

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5774562

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT
CONVEYING PARTY DATA	
Name	Execution Date
LIVE NATION ENTERTAINMENT, INC.	10/17/2019
LIVE NATION WORLDWIDE, INC.	10/17/2019
RECEIVING PARTY DATA	
Name:	JPMORGAN CHASE BANK, N.A.
Street Address:	MAIL CODE NY1-C413, 4 CMC
City:	BROOKLYN
State/Country:	NEW YORK
Postal Code:	11245-0001
PROPERTY NUMBERS Total: 72	
Property Type	Number
Patent Number:	9466035
Patent Number:	10102544
Patent Number:	10078851
Patent Number:	9639811
Patent Number:	9798892
Patent Number:	9819684
Patent Number:	9690624
Patent Number:	9912653
Patent Number:	10051018
Patent Number:	10299189
Patent Number:	9954907
Patent Number:	9805179
Patent Number:	9792742
Patent Number:	10102393
Patent Number:	9870259
Patent Number:	10282929
Patent Number:	9892252
Patent Number:	10397335
Patent Number:	9978023

Property Type	Number
Patent Number:	10424140
Patent Number:	10242218
Patent Number:	10049196
Patent Number:	10187390
Patent Number:	10230729
Application Number:	15830464
Patent Number:	10228971
Patent Number:	10146928
Patent Number:	10355936
Patent Number:	10305881
Application Number:	15948749
Application Number:	15960208
Application Number:	15967106
Patent Number:	10205728
Patent Number:	10298593
Application Number:	16012255
Application Number:	16017150
Application Number:	62690131
Application Number:	16102311
Application Number:	16102280
Application Number:	16132584
Application Number:	16154216
Patent Number:	10402580
Application Number:	16160836
Patent Number:	10430576
Application Number:	16195568
Application Number:	62779750
Application Number:	16252164
Patent Number:	10419440
Application Number:	16275064
Application Number:	16283506
Application Number:	62814644
Application Number:	16298453
Application Number:	16298536
Application Number:	16363392
Application Number:	16404361
Application Number:	62846381
Application Number:	16415109

Property Type	Number
Application Number:	16417366
Application Number:	16421925
Application Number:	16452137
Application Number:	16504706
Application Number:	16511880
Application Number:	62879206
Application Number:	16524985
Application Number:	16538095
Application Number:	16547393
Application Number:	16556434
Application Number:	16579061
Application Number:	16572026
Application Number:	62904357
Application Number:	16571369
Patent Number:	10419827

CORRESPONDENCE DATA

Fax Number: (800)914-4240

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.

Phone: 800-713-0755

Email: Michael.Violet@wolterskluwer.com, ECarrera@cahill.com

Correspondent Name: CT CORPORATION

Address Line 1: 4400 EASTON COMMONS WAY

Address Line 2: SUITE 125

Address Line 4: COLUMBUS, OHIO 43219

NAME OF SUBMITTER:	ELAINE CARRERA
SIGNATURE:	/Elaine Carrera/
DATE SIGNED:	10/17/2019

Total Attachments: 9

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RECORDATION FORM COVER SHEET
PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

Live Nation Entertainment, Inc.
Live Nation Worldwide, Inc.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) October 17, 2019

- ☐ Assignment ☐ Merger
☒ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other _____

2. Name and address of receiving party(ies)

Name: JPMorgan Chase Bank, N.A.

Internal Address: _____

Street Address: Mail Code NY1-C413, 4 CMC

City: Brooklyn

State: NY

Country: USA Zip: 11245-0001

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application or patent number(s):

☐ This document serves as an Oath/Declaration (37 CFR 1.63).

A. Patent Application No.(s)

B. Patent No.(s)

See Schedule I

See Schedule I

Additional numbers attached? ☒ Yes ☐ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Elaine Carrera, Senior Paralegal

Internal Address: _____

Street Address: c/o Cahill Gordon & Reindel LLP,
80 Pine Street

City: New York

State: NY Zip: 10005

Phone Number: (212) 701-3365

Docket Number: _____

Email Address: ecarrera@cahill.com

6. Total number of applications and patents involved: 72

7. Total fee (37 CFR 1.21(h) & 3.41) \$ _____

- ☐ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account Number _____

Authorized UserName _____

9. Signature:

Elaine Carrera
Signature

October 17, 2019

Date

Elaine Carrera

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

9

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

Grant of Security Interest in Patents

Patent Security Agreement, dated as of October 17, 2019 by each signatory hereto (each a "Grantor" and collectively, the "Grantors"), in favor of JPMORGAN CHASE BANK, N.A., in its capacity as collateral agent pursuant to the Credit Agreement (in such capacity, the "Collateral Agent").

W i t n e s s e t h:

Whereas, each Grantor is party to that certain Second Amended and Restated U.S. Security Agreement, dated as of October 31, 2016 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement"), in favor of the Collateral Agent pursuant to which each Grantor is required to execute and deliver this Patent Security Agreement;

Now, therefore, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Credit Agreement, each Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. Each Grantor hereby grants to the Collateral Agent for the benefit of the Secured Parties a Lien on and continuing security interest in and to all of its right, title and interest in, to and under all the following Collateral of such Grantor (collectively, the "Applicable Collateral"):

(a) Patents of such Grantor, including those listed on Schedule I attached hereto; and

(b) all Proceeds of any and all of the foregoing (other than Excluded Property).

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and each Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control.

SECTION 4. Termination. Upon the release of the Lien provided for in the Security Agreement (as set forth in the Security Agreement and/or the Credit Agreement, as the case may be) with respect to all or any portion of the Applicable Collateral (including in connection with the Disposition thereof), the Collateral Agent shall execute, acknowledge, and deliver to each Grantor an instrument in writing in recordable form releasing the collateral pledge, grant, assignment, lien and security interest in all or such portion of the Applicable Collateral under this Patent Security Agreement.

SECTION 5. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.

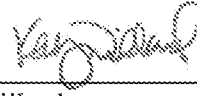
[signature pages follow]

IN WITNESS WHEREOF, each Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Very truly yours,

LIVE NATION ENTERTAINMENT, INC.

By:

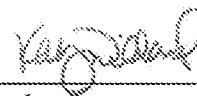


Name: Kathy Willard

Title: Chief Financial Officer

LIVE NATION WORLDWIDE, INC.

By:

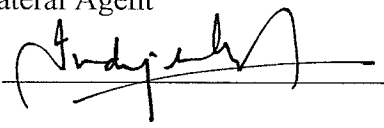


Name: Kathy Willard

Title: President, Chief Financial
Officer and Assistant Secretary

Accepted and Agreed:

JPMORGAN CHASE BANK, N.A.,
as Collateral Agent

By: 
Name: _____
Title: Inderjeet Singh Aneja
Vice President

[U.S. Patent Security Agreement Supplement]

PATENT
REEL: 050754 FRAME: 0512

SCHEDULE I
to
PATENT SECURITY AGREEMENT
PATENT REGISTRATIONS AND PATENT APPLICATIONS
PATENTS

Title	Application No. Application Date	(Publication No.) Patent No. Issue Date	Comments
Systems And Methods For Leveraging Social Queuing To Facilitate Event Ticket Distribution	14595797 2015-01-13	9466035 2016-10-11	Live Nation Entertainment, Inc.
Systems and methods for leveraging social queuing to simulate ticket purchaser behavior	14595886 2015-01-13	10102544 2018-10-16	Live Nation Entertainment, Inc.
Systems and methods for leveraging social queuing to identify and prevent ticket purchaser simulation	14595840 2015-01-13	10078851 2018-09-18	Live Nation Entertainment, Inc.
Systems And Methods For Leveraging Social Queuing To Facilitate Event Ticket Distribution	15099750 2016-04-15	9639811 2017-05-02	Live Nation Entertainment, Inc.
Prioritized link establishment for data transfer using task scheduling	15337949 2016-10-28	9798892 2017-10-24	Live Nation Entertainment, Inc.
Systems and methods for scalable-factor authentication	15367862 2016-12-02	9819684 2017-11-14	Live Nation Entertainment, Inc.
Triggered queue transformation	15380132 2016-12-15	9690624 2017-06-27	Live Nation Entertainment, Inc.
Controlled token distribution to protect against malicious data and resource access	15390265 2016-12-23	9912653 2018-03-06	Live Nation Entertainment, Inc.
Establishing communication links using routing protocols	15393902 2016-12-29	10051018 2018-08-14	Live Nation Entertainment, Inc.
Location-based task execution for enhanced data access	15395539 2016-12-30	10299189 2019-05-21	Live Nation Entertainment, Inc.
Establishing communication links using routing protocols	15395940 2016-12-30	9954907 2018-04-24	Live Nation Entertainment, Inc.
Enhanced task scheduling for data access control using queue protocols	15395019 2016-12-30	9805179 2017-10-31	Live Nation Entertainment, Inc.
Decentralized virtual trustless ledger for access control	15423452 2017-02-02	9792742 2017-10-17	Live Nation Entertainment, Inc.
System and method for using unique device identifiers to enhance security	15627231 2017-06-19	10102393 2018-10-16	Live Nation Entertainment, Inc.
Triggered queue transformation	15633119 2017-06-26	9870259 2018-01-16	Live Nation Entertainment, Inc.
Systems and methods for short-range communication between devices	15634578 2017-06-27	10282929 2019-05-07	Live Nation Entertainment, Inc.
Systems and methods for sensor-based layer variation on mobile devices	15655412 2017-07-20	9892252 2018-02-13	Live Nation Entertainment, Inc.
Event saturation networking	15670398 2017-08-07	10397335 2019-08-27	Live Nation Entertainment, Inc.

Title	Application No. Application Date	(Publication No.) Patent No. Issue Date	Comments
System and method for using unique device identifiers to enhance security	15682271 2017-08-21	9978023 2018-05-22	Live Nation Entertainment, Inc.
Decentralized virtual trustless database for access control	15700563 2017-09-11	10424140 2019-09-24	Live Nation Entertainment, Inc.
Prioritized link establishment for data transfer using task scheduling	15790407 2017-10-23	10242218 2019-03-26	Live Nation Entertainment, Inc.
Enhanced task scheduling for data access control using queue protocols	15797032 2017-10-30	10049196 2018-08-14	Live Nation Entertainment, Inc.
Systems and methods for scalable-factor authentication	15811078 2017-11-13	10187390 2019-01-22	Live Nation Entertainment, Inc.
Sensor-based human authorization evaluation	15830543 2017-12-04	10230729 2019-03-12	Live Nation Entertainment, Inc.
Enhanced Load Processing Using Linked Hierarchical Data Structures	15830464 12/4/2017	(20180191723)	Live Nation Entertainment, Inc. ¹
Triggered queue transformation	15871735 2018-01-15	10228971 2019-03-12	Live Nation Entertainment, Inc.
Systems and methods for sensor-based layer variation on mobile devices	15894410 2018-02-12	10146928 2018-12-04	Live Nation Entertainment, Inc.
Methods and systems for reducing burst usage of a networked computer system	15899001 2018-02-19	10355936 2019-07-16	Live Nation Entertainment, Inc.
Controlled token distribution to protect against malicious data and resource access	15911997 2018-03-05	10305881 2019-05-28	Live Nation Entertainment, Inc.
Iterative And Hierarchical Processing Of Request Partitions	15948749 2018-04-09	(20180329751)	Live Nation Entertainment, Inc.
Biased Ticket Offers For Actors Identified Using Dynamic Assessments Of Actors' Attributes	15960208 2018-04-23	(20180357573)	Live Nation Entertainment, Inc.
System And Method For Dynamic Queue Management Using Queue Protocols	15967106 4/30/2018	(20180278538)	Live Nation Entertainment, Inc.
Systems and methods for objective-based scoring using machine learning techniques	15983475 2018-05-18	10205728 2019-02-12	Live Nation Entertainment, Inc.
Systems and methods for big-data resource management	16007646 2018-06-13	10298593 2019-05-21	Live Nation Entertainment, Inc.
Enhanced Real-Time Linking Methods And Systems	16012255 2018-06-19	(20180367469)	Live Nation Entertainment, Inc.
Short-Range Device Communications For Secured Resource Access	16017150 2018-06-25	(20190073845)	Live Nation Entertainment, Inc.
Systems Methods And Apparatus For Generation Of A Database Object	62690131 6/26/2018		Live Nation Entertainment, Inc.
Establishing Communication Links Using Routing Protocols	16102311 2018-08-13	(20190075140)	Live Nation Entertainment, Inc.

Title	Application No. Application Date	(Publication No.) Patent No. Issue Date	Comments
Enhanced Task Scheduling For Data Access Control Using Queue Protocols	16102280 2018-08-13	(20190073458)	Live Nation Entertainment, Inc.
Systems And Methods For Leveraging Social Queuing To Identify And Prevent Ticket Purchaser Simulation	16132584 2018-09-17	(20190087858)	Live Nation Entertainment, Inc.
Generating Augmented Reality Images Using Sensor And Location Data	16154216 2018-10-08	(20190108684)	Live Nation Entertainment, Inc.
System and method for using unique device identifiers to enhance security	16160867 2018-10-15	10402580 2019-09-03	Live Nation Entertainment, Inc.
Systems And Methods For Leveraging Social Queuing To Simulate Ticket Purchaser Behavior	16160836 2018-10-15	(20190050899)	Live Nation Entertainment, Inc.
Systems And Methods For Sensor-Based Layer Variation On Mobile Devices	16172400 2018-10-26	10430576 2019-10-01	Live Nation Entertainment, Inc.
Systems And Methods For Dynamic Queue Control Using Machine Learning Techniques	16195568 11/19/2018		Live Nation Entertainment, Inc.
Enhanced Pricing Modifications Using Contextual Models With Reinforcement Learning	62779750 12/14/2018		Live Nation Entertainment, Inc.
Systems And Methods For Scalable-Factor Authentication	16252164 2019-01-18	(20190230082)	Live Nation Entertainment, Inc.
Systems and methods for objective-based scoring using machine learning techniques	16272761 2019-02-11	10419440 2019-09-17	Live Nation Entertainment, Inc.
Enhanced Processing And Verification Of Digital Access Rights	16275064 2019-02-13	(20190251281)	Live Nation Entertainment, Inc.
Digital Securitization, Obfuscation, Policy And Commerce Of Event Tickets	16283506 2019-02-22	(20190188653)	Live Nation Entertainment, Inc.
Systems And Methods For Dynamic, Rule-Based Queue Control	62814644 3/6/2019		Live Nation Entertainment, Inc.
Sensor-Based Human Authorization Evaluation	16298453 2019-03-11	(20190273741)	Live Nation Entertainment, Inc.
Triggered Queue Transformation	16298536 2019-03-11	(20190272195)	Live Nation Entertainment, Inc.
Prioritized Link Establishment For Data Transfer Using Task Scheduling	16363392 2019-03-25	(20190286835)	Live Nation Entertainment, Inc.
Systems And Methods For Short-Range Communication Between Devices	16404361 2019-05-06	(20190259228)	Live Nation Entertainment, Inc.
Enhanced Ticket Processing Using Metadata Driven Blockchain Optimization Techniques	62846381 5/10/2019		Live Nation Entertainment, Inc.
Location-Based Task Execution For Enhanced Data Access	16415109 2019-05-17	(20190281531)	Live Nation Entertainment, Inc.
Systems And Methods For Big-Data Resource Management	16417366 2019-05-20	(20190273745)	Live Nation Entertainment, Inc.
Controlled Token Distribution To Protect Against Malicious Data And Resource Access	16421925 5/24/2019		Live Nation Entertainment, Inc.

Title	Application No. Application Date	(Publication No.) Patent No. Issue Date	Comments
Systems Methods And Apparatus For Generation Of A Database Object	16452137 6/25/2019		Live Nation Entertainment, Inc.
Partial Uses Of Clustered Access Rights	16504706 7/8/2019		Live Nation Entertainment, Inc.
Methods And Systems For Reducing Burst Usage Of A Networked Computer System	16511880 7/15/2019		Live Nation Entertainment, Inc.
Enhanced Fraud Modeling Using Machine-Learning Techniques	62879206 7/26/2019		Live Nation Entertainment, Inc.
Apparatus For Access Control And Processing	16524985 7/29/2019		Live Nation Entertainment, Inc.
Dynamic Filtering And Precision Alteration Of Query Responses Responsive To Request Load	16538095 8/12/2019		Live Nation Entertainment, Inc.
Event Saturation Networking	16547393 8/21/2019		Live Nation Entertainment, Inc.
System And Method For Using Unique Device Identifiers To Enhance Security	16556434 8/30/2019		Live Nation Entertainment, Inc.
Decentralized Virtual Trustless Database For Access Control	16579061 9/12/2019		Live Nation Entertainment, Inc.
Systems And Methods For Objective-Based Scoring Using Machine Learning Techniques	16572026 9/16/2019		Live Nation Entertainment, Inc.
Systems And Methods For Securing Ticket Access Using Cryptography And The Blockchain	62904357 9/23/2019		Live Nation Entertainment, Inc.
Live Concert/Event Video System And Method	16571369 9/16/2019		Live Nation Worldwide, Inc.
Live Concert/Event Video System And Method	15/790,362 10/23/2017	10419827 9/17/2019	Live Nation Worldwide, Inc.