

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

Assignment ID: PATI661067

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST
<b>SEQUENCE:</b>	1
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
QUARTILE DIGITAL, INC.	11/22/2024
<b>RECEIVING PARTY DATA</b>	
<b>Company Name:</b>	CELTIC BANK CORPORATION
<b>Street Address:</b>	268 S . STATE ST.
<b>Internal Address:</b>	SUITE 300
<b>City:</b>	SALT LAKE CITY
<b>State/Country:</b>	UTAH
<b>Postal Code:</b>	84111
<b>PROPERTY NUMBERS Total: 6</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	18440350
Application Number:	63572515
Application Number:	63677181
Application Number:	16249465
Application Number:	17222883
Application Number:	16281420
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<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>	
<b>Phone:</b>	8013206500
<b>Email:</b>	dgodfrey@celticbank.com
<b>Correspondent Name:</b>	Mr. Daniel Godfrey
<b>Address Line 1:</b>	268 S. State Street
<b>Address Line 2:</b>	Suite 300
<b>Address Line 4:</b>	Salt Lake City, UTAH 84111
<b>NAME OF SUBMITTER:</b>	Mr. Daniel Godfrey
<b>SIGNATURE:</b>	Mr. Daniel Godfrey
<b>DATE SIGNED:</b>	11/27/2024

PATENT

**Total Attachments: 7**

source=Quartile IP Amend & Restate#page1.tiff  
source=Quartile IP Amend & Restate#page2.tiff  
source=Quartile IP Amend & Restate#page3.tiff  
source=Quartile IP Amend & Restate#page4.tiff  
source=Quartile IP Amend & Restate#page5.tiff  
source=Quartile IP Amend & Restate#page6.tiff  
source=Quartile IP Amend & Restate#page7.tiff

Loan Number: [REDACTED]  
Loan Amount: \$20,000,000

**AMENDED AND RESTATED  
INTELLECTUAL PROPERTY SECURITY AGREEMENT**

This AMENDED AND RESTATED INTELLECTUAL PROPERTY SECURITY AGREEMENT (“**IP Security Agreement**”), dated as of November 22, 2024 is made by Quartile Digital, Inc., a Delaware corporation, and Quartile, LLC, a Delaware limited liability company (collectively “**Borrower**”), in favor of Celtic Bank Corporation (the “**Lender**”), a Utah state corporation.

WHEREAS, the Borrower has entered into that certain Amended and Restated Business Loan Agreement dated as of even date (the “**Loan Agreement**”), with the Lender; and

WHEREAS, as a condition precedent to the making of the loan by the Lender under the Loan Agreement, Borrower has executed and delivered to the Lender that certain Amended and Restated Commercial Security Agreement dated as of November 22, 2024 made by and among the Borrower and the Lender (the “**Security Agreement**”); and

WHEREAS, under the terms of the Security Agreement, the Borrower has granted to the Lender a security interest in, among other property, certain intellectual property of the Borrower and has agreed to execute and deliver this IP Security Agreement for recording with governmental authorities, including, but not limited to, the United States Patent and Trademark Office and the United States Copyright Office.

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

1. Grant of Security. Borrower hereby pledges and grants to the Lender a security interest in and to all of the right, title, and interest of Borrower in, to, and under the following, the “**IP Collateral**”, which shall mean collectively the Copyrights, Patents, Trademarks and Trade Secrets as set forth herein:

- (a) the patents and patent applications set forth in Schedule 1 hereto and all reissues, divisions, continuations, continuations-in-part, renewals, extensions, and reexaminations thereof and amendments thereto (the “**Patents**”);
- (b) the trademark registrations and applications set forth in Schedule 2 hereto, together with the goodwill connected with the use thereof and symbolized thereby, and all extensions and renewals thereof (the “**Trademarks**”);
- (c) the trade secrets as set forth in Schedule 3 hereto, together with the goodwill connected with the use thereof and symbolized thereby, and all extensions and renewals thereof (the “**Trade Secrets**”);
- (d) all rights of any kind whatsoever of Grantor accruing under any of the foregoing provided by applicable law of any jurisdiction, by international treaties and conventions, and otherwise throughout the world;
- (e) 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
- (f) 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, dilution, misappropriation, violation, 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.

2. Recordation. Borrower authorizes the Commissioner for Patents and the Commissioner for Trademarks to record and register this IP Security Agreement upon request by the Lender.

3. Loan Documents. This IP Security Agreement has been entered into pursuant to and in conjunction with the Security Agreement, which is hereby incorporated by reference. The provisions of the Security Agreement shall supersede and control over any conflicting

Loan Number: [REDACTED]

Loan Amount: \$20,000,000

or inconsistent provision herein. The rights and remedies of the Lender with respect to the IP Collateral are as provided by the Loan Agreement, the Security Agreement, and related documents, and nothing in this IP Security Agreement shall be deemed to limit such rights and remedies.

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

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

6. Governing Law. This IP 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 IP 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 Utah, without giving effect to any choice or conflict of law provision or rule (whether of the State of Utah or any other jurisdiction).

IN WITNESS WHEREOF, Borrower has caused this IP Security Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

QUARTILE DIGITAL, INC.

DocuSigned by:  
By: **DANIEL KNIJNIK**  
Name: ~~Daniel Knijnik~~  
Title: Chief Executive Officer

Address for Notices:

101 Park Ave., Room 2504  
New York, NY 10178

QUARTILE, LLC

DocuSigned by:  
By: **DANIEL KNIJNIK**  
Name: ~~Daniel Knijnik~~  
Title: Chief Executive Officer of Quartile, LLC

Address for Notices:

101 Park Ave., Room 2504  
New York, NY 10178

Loan Number: [REDACTED]  
Loan Amount: \$20,000,000  
AGREED TO AND ACCEPTED:

CELTIC BANK CORPORATION

DocuSigned by:  
By: Daniel Godfrey  
Name: Daniel Godfrey  
Title: Senior Vice President

Address for Notices:

268 S. State Street, Suite 300  
Salt Lake City, UT 84111

Loan Number: XXXXXXXXXX  
 Loan Amount: \$20,000,000

**SCHEDULES**

**SCHEDULE 1**

**PATENTS**

GRANTED PATENTS					
Title	Jurisdiction	Application Number	Patent Number	Issue Date	Record Owner
Systems and Methods for Optimization of Capital Allocation for Advertising Campaigns in Online-Based Commerce	United States	16/249,465	10,970,742 B1	April 6, 2021	Quartile Digital, Inc.
Systems and Methods for Optimization of Capital Allocation for Advertising Campaigns in Online-Based Commerce	United States	17/222,883	11,222,369 B1	January 11, 2022	Quartile Digital, Inc.
Systems and Methods for Increasing Digital Marketing Campaign Efficiency	United States	16/281,420	11,315,145 B1	April 26, 2022	Quartile Digital, Inc.
PENDING PATENTS					
Systems and Methods for Optimizing Processing of Time-History Series of Large Data Sets	United States	18/440,350	Pending	Pending	Quartile Digital, Inc.
Systems and Methods for Adaptive API Rule Management	United States	63/572,515	Pending	Pending	Quartile Digital, Inc.
Systems and Methods for Linking Product Data From Multiple Channels of Electronic Marketplaces	United States	63/677,181	Pending	Pending	Quartile Digital, Inc.

**SCHEDULE 2**

**TRADEMARKS**

TRADEMARKS / WORD MARKS				
Word Mark	Jurisdiction	Serial Number/Registration Number	Filing Date / Registration Date	Record Owner
QUARTILE	United States	87688830 / 5687148	November 17, 2017 / February 26, 2019	Quartile LLC
QUARTILE	United States	88349163 / 5910566	March 20, 2019 / November 12, 2019	Quartile LLC

Loan Number: [REDACTED]  
Loan Amount: \$20,000,000

**SCHEDULE 3**

**TRADE SECRETS**

Trade Secret Collateral shall include common law and statutory trade secrets and all other confidential or proprietary information and all know-how obtained by or used in or contemplated at any time for use in the business of any Grantor (including all patent applications in preparation for filing anywhere in the world) (all of the foregoing being collectively “Trade Secrets”), whether or not such Trade Secret has been reduced to a writing or other tangible form (including all documents and things embodying, incorporating or referring in any way to such Trade Secret) all Trade Secret licenses, including each Trade Secret license referred to in this Schedule 3, and including the right to sue for, to enjoin and to collect damages for the actual or threatened misappropriation of any Trade Secret and for the breach or enforcement of any such Trade Secret license.

**Trade Secret Licenses**

Quartile is a machine learning platform that integrates e-commerce marketing channels for e-commerce brands.

### Certificate Of Completion

Envelope Id: 1A6B6A06EBF649D4A346E81866A222E4

Status: Completed

Subject: Complete with Docusign: 112224 [REDACTED] Change in Terms Document Package (2 of 2)

Source Envelope:

Document Pages: 33

Signatures: 34

Envelope Originator:

Certificate Pages: 5

Initials: 0

Tami Anderson

AutoNav: Enabled

268 S State St

Envelopeld Stamping: Enabled

Ste 300

Time Zone: (UTC-07:00) Mountain Time (US & Canada)

Salt Lake City, UT 84111

tanderson@celticbank.com

IP Address: 67.177.51.198

### Record Tracking

Status: Original

Holder: Tami Anderson

Location: DocuSign

11/22/2024 10:05:00 AM

tanderson@celticbank.com

### Signer Events

Andre Golsorkhi

### Signature

### Timestamp

[REDACTED]

DocuSigned by:  
*Andre Golsorkhi*  
-DCFBA048F9204DD...

Sent: 11/22/2024 10:53:25 AM

Viewed: 11/22/2024 10:56:30 AM

Signed: 11/22/2024 10:56:40 AM

CEO

Security Level: Email, Account Authentication (None), Authentication

Signature Adoption: Pre-selected Style

Using IP Address: 72.78.200.87

### Authentication Details

ID Check:

Transaction: 31033582543845

Result: passed

Vendor ID: LexisNexis

Type: iAuth

Recipient Name Provided by: Recipient

Information Provided for ID Check: Address, SSN9, SSN4, DOB

Performed: 11/22/2024 10:56:22 AM

Question Details:

passed person.city.real

passed vehicle.historical.association.real

passed corporate.association.real

passed vehicle.historical.association.real

passed property.purchasedwhen.fake

passed property.association.single.real

### Electronic Record and Signature Disclosure:

Accepted: 11/22/2024 10:56:30 AM

ID: f0650b4b-0b93-4253-9bcd-1d617d5ca187

Bob Burns

DocuSigned by:  
*Bob Burns*  
-BB0678EFC5C14F9...

Sent: 11/22/2024 10:53:25 AM

Viewed: 11/22/2024 10:57:32 AM

Signed: 11/22/2024 10:57:58 AM

Security Level: Email, Account Authentication (None), Authentication

Signature Adoption: Pre-selected Style

Using IP Address: 71.239.30.70

### Authentication Details

ID Check:

Transaction: 31033582531995

Result: passed

Vendor ID: LexisNexis

Type: iAuth

Recipient Name Provided by: Recipient

Information Provided for ID Check: Address, SSN9, SSN4, DOB

Performed: 11/22/2024 10:57:16 AM

Question Details:

passed property.association.single.real

passed person.age.real

passed county.lived.single.real

passed vehicle.color.real

passed vehicle.association.real


passed corporate.association.fake

### Electronic Record and Signature Disclosure:


Accepted: 11/22/2024 10:57:32 AM

ID: 82ba791d-9b41-4313-9af3-9a6bd8c38c8c



Signer Events	Signature	Timestamp
Daniel Godfrey Senior Vice President Celtic Bank Security Level: Email, Account Authentication (None)	 <small>DocuSigned by: 82816D5CA2FE460...</small> Signature Adoption: Pre-selected Style Using IP Address: 108.147.173.27 Signed using mobile	Sent: 11/22/2024 10:53:23 AM Viewed: 11/22/2024 12:27:03 PM Signed: 11/22/2024 12:27:28 PM

**Electronic Record and Signature Disclosure:**  
Not Offered via DocuSign

DANIEL KNIJNIK CEO Quartile LLC Security Level: Email, Account Authentication (None), Authentication	 <small>DocuSigned by: 7B4E00138C0044E...</small> Signature Adoption: Pre-selected Style Using IP Address: 173.2.231.92	Sent: 11/22/2024 10:53:24 AM Viewed: 11/22/2024 12:43:55 PM Signed: 11/22/2024 12:44:30 PM
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**Authentication Details**  
 ID Check:  
 Transaction: 31033585953235  
 Result: passed  
 Vendor ID: LexisNexis  
 Type: iAuth  
 Recipient Name Provided by: Recipient  
 Information Provided for ID Check: Address  
 Performed: 11/22/2024 12:43:46 PM

**Question Details:**  
 passed property.purchasedfrom.fake  
 passed property.street.in.city.real  
 passed property.association.single.real  
 passed corporate.association.real  
 passed corporate.association.real  
 passed property.association.single.real

**Electronic Record and Signature Disclosure:**  
 Accepted: 11/22/2024 12:43:55 PM  
 ID: da251973-f4e8-4d3f-9488-bceca6e00bd8

In Person Signer Events	Signature	Timestamp
<b>Editor Delivery Events</b>	<b>Status</b>	<b>Timestamp</b>
<b>Agent Delivery Events</b>	<b>Status</b>	<b>Timestamp</b>
<b>Intermediary Delivery Events</b>	<b>Status</b>	<b>Timestamp</b>
<b>Certified Delivery Events</b>	<b>Status</b>	<b>Timestamp</b>
<b>Carbon Copy Events</b>	<b>Status</b>	<b>Timestamp</b>
<b>Witness Events</b>	<b>Signature</b>	<b>Timestamp</b>
<b>Notary Events</b>	<b>Signature</b>	<b>Timestamp</b>
<b>Envelope Summary Events</b>	<b>Status</b>	<b>Timestamps</b>
Envelope Sent	Hashed/Encrypted	11/22/2024 10:53:26 AM
Certified Delivered	Security Checked	11/22/2024 12:43:55 PM
Signing Complete	Security Checked	11/22/2024 12:44:30 PM
Completed	Security Checked	11/22/2024 12:44:30 PM

Payment Events	Status	Timestamps
<b>Electronic Record and Signature Disclosure</b>		