Applications

CASE	PATENT#	APPLICATION #	CATEGORY	DESCRIPTION
3001	8,401,354	12850005	SECURITY	FIBER OPTIC SECURITY SYSTEMS
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3026		13414157	HYDROHONE ARRAY	FIBER OPTIC ACOUSTIC SENSOR ARRAYS
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	8,766,167	14/260,591		Wind Turbine Monitoring
		13/414,157		Marine hydrophone systems
		14/184,111		Marine hydrophone systems

PATENT REEL: 036668 FRAME: 0445

RECORDED: 09/28/2015