506304709 10/15/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6351458

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
ECO DIGITAL, LLC	10/15/2020

RECEIVING PARTY DATA

Name:	FORTRESS CREDIT CORP., AS AGENT	
Street Address:	1345 AVENUE OF THE AMERICAS	
City:	NEW YORK	
State/Country:	NEW YORK	
Postal Code:	10105	

PROPERTY NUMBERS Total: 2

Property Type	Number
Patent Number:	10491968
Patent Number:	7853766

CORRESPONDENCE DATA

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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ATTORNEY DOCKET NUMBER:	037984-0015	
NAME OF SUBMITTER: JESSICA BAJADA-SILVA		
SIGNATURE:	/s/ Jessica Bajada-Silva	
DATE SIGNED:	10/15/2020	

Total Attachments: 9

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> PATENT REEL: 054063 FRAME: 0424

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PATENT REEL: 054063 FRAME: 0425

PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT is entered into as of October 15, 2020 (this "Agreement"), among IneoQuest Technologies, LLC, a Delaware limited liability company, Project Giants, LLC, a Delaware limited liability company, Eco Digital, LLC, a Delaware limited liability company (each, a "Grantor") and Fortress Credit Corp. in its capacities as administrative agent an[d collateral agent (in such capacities, the "Administrative Agent") for the Secured Parties.

Reference is made to that certain Security Agreement, dated as of October 15, 2020 (as amended, supplemented or otherwise modified from time to time, the "Security Agreement"), among the Loan Parties party thereto and the Administrative Agent. The Lenders (as defined below) have extended credit to the Borrower subject to the terms and conditions set forth in that certain Credit Agreement, dated as of October 15, 2020 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"), by and among Telestream Holdings Corporation, a Delaware corporation (the "Borrower"), Thunder Parent Inc., a Delaware limited partnership ("Holdings"), the Lenders from time to time party thereto, and Administrative Agent. Consistent with the requirements set forth in Section 4.01 of the Credit Agreement and Section 4.03(c) of the Security Agreement, the parties hereto agree as follows:

- SECTION 1. *Terms*. Capitalized terms used in this Agreement and not otherwise defined herein have the meanings specified in the Security Agreement.
- SECTION 1. *Grant of Security Interest*. As security for the prompt and complete payment or performance, as the case may be, in full of the Secured Obligations, each Grantor, pursuant to the Security Agreement, did and hereby does pledge, collaterally assign, mortgage, transfer and grant to the Administrative Agent, its successors and permitted assigns, on behalf of and for the benefit of the Secured Parties, a continuing security interest in all right, title or interest in, to or under all of the following assets, whether now owned or at any time hereafter acquired by or arising in favor of such Grantor and regardless of where located (collectively, the "Patent Collateral"):
 - A. all Patents, including those issued Patents and pending applications in the United States Patent and Trademark Office listed on Schedule I hereto;
 - B. all inventions described and claimed therein;
 - C. all reissues, divisions, continuations, renewals, extensions and continuations in part thereof;
 - D. the right to sue third parties for past, present and future infringements of any Patent and pending applications;
 - E. all Proceeds of and any right associated with the foregoing; and
 - F. all rights, priorities and privileges corresponding to any of the foregoing throughout the world;

in each case to the extent the foregoing items constitute Collateral.

SECTION 2. Security Agreement. The security interests granted to the Administrative Agent herein are granted in furtherance, and not in limitation, of the security interests pledged, collaterally assigned, mortgaged, transferred and granted to the Administrative Agent pursuant to the Security Agreement. Each Grantor hereby acknowledges and affirms that the rights and remedies of the Administrative Agent with respect to the Patent Collateral are more fully set forth in the Security

PATENT REEL: 054063 FRAME: 0426 Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein. In the event of any conflict between the terms of this Agreement and the Security Agreement, the terms of the Security Agreement shall govern.

SECTION 3. *Governing Law*. This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of New York.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

> INEOQUEST TECHNOLOGIES, LLC, a Delaware limited liability company

Name: Dan Castles Title: President

PROJECT GIANTS, LLC, a Delaware limited liability

company

Name: Dan Castles Title: President

ECO DIGITALL.C. a Delaware limited liability company

Name: Dan Castles Title: President

FORTRESS CREDIT CORP. as Administrative Agait

By:_

Name: Constantine M. Dakolias Title: President

REEL: 054063 FRAME: 0429

SCHEDULE I

PATENTS

REGISTERED OWNER	SERIAL NUMBER	<u>DESCRIPTION</u>
IneoQuest Technologies, LLC	10/604,997 / 7,321,565	System and Method for Analyzing the Performance of Multiple Transportation Streams of Streaming Media in Packet-Based Networks
IneoQuest Technologies, LLC	11/257,184 / 7,801,127	System and Method for Creating a Sequence Number Field for Streaming Media in Packet-Based Networks Utilizing Internet Protocol
IneoQuest Technologies, LLC	12/619,120 / 8,019,896	System and Method of Collecting Video Content Information
IneoQuest Technologies, LLC	11/257,183 / 8,031,623	System and Method for Creating Multiple Transportation Streams of Streaming Media Network Test Traffic In Packet-Based Networks
IneoQuest Technologies, LLC	11/654,746 / 7,848,237	System and Method for Selective Packet Discard for the Transport of Multiple Transportation Streams of Streaming Media In Packet-Based Networks
IneoQuest Technologies, LLC	11/396,753 / 8,838,772	System and Method for Analyzing the Performance of Multiple Transportation Streams of Streaming Media In Packet-Based Networks
IneoQuest Technologies, LLC	11/582,072 / 8,625,455	System and Method for Handling Streaming Media
IneoQuest Technologies, LLC	12/336,210 / 8,588,069	System and Method for Analyzing the Performance of Multiple Transportation Streams of Streaming Media In Packet-Based Networks
IneoQuest Technologies, LLC	12/608,764 / 8,239,888	Advertising Metrics System and Method
IneoQuest Technologies, LLC	12/788,949 / 9,197,684	Streaming Media Delivery Composite
IneoQuest Technologies, LLC	13/184,163 / 9,590,816	System and Method for Creating Multiple Transportation Streams of Streaming Media Network Test Traffic in Packet-Based Networks
IneoQuest Technologies, LLC	13/404,329 / 9,449,086	System and Method for Analyzing and Collecting Internet-Based Video Service Quality Information

PATENT REEL: 054063 FRAME: 0430

REGISTERED OWNER	SERIAL NUMBER	<u>DESCRIPTION</u>
IneoQuest Technologies, LLC	13/404,401 / 9,449,087	System and Method for Videoconferencing and TelePrescence Quality Analytics
IneoQuest Technologies, LLC	13/404,561 / 9,449,088	System and Method for Collecting Handheld Test & Measurement Video Quality Information
IneoQuest Technologies, LLC	13/540,084 / 8,943,530	Advertising Metrics System and Method
IneoQuest Technologies, LLC	14/242,115 / 9,191,426	System and Method for Analyzing the Performance of Multiple Transportation Streams of Streaming Media in Packet-Based Networks
IneoQuest Technologies, LLC	14/579,423 / 9,232,241	Advertising Metrics System and Method
IneoQuest Technologies, LLC	14/579,462 / 9,253,512	Advertising Metrics System and Method
IneoQuest Technologies, LLC	14/886,510 / 9,680,890	Streaming Media Delivery Composite
IneoQuest Technologies, LLC	16/185366 / 10,681,574	Video Quality Monitoring
IneoQuest Technologies, LLC	16/185389 / 10,681,575	Video Quality Monitoring
IneoQuest Technologies, LLC	16/185412 / 10,674,387	Video Quality Monitoring
Project Giants, LLC	6,941,017	Temporal Processing for Realtime Human Vision System Behavior Modeling
Project Giants, LLC	6,751,360	Fast Video Temporal Alignment Estimation
Project Giants, LLC	6,670,963	Visual Attention Model
Project Giants, LLC	7,180,539	Luminance Qualified Vector Display
Project Giants, LLC	6,738,099	Robust Camera Motion Estimation for Video Sequences
Project Giants, LLC	7,061,920	Streaming Media Quality Analyzer System
Project Giants, LLC	6,907,143	Adaptive Spatio-Temporal Filter for Human Vision System Models
Project Giants, LLC	6,829,005	Predicting Subjective Quality Ratings of Video
Project Giants, LLC	7,268,783	Image Alias Rejection Using Shaped Statistical Filtering
Project Giants, LLC	6,975,774	Quantifying Perceptual Information and Entropy
Project Giants, LLC	7,102,667	Picture Quality Diagnostics for Revealing Cause of Perceptible Impairments
Project Giants, LLC	6,944,356	Locating Point of Interest in an Impaired Image
Project Giants, LLC	7,889,211	Measuring PSNR of Full Color Video

REGISTERED OWNER	SERIAL NUMBER	<u>DESCRIPTION</u>
Project Giants, LLC	7,773,112	Automatic Measurement of Video Parameters
Project Giants, LLC	7,327,384	Gamut False Color Display
Project Giants, LLC	7,071,965	Artistic Color Gamut Display
Project Giants, LLC	6,975,349	Two-Dimensional Video Timing Display
Project Giants, LLC	7,038,711	Audio Processing Using a Video Rasterizer
Project Giants, LLC	7,154,532	Video Field Rate Persistence
Project Giants, LLC	7,180,537	Relative Channel Delay Measurement
Project Giants, LLC	7,069,167	Frequency Response Measurement
Project Giants, LLC	7,586,515	Instrument for Real-Time Video Quality Measurement
Project Giants, LLC	8,713,083	Digital Fine Delay Processing
Project Giants, LLC	8,497,909	Video Timing Display for Multi-Rate Systems
Project Giants, LLC	7,764,305	Method and Apparatus for Generating Reference Television Signal
Project Giants, LLC	8,184,747	Flexible Timebase for Eye Diagram
Project Giants, LLC	8,355,469	Flexible Timebase for Eye Diagram
Project Giants, LLC	8,054,331	Systems and Methods for Generating Video Test Sequences Based Upon Captured Video Data
Project Giants, LLC	9,699,446	Test and Measurement Device, System, and Method for Providing Synchronized Measurement Views
Project Giants, LLC	9,031,134	System for Detecting Sequences of Frozen Frame in Baseband Digital Video
Project Giants, LLC	9,013,502	Method of Viewing Virtual Display Outputs
Project Giants, LLC	8,754,988	Blur Detection with Local Sharpness Map
Project Giants, LLC	9,071,825	Tiling or Blockiness Detection Based on Spectral Power Signature
Project Giants, LLC	9,723,303	System For Generating Text Defined Test Patterns
Project Giants, LLC	8,963,998	Full Reference System for Predicting Subjective Quality of Three-Dimensional Video
Project Giants, LLC	9,591,304	Evaluation of Perceptual Visual Quality
Project Giants, LLC	9,148,644	System For Detecting Structured Artifacts in Video Sequences
Project Giants, LLC	9,569,856	Variable Blocking Artifact Size and Offset Detection
Project Giants, LLC	9,236,209	Relay Failure Detection System
Project Giants, LLC	9,721,354	Stop Weighted Waveform
Project Giants, LLC	9,317,931	Stop Weighted Waveform
Project Giants, LLC	10,057,566	Multiple Focus-Peaking Picture Markers Allowing Depth-of-Field Indication for Adjusting Camera Focus
Project Giants, LLC	10,025,988	Anomalous Pixel Detection
Project Giants, LLC	D781,800	Front Panel of a Video Display
Project Giants, LLC	6,642,966	Subliminally Embedded Keys in Video for Synchronization
Project Giants, LLC	7,477,286	Rectangular Gamut Display

REGISTERED OWNER	SERIAL NUMBER	<u>DESCRIPTION</u>
Project Giants, LLC	8,436,939	AV Delay Measurement and Correction Via Signature Curves
Project Giants, LLC	7,642,822	Analog Phase-Locked Loop
Project Giants, LLC	8,781,222	Method and Apparatus for Automatic Illuminant Compensation in Video Surveillance
Project Giants, LLC	8,355,567	Method and Apparatus for Implementing Moving Image Color Appearance Model for Video Quality Ratings Prediction
Project Giants, LLC	8,437,577	Methods and Systems for Image Registration
Project Giants, LLC	8,520,143	Method and Apparatus For Measuring Delay Within a Compressed Digital Stream
Project Giants, LLC	9,456,209	Method of Multiplexing H.264 Elementary Streams Without Timing Information Coded
Project Giants, LLC	8,731,053	Method of Multiplexing H.264 Elementary Streams Without Timing Information Coded
Project Giants, LLC	8,768,020	Method of Detecting Visual Stress and Photosensitive Epilepsy Triggers in Video & Mitigation Method
Project Giants, LLC	9,479,762	Stereoscopic Video Temporal Frame Offset Measurement
Project Giants, LLC	D677,184	Portable measurement instrument
Project Giants, LLC	9,541,494	Apparatus and Method to Measure Display Quality
Project Giants, LLC	15/264,820 / 10,405,002	Low Complexity Perceptual Visual Quality(PVQ) Evaluation for JPEG2000 Compressed Streams
Project Giants, LLC	15/642,095 / 10,587,872	Video Waveform Peak Indicator
Project Giants, LLC	15/859,329 / 10,581,965	Mirroring Flow Configurations for Internet Protocol Receivers
Project Giants, LLC	9,307,227	Stereoscopic image registration and color balance for evaluation display
Project Giants, LLC	9,055,279	System for Natural Language Assessment of Relative Color Quality
Project Giants, LLC	D714,792	Front panel for rack mounted video device
Project Giants, LLC	8,184,163	Methods and systems for detecting and locating skipped frames in a video sequence
Project Giants, LLC	6,924,834	Analog or serial digital video input with automatic video switch
Project Giants, LLC	6,912,010	Automated lip sync error correction
Project Giants, LLC	6,788,127	Circuit for variably delaying data

REGISTERED	SERIAL NUMBER	<u>DESCRIPTION</u>
<u>OWNER</u>		
Project Giants, LLC	7,268,783	Image Alias Rejection Using Shaped Statistical Filtering
Project Giants, LLC	9,591,304	Evaluation of Perceptual Visual Quality
Project Giants, LLC	10,405,002	Low Complexity Perceptual Visual Quality(PVQ) Eavluation for JPEG2000 Compressed Streams
Project Giants, LLC	9,392,267	System and Methods to Measure Noise and Generate Picture Quality Prediction From Source Having No Reference
Project Giants, LLC	8,351,499	Method of identifying inconsistent field dominance metadata in a sequence of video frames
Project Giants, LLC	8,319,888	Method of determining field dominance in a sequence of video frames
Project Giants, LLC	8,294,770	Systems and methods for spatially isolated artifact, dissection, classification, and measurement
Project Giants, LLC	8,229,229	Systems and methods for predicting video location of attention focus probability trajectories due to distractions
Project Giants, LLC	7,406,493	Up-sampling half-band reconstruction filtering
Project Giants, LLC	7,405,747	Extended K2T measurement of video
Eco Digital, LLC	10,491,968	TIME BASED VIDEO METADATA SYSTEM
Eco Digital, LLC	7,853,766	METHOD AND SYSTEM FOR AUTOMATED MIGRATION OF MEDIA ARCHIVES

Patent Applications

<u>APPLICANT</u>	APPLICATION NO.	<u>DESCRIPTION</u>
Project Giants, LLC	16/252,497	Test and Measurement Instrument with Buffer Model Delay Compensation

RECORDED: 10/15/2020