



- (51) International Patent Classification:  
*G06F 3/00* (2006.01)
- (21) International Application Number:  
PCT/US2012/039095
- (22) International Filing Date:  
23 May 2012 (23.05.2012)
- (25) Filing Language:  
English
- (26) Publication Language:  
English
- (30) Priority Data:  
61/519,505 24 May 2011 (24.05.2011) US  
61/575,075 15 August 2011 (15.08.2011) US  
13/409,725 1 March 2012 (01.03.2012) US  
13/409,764 1 March 2012 (01.03.2012) US

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

— with international search report (Art. 21(3))

(88) Date of publication of the international search report:  
28 March 2013

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(54) Title: A SYSTEM FOR GENERATING AUDIENCE INTERACTION WITH RADIO PROGRAMMING

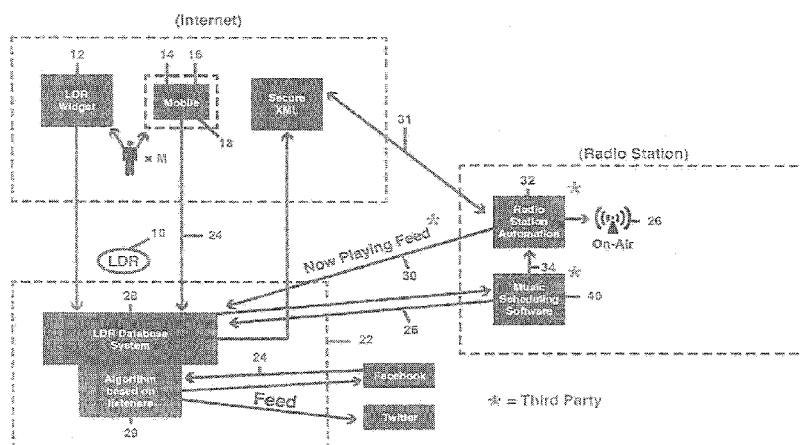


FIG. 1

(57) Abstract: A system of capturing real-time audience interaction via a web-based user interface and automatically adjusting a radio station's programming through a unique direct interface with the radio station's studio operating system and/or music scheduling system. Audience participation is collected and processed using an algorithm to determine how a radio station's programming should be manipulated to fit the preferences of the audience. Audiences are also empowered to invite friends to vote and share their votes via Social media, such as Facebook and Twitter or sign up for alerts via e-mail, SMS, Twitter, and other means to be notified when their chosen songs are about to play. Also, a software system is provided which links a broadcast station operating system or playback system via the internet to an external data source, such as a separate audience participation system for providing audience interaction with broadcast programming.



**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US12/39095

<p><b>A. CLASSIFICATION OF SUBJECT MATTER</b>                  IPC(8) - G06F 3/00 (2012.01)                  USPC - 725/ 9, 24, 58                  According to International Patent Classification (IPC) or to both national classification and IPC</p>																			
<p><b>B. FIELDS SEARCHED</b></p> <p>Minimum documentation searched (classification system followed by classification symbols)                  IPC(8): G06F 3/00, 13/00; G06Q 10/00, 30/00; H04N 5/445, 7/16, 60/32 (2012.01)                  USPC: 725/4, 9, 13, 14, 16, 46, 58; 705/7.32, 14.66</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)                  MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C,B, DE-A, DE-T, DE-U, GB-A, FR-A); Google/Google Scholar; IEEE; DialogPRO; audience, listener, interact, communicate, vote, poll, survey, feedback, participate, radio, broadcast, schedule, program, criteria, guide, selection, choice, secure, safe</p>																			
<p><b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b></p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X ---</td> <td rowspan="2">US 2009/0157731 A1 (ZIGLER J, et al.) June 18, 2009, paragraphs [0029], [0031], [0035], [0062], [0064], [0065]</td> <td>23-26, 28-31 and 33-36</td> </tr> <tr> <td>Y</td> <td>1-22, 27, 32 and 37-41</td> </tr> <tr> <td>Y</td> <td>US 2009/0063511 A1 (MYERS T, et al.) March 5, 2009, figures 3, 4, 13, paragraphs [0027], [0028], [0031], [0041], [0044], [0052], [0057], [0058], [0060]</td> <td>1-22, 27, 32 and 37-41</td> </tr> <tr> <td>Y</td> <td>US 7,698,723 B2 (HICKS III, J, et al.) April 13, 2010, column 4, lines 46-54</td> <td>6, 15 and 20</td> </tr> <tr> <td>Y</td> <td>US 2011/0067044 A1 (ALBO R) March 17, 2011, paragraphs [0024], [0028], [0031], [0033], [0037]</td> <td>12, 13, 18-20 and 22</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X ---	US 2009/0157731 A1 (ZIGLER J, et al.) June 18, 2009, paragraphs [0029], [0031], [0035], [0062], [0064], [0065]	23-26, 28-31 and 33-36	Y	1-22, 27, 32 and 37-41	Y	US 2009/0063511 A1 (MYERS T, et al.) March 5, 2009, figures 3, 4, 13, paragraphs [0027], [0028], [0031], [0041], [0044], [0052], [0057], [0058], [0060]	1-22, 27, 32 and 37-41	Y	US 7,698,723 B2 (HICKS III, J, et al.) April 13, 2010, column 4, lines 46-54	6, 15 and 20	Y	US 2011/0067044 A1 (ALBO R) March 17, 2011, paragraphs [0024], [0028], [0031], [0033], [0037]	12, 13, 18-20 and 22
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<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/></p>																			
<p>* Special categories of cited documents:</p> <table border="0"> <tr> <td>“A” document defining the general state of the art which is not considered to be of particular relevance</td> <td>“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>“E” earlier application or patent but published on or after the international filing date</td> <td>“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>“L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>“O” document referring to an oral disclosure, use, exhibition or other means</td> <td>“&amp;” document member of the same patent family</td> </tr> <tr> <td>“P” document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			“A” document defining the general state of the art which is not considered to be of particular relevance	“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	“E” earlier application or patent but published on or after the international filing date	“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	“L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	“O” document referring to an oral disclosure, use, exhibition or other means	“&” document member of the same patent family	“P” document published prior to the international filing date but later than the priority date claimed								
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<p>Date of the actual completion of the international search 04 October 2012 (04.10.2012)</p>		<p>Date of mailing of the international search report <b>27 NOV 2012</b></p>																	
<p>Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201</p>		<p>Authorized officer: Shane Thomas  PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774</p>																	

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US12/39095

**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

Group I: Claims 1-22; Group II: Claims 23-41

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fee must be paid.

Group I: Claims 1-22 are directed toward an audience interaction system which interfaces with a radio station scheduling system which determines a radio station play schedule including gathering audience selection votes and an algorithm which processes the audience selection votes and manipulates the radio station play schedule based on the algorithm.

.-\*\*\*-Continued Within the Extra Page-\*\*\*-

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

-Continued from Box No. III: Observations where unity of invention is lacking-

Group II: Claims 23-41 are directed toward a software link with a broadcast station operating system with a station play schedule having a file at a file location, an external data source which determines a selection base upon audience criteria, the software link determines the existence of the file and places a placeholder at the file location in the broadcast station play schedule and to cause the broadcast station operating system to play the selection on-air.

The common technical feature shared by Groups I and II are an audience interaction system which interfaces with a radio station scheduling system which determines a radio station play schedule including gathering audience selection votes and manipulating the radio station play schedule. However, this common feature is previously disclosed by US 2002/0065034 A1 (Zhang). Zhang discloses an audience interaction system which interfaces with a radio station scheduling system (a radio announcer 70, a broadcast producer 60, a broadcast scheduler 63 or a syndicator 61, figure 9, paragraph [0082]) which determines a radio station play schedule including gathering audience selection votes (response and interaction data generated by the audience by "polling" which can be voting, paragraphs [0104] and [0105]) and manipulates the radio station play schedule (the programming update function 220 will publish and send the latest schedule to all stations, paragraph [0073]).

Since the common technical feature is previously disclosed by the Zhang reference, this common feature is not special and so Groups I and II lack unity.