

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3277767

|                              |                    |
|------------------------------|--------------------|
| <b>SUBMISSION TYPE:</b>      | NEW ASSIGNMENT     |
| <b>NATURE OF CONVEYANCE:</b> | SECURITY AGREEMENT |

**CONVEYING PARTY DATA**

| Name                              | Execution Date |
|-----------------------------------|----------------|
| GRACENOTE, INC.                   | 03/06/2015     |
| TRIBUNE BROADCASTING COMPANY, LLC | 03/06/2015     |
| TRIBUNE DIGITAL VENTURES, LLC     | 03/06/2015     |

**RECEIVING PARTY DATA**

|                          |                                     |
|--------------------------|-------------------------------------|
| <b>Name:</b>             | JPMORGAN CHASE BANK, N.A., AS AGENT |
| <b>Street Address:</b>   | 10 S. DEARBORN                      |
| <b>Internal Address:</b> | 7TH FLOOR                           |
| <b>City:</b>             | CHICAGO                             |
| <b>State/Country:</b>    | ILLINOIS                            |
| <b>Postal Code:</b>      | 60603                               |

**PROPERTY NUMBERS Total: 37**

| Property Type       | Number   |
|---------------------|----------|
| Patent Number:      | 8955025  |
| Patent Number:      | 8955026  |
| Patent Number:      | 8953891  |
| Application Number: | 62099398 |
| Application Number: | 62099399 |
| Application Number: | 62099401 |
| Application Number: | 14632140 |
| Application Number: | 14556636 |
| Application Number: | 14584720 |
| Application Number: | 14584972 |
| Application Number: | 14584975 |
| Application Number: | 62111474 |
| Application Number: | 14622366 |
| Application Number: | 14626592 |
| Application Number: | 14626598 |
| Application Number: | 14627119 |
| Application Number: | 14627164 |

PATENT

| Property Type       | Number    |
|---------------------|-----------|
| Application Number: | 14628771  |
| Application Number: | 14636575  |
| PCT Number:         | US1466428 |
| PCT Number:         | US1471105 |
| PCT Number:         | US1472977 |
| PCT Number:         | US1516458 |
| PCT Number:         | US1517271 |
| PCT Number:         | US1471206 |
| PCT Number:         | US1472217 |
| PCT Number:         | US1472111 |
| PCT Number:         | US1472641 |
| PCT Number:         | US1472652 |
| PCT Number:         | US1472653 |
| PCT Number:         | US1472812 |
| PCT Number:         | US1472817 |
| PCT Number:         | US1472821 |
| PCT Number:         | US1472825 |
| PCT Number:         | US1472829 |
| PCT Number:         | US1472830 |
| PCT Number:         | US1472836 |

#### CORRESPONDENCE DATA

**Fax Number:** (800)494-7512

*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.*

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**Correspondent Name:** DWAYNE C. HOUSTON

**Address Line 1:** 1025 VERMONT AVENUE NW, SUITE 1130

**Address Line 2:** NATIONAL CORPORATE RESEARCH, LTD.

**Address Line 4:** WASHINGTON, D.C. 20005

|                                |                     |
|--------------------------------|---------------------|
| <b>ATTORNEY DOCKET NUMBER:</b> | F154639             |
| <b>NAME OF SUBMITTER:</b>      | KAREN S. COTTRELL   |
| <b>SIGNATURE:</b>              | /Karen S. Cottrell/ |
| <b>DATE SIGNED:</b>            | 03/23/2015          |

#### Total Attachments: 8

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**NOTICE AND CONFIRMATION OF GRANT OF  
SECURITY INTEREST IN PATENTS**

NOTICE AND CONFIRMATION OF GRANT OF SECURITY INTEREST IN PATENTS (the "Agreement"), dated as of March 6, 2015, made by each of the Grantors indicated on the signature pages hereto (the "Grantors") in favor of JPMORGAN CHASE BANK, N.A., as Collateral Agent (the "Agent") for the Lenders that are parties to the Credit Agreement, dated as of December 27, 2013, among the Tribune Company (the "Borrower"), the Lenders and the Agent (as amended, supplemented, waived or otherwise modified from time to time, the "Credit Agreement").

WHEREAS, pursuant to the Credit Agreement, the Lenders have severally agreed to make loans to the Borrower subject to the terms and conditions set forth therein; and

WHEREAS, in connection with the Credit Agreement, the Grantors and the other parties thereto have executed and delivered a Security Agreement, dated as of December 27, 2013, in favor of the Agent (together with all amendments, supplements, waivers and other modifications, if any, from time to time thereafter made thereto, the "Security Agreement"); and

WHEREAS, pursuant to the Security Agreement, each Grantor granted to the Agent, for the ratable benefit of the Secured Parties, a security interest in all of its Intellectual Property, including the Patents; and

WHEREAS, each Grantor has duly authorized the execution, delivery and performance of this Agreement;

NOW THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, each Grantor agrees as follows:

1. Definitions. Unless otherwise defined herein or the context otherwise requires, terms used in this Agreement, including its preamble and recitals, have the meanings provided or provided by reference in the Credit Agreement and the Security Agreement.
2. Confirmation of Grant of Security Interest. Each Grantor hereby confirms that it granted to the Agent, for the benefit of the Secured Parties, a security interest in and continuing lien on all of such Grantor's right, title and interest in (subject only to Liens permitted under the Credit Agreement) and to all Patents now owned or anytime hereafter acquired by such Grantor or in which such Grantor now has or at any time in the future may acquire any right, title and interest, including without limitation those Patents set forth on Schedule I hereto, and, to the extent not otherwise included, all Proceeds and products of any and all of the foregoing and all collateral security and

guarantees given by any Person with respect to the foregoing as collateral security for the prompt and complete payment and performance when due (whether as stated maturity, by acceleration or otherwise) of the Guaranteed Obligations; provided, however, that no security interest is granted in any Excluded Property.

3. Purpose. This Agreement has been executed and delivered by each Grantor for the purpose of recording the grant of security interest with the United States Patent and Trademark Office. This Agreement is expressly subject to the terms and conditions of the Security Agreement. The Security Agreement (and all rights and remedies of the Lenders thereunder) shall remain in full force and effect in accordance with its terms.

4. Acknowledgment. Each Grantor does hereby further acknowledge and affirm that the rights and remedies of the Lenders with respect to the security interest in the Patents are more fully set forth in the Credit Agreement and the Security Agreement, the terms and provisions of which (including the remedies provided for therein) are incorporated by reference herein as if fully set forth herein.

5. Counterparts. This Agreement may be executed in one or more counterparts (and by different parties hereto in different counterparts), each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery by telecopier or other electronic transmission of an executed counterpart of a signature page to this Agreement shall be effective as delivery of an original executed counterpart of this Agreement. The Agent may also require that any such documents and signatures delivered by telecopier or other electronic transmission be confirmed by a manually-signed original thereof; provided that the failure to request or deliver the same shall not limit the effectiveness of any document or signature delivered by telecopier or other electronic transmission.

\* \* \*

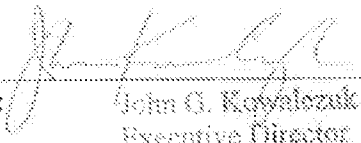
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IN WITNESS WHEREOF, each Grantor and the Agent have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the day and year first above written.

GRACENOTE, INC.;  
TRIBUNE BROADCASTING  
COMPANY, LLC; and  
TRIBUNE DIGITAL VENTURES, LLC,  
each as a Grantor

By: \_\_\_\_\_  
Name:  
Title:

JPMORGAN CHASE BANK, N.A.,  
as Agent

By:  \_\_\_\_\_  
Name: John G. Kowaleczuk  
Title: Executive Director

IN WITNESS WHEREOF, each Grantor and the Agent have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the day and year first above written.

**GRACENOTE, INC.;**  
**TRIBUNE BROADCASTING**  
**COMPANY, LLC; and**  
**TRIBUNE DIGITAL VENTURES, LLC,**  
each as a Grantor

By: \_\_\_\_\_

Name: *Jack Robben*

Title: *Asst. Treasurer*

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

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

# SCHEDULE I

## Issued Patents

| <u>Title</u>  | <u>Reg. No.</u> | <u>Issue Date</u> | <u>Owner</u>                      |
|---|-----------------|-------------------|-----------------------------------|
| System and method for Rejoining a Traffic Log Mode After a Breakout in a Broadcasting Environment | 8,955,025       | 2/10/2015         | Tribune Broadcasting Company, LLC |
| System and Method for Extending a Breakout in a Broadcasting Environment                          | 8,955,026       | 2/10/2015         | Tribune Broadcasting Company, LLC |
| Systems and Methods for Identifying a Black/Non-Black Frame Attribute                             | 8,953,891       | 2/10/2015         | Tribune Broadcasting Company, LLC |

## Pending Patent Applications

| <u>Title</u>   | <u>App. No.</u> | <u>Filing Date</u> | <u>Owner</u>    |
|--|-----------------|--------------------|-----------------|
| Media Service  | PCT/US14/66428  | 11/19/2014         | Gracenote, Inc. |
| Modifying Operations Based on Acoustic Ambience Classification | PCT/US14/71105  | 12/18/2014         | Gracenote, Inc. |
| Interactive Programming Guide                                  | PCT/US14/72977  | 12/31/2014         | Gracenote, Inc. |
| Approaches for Categorizing Content Stations                   | 62/099398       | 1/2/2015           | Gracenote, Inc. |
| Approaches for Recognizing Live Performances                   | 62/099399       | 1/2/2015           | Gracenote, Inc. |
| Approaches for Selecting Music Mood                            | 62/099401       | 1/2/2015           | Gracenote, Inc. |



| <b>Title</b>   | <b>App. No.</b> | <b>Filing Date</b> | <b>Owner</b>                       |
|--|-----------------|--------------------|------------------------------------|
| Systems, methods and Apparatus for Generating an Audio-Visual Presentation Using Characteristics of Audio, Visual and Symbolic Media Objects | 14/632140       | 2/26/15            | Gracenote, Inc.                    |
| Systems and methods for Using Caller Data to Set an Operational Mode of a Phone Switch   | 2872209         | 11/21/2014         | Tribune Broadcasting Company, Inc. |
| News Production System with Dynamic Media Server   | 14/556636       | 12/1/2014          | Tribune Broadcasting Company, LLC  |
| System and Method for Rejoining A Traffic Log Mode After a Breakout In A Broadcasting Environment  | 14/584720       | 12/29/14           | Tribune Broadcasting Company, LLC  |
| System and Method for Extending A Breakout In A Broadcasting Environment   | 14/584972       | 12/29/14           | Tribune Broadcasting Company, LLC  |
| Systems and Methods for Identifying A Black/Non-Black Frame Attribute  | 14/584975       | 12/29/14           | Tribune Broadcasting Company, LLC  |
| Method and System for Localized Replacement of Base Content in Video Feed, with Replacement-Media Delivered in Broadcast-TV Transport Stream | 62/111474       | 2/3/15             | Tribune Broadcasting Company, LLC  |
| System and Methods for Determining A Time Period Remaining Until A Live Production System Changes State                                      | 14/622366       | 2/13/15            | Tribune Broadcasting Company, LLC  |
| Using a Digital Video Effect to Generate a Video Stream  | PCT/US15/16458  | 2/18/15            | Tribune Broadcasting Company, Inc. |

| <b>Title</b>  | <b>App. No.</b>   | <b>Filing Date</b> | <b>Owner</b>                      |
|---|-------------------|--------------------|-----------------------------------|
| Use of A Program Schedule to Modify An Electronic Dictionary of A Closed-Captioning Generator                             | 14/626592         | 2/19/15            | Tribune Broadcasting Company, LLC |
| Use of A Program Schedule To Facilitate Modifying Closed-Captioning Text  | 14/626598         | 2/19/15            | Tribune Broadcasting Company, LLC |
| Use of Program-Schedule Text and Closed Captioning Text to Facilitate Selection of a Portion of a Media-Program Recording | 14/627119         | 2/20/15            | Tribune Broadcasting Company, LLC |
| Use of Program-Schedule Text and Teleprompter Output to Facilitate Selection of a Portion of a Media-Program Recording    | 14/627164         | 2/20/15            | Tribune Broadcasting Company, LLC |
| News Production System With Device Control Using Multiple Protocols   | 14/628771         | 2/23/15            | Tribune Broadcasting Company, LLC |
| News Production System with Display Controller  | PCT/US15/17271    | 2/24/15            | Tribune Broadcasting Company, LLC |
| Broadcast TV Delivery of Replacement Commercials  | 14/636575         | 3/3/15             | Tribune Broadcasting Company, LLC |
| Systems and Methods for Using Caller Data to Set an Operational Mode of a Phone Switch                                    | 2872209<br>Canada | 11/21/14           | Tribune Broadcasting Company, LLC |
| Playout of Audible Punctuation in Connection With Playout of Playlist Content   | PCT/US14/71206    | 12/18/14           | Tribune Digital Ventures, LLC     |
| Personalized News Program   | PCT/US14/72217    | 12/23/14           | Tribune Digital Ventures, LLC     |
| Real Time Popularity Based Audible Content Acquisition  | PCT/US14/72111    | 12/23/14           | Tribune Digital Ventures, LLC     |

| <b>Title</b>  | <b>App. No.</b> | <b>Filing Date</b> | <b>Owner</b>                  |
|---|-----------------|--------------------|-------------------------------|
| Audio File Quality and Accuracy Assessment                              | PCT/US14/72641  | 12/30/14           | Tribune Digital Ventures, LLC |
| Use of an Anticipated Travel Duration as a Basis to Generate a Playlist | PCT/US14/72652  | 12/30/14           | Tribune Digital Ventures, LLC |
| Use of A Remainder Duration as a Basis to Generate a Playlist           | PCT/US14/72653  | 12/30/14           | Tribune Digital Ventures, LLC |
| Generating a Playlist Based on a Data Generation Attribute              | PCT/US14/72812  | 12/30/14           | Tribune Digital Ventures, LLC |
| Retrieval and Payout of Media Content                                   | PCT/US14/72817  | 12/30/14           | Tribune Digital Ventures, LLC |
| Retrieval and Payout of Media Content                                   | PCT/US14/72821  | 12/30/14           | Tribune Digital Ventures, LLC |
| Retrieval and Payout of Media Content                                   | PCT/US14/72825  | 12/30/14           | Tribune Digital Ventures, LLC |
| Personalized News Program   | PCT/US14/72829  | 12/30/14           | Tribune Digital Ventures, LLC |
| Retrieval and Payout of Media Content                                   | PCT/US14/72830  | 12/30/14           | Tribune Digital Ventures, LLC |
| Method for Generating Data Representing Text                            | PCT/US14/72836  | 12/30/14           | Tribune Digital Ventures, LLC |