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(12) United States Patent

Qureshey et al.

(54) METHOD AND DEVICE FOR AN INTERNET RADIO CAPABLE OF OBTAINING PLAYLIST CONTENT FROM A CONTENT SERVER

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See application file for complete search history.

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(56) References Cited

U.S. PATENT DOCUMENTS

3,291,919 A 12/1966 Robitaille (Continued)

FOREIGN PATENT DOCUMENTS

0984584 A1 3/2000

(Continued)

OTHER PUBLICATIONS

"A Music Revolution . . . SoundServer," imerge, 2 pages.

(Continued)

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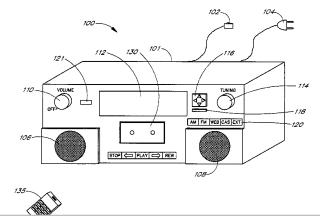
EP

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(57) ABSTRACT

A network-enabled audio device that provides a display device that allows the user to select playlists of music much like a jukebox is disclosed. The user can compose playlists from disk files, CD's, Internet streaming audio broadcasts, online music sites, and other audio sources. The user can also select a desired Web broadcast from a list of available Web broadcasts. In addition, the user can play standard audio CD's and MP3 encoded CD's and have access to local AM/FM $\,$ stations. Further, the software, the user controls, and the display in the network-enabled audio device are operably configured and connected such that the user can listen to playlists that include CD's and other audio sources just as the user would choose a playlist in a jukebox. The user accesses a server site via a PC and the Internet. From the server site, the user obtains a list of the devices in his or her Internet Personal Audio Network (IPAN) and what songs are on those devices. The IPAN includes an IPAN server, an IPAN client, and IPAN software stored on the network-enabled audio device. Thus, the network-enabled audio device provides people who are or are not comfortable with computers a way of taking music from various sources and putting it into one place for listening pleasure. In one embodiment, the Personal Computer (PC) is used to compose the playlists, but the user is able to listen to playlists and other audio sources without using the PC.

64 Claims, 49 Drawing Sheets



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U.S. PATENT DOCUMENTS

U	I.S. PATEN	Γ DOCUMENTS
4,682,370 A	7/1987	Matthews
4,720,873 A		
4,920,432 A		66
5,035,438 A 5,119,188 A		.
5,117,108 A		
5,129,036 A		_ ^ _
5,168,481 A	A 12/1992	2 Culbertson et al.
5,189,630 A		
5,191,573 A 5,192,999 A		
5,192,999 A 5,215,466 A		
5,262,875 A		
5,282,028 A	A 1/1994	
5,305,438 A		
5,349,678 A 5,351,276 A		
5,351,276 A 5,414,455 A		
5,440,334 A		
5,440,336 A		
5,455,570 A		
5,475,835 A		
5,481,535 A 5,512,935 A		
5,526,284 A		5
5,534,913 A		
5,539,635 A	x 7/1996	
5,544,161 A		
5,557,541 A		
5,568,645 A 5,570,134 A		
5,572,442 A		U
5,583,763 A		
5,592,511 A		
5,594,779 A		
5,617,565 A 5,625,608 A		
5,625,608 A 5,629,867 A		
5,636,211 A		
5,640,193 A	6/1997	Wellner
5,652,841 A		
5,654,886 A 5,671,436 A		
5,671,436 A 5,673,322 A		
5,682,525 A		•
5,684,799 A		Bigham et al.
5,710,970 A		
5,727,048 A		
5,740,035 A 5,768,527 A		
5,809,246 A		
5,812,937 A		
5,818,512 A		
5,819,160 A		
5,844,893 A 5,850,340 A		
5,852,610 A		
5,857,149 A		
5,862,171 A		5
5,870,390 A		1
5,873,045 A 5,880,721 A		
5,890,152 A		
5,892,536 A		
5,905,865 A		
5,907,831 A		
5,914,941 A 5,918,223 A		
5,918,223 A 5,930,765 A		
5,943,398 A		
5,948,084 A	A 9/1999) Ha
5,949,492 A		
5,949,877 A 5,990,868 A		
5,990,868 A 5,991,693 A		
5,991,737 A		

DOCKE

LARM

Α

6,014,569 A	1/2000	Bottum
6,035,350 A	3/2000	Swamy et al.
6,064,379 A	5/2000	DeMoney
6,067,562 A 6,088,455 A	5/2000 7/2000	Goldman Logan et al.
6,105,060 A	8/2000	Rothblatt
6,108,686 A	8/2000	Williams, Jr.
6,182,128 B1	1/2001	Kelkar et al.
6,192,340 B1	2/2001	Abecassis
6,199,076 B1 6,204,885 B1	3/2001 3/2001	Logan et al. Kwoh
6,226,672 B1	5/2001	DeMartin et al.
6,229,621 B1	5/2001	Kulakowski et al.
6,233,430 B1	5/2001	Helferich
6,233,682 B1 6,248,946 B1	5/2001 6/2001	Fritsch Dwek
6,253,069 B1	6/2001	Mankovitz
6,295,093 B1	9/2001	Park et al.
6,295,555 B1	9/2001	Goldman
6,349,329 B1 6,349,339 B1	2/2002	Mackintosh et al. Williams
6,349,339 B1 6,389,467 B1	2/2002 5/2002	Eyal
6,473,792 B1	10/2002	Yavitz et al.
6,484,199 B2	11/2002	Eyal
6,502,194 B1	12/2002	Berman et al.
6,505,160 B1 6,507,727 B1	1/2003 1/2003	Levy et al. Henrick
6,519,648 B1	2/2003	Eyal
6,587,127 B1	7/2003	Leeke et al.
6,600,898 B1	7/2003	De Bonet et al.
6,609,096 B1 6,628,928 B1	8/2003 9/2003	De Bonet et al. Cresby et al
6,628,928 B1 6,647,389 B1	11/2003	Crosby et al. Fitch et al.
6,657,116 B1	12/2003	Gunnerson
6,662,231 B1	12/2003	Drosset et al.
6,701,355 B1	3/2004	Brandt et al.
6,711,622 B1 6,721,403 B1	3/2004 4/2004	Fuller et al. Mandalia
6,721,741 B1	4/2004	Eyal et al.
6,725,275 B2	4/2004	Eyal
6,735,628 B2	5/2004	Eyal
6,741,869 B1 6,782,253 B1	5/2004 8/2004	Lehr Shteyn et al.
6,793,142 B2	9/2004	Yap
6,826,283 B1	11/2004	Wheeler et al.
6,829,475 B1	12/2004	Lee et al.
6,925,489 B1 6,933,433 B1	8/2005 8/2005	Curtin Porteus et al.
6,933,433 B1 6,982,780 B2	1/2005	Morley et al.
6,985,694 B1	1/2006	De Bonet et al.
7,010,263 B1	3/2006	Patsiokas
7,010,537 B2	3/2006	Eyal et al.
7,028,082 B1 7,058,694 B1	4/2006 6/2006	Rosenberg et al. De Bonet et al.
7,139,770 B2	11/2006	Nakase et al.
7,187,947 B1	3/2007	White et al.
7,212,830 B2	5/2007	Tamaki et
7,277,955 B2 7,468,934 B1	10/2007 12/2008	Elliott Janik
7,469,283 B2	12/2008	Eyal et al.
7,472,353 B1	12/2008	Wolff et al.
7,525,289 B2	4/2009	Janik et al.
7,652,844 B2 7,660,601 B2	1/2010 2/2010	Edwards et al. Janik et al.
7,711,838 B1	5/2010	Boulter et al.
7,768,234 B2	8/2010	Janik et al.
7,783,722 B1	8/2010	Rosenberg et al.
7,786,705 B2 7,797,272 B2	8/2010 9/2010	Janik et al. Picker et al
7,797,272 B2 7,797,321 B2	9/2010 9/2010	Picker et al. Martin et al.
7,840,691 B1	11/2010	De Bonet et al.
7,856,485 B2*	12/2010	Prager et al 709/219
7,870,088 B1	1/2011	Chen et al.
7,904,579 B2	3/2011	Janik et al.
7,917,645 B2 * 7,917,932 B2 *	3/2011	Ikezoye et al 709/231 Krikorian
7,917,932 B2 * 7,920,824 B2	3/2011 4/2011	Janik et al.
.,>20,021 122	02011	Contract VI 1841

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348/473

2002/0013852	A1	1/2002	Janik	
2002/0023084	A1	2/2002	Eyal et al.	
2002/0049037	A1	4/2002	Christensen et al.	
2002/0072326	A1	6/2002	Qureshey et al.	
2002/0116476	A1	8/2002	Eyal et al.	
2002/0138630	A1	9/2002	Solomon et al.	
2002/0161858	A1	10/2002	Goldman	
2002/0194260	A1	12/2002	Headley et al.	
2003/0018799	A1	1/2003	Eyal	
2003/0033420	A1	2/2003	Eyal et al.	
2003/0060157	A1	3/2003	Henrick	
2004/0121723	A1	6/2004	Poltorak	
2004/0255340	A1*	12/2004	Logan 725/145	
2005/0044561	A1*	2/2005	McDonald 725/18	
2006/0074808	A1	4/2006	Boesen	
2006/0141962	A1	6/2006	Forbes et al.	
2006/0156346	A1	7/2006	Kulakowski	
2006/0161621	A1	7/2006	Rosenberg	
2006/0171395	A1	8/2006	Deshpande	
2006/0173825	A1	8/2006	Hess et al.	
2006/0174348	A1	8/2006	Rhoads et al.	
2006/0184960	A1	8/2006	Horton et al.	
2006/0218613	A1	9/2006	Bushnell	
2006/0224971	A1	10/2006	Paulin et al.	
2006/0288074	A1	12/2006	Rosenberg	
2007/0088804	A1	4/2007	Qureshey et al.	
2007/0089135	A1	4/2007	Qureshey et al.	
2007/0180063	A1	8/2007	Qureshey et al.	
2007/0220100	A1	9/2007	Rosenberg	
2007/0265979	A1	11/2007	Hangartner	
2007/0283268	A1	12/2007	Berger et al.	
2009/0070267	A9	3/2009	Hangartner	

FOREIGN PATENT DOCUMENTS

GB	2306869	Α	7/1997
WO	97/26601	A2	7/1997

DOCKE

ARM

OTHER PUBLICATIONS

"Imerge Multi-room SoundServer Application note," Issue 1.1, Aug. 2000, 9 pages.

Veronica Hendricks, "Imerge SoundServer," Techonline, http:// www.techonline.com/scripts/tol.exe?TEMPLATE, top.ops &AREA,1&CONTENT,8988&NET,13&USER.todd Bergeson@3com.com, Copyright 1999-2000 TechOnLine, Inc., printed Sep. 22, 2000, 2 pages.

*NPR : National Public Radio : News & Analysis, World, US, Music & Arts," http://www.npr.org, Copyright 2007 NPR, printed Oct. 16, 2007, 7 pages.

"Webradio Com," http://www.webradio.com/effp/web+radio/ pid73231/D284974/C2243539, Copyright 2007 www.webradio. com, printed Oct. 16, 2007, 1 page.

"RCS Acquires Decision Inc.; Offers Complete Software Solution for Radio Station Programming Operations," Businesswire, Feb. 9, 1993, Copyright 1995 Reuters Info. Svcs., 2 pages.

Mary Weller, "Radio Station Software: Programmes That Meet Your Stations Needs," Music & Media, Nov. 28, 1992, p. 11, Copyright 1995 Information Access Co., 3 pages. Chris McConnell, "The tapeless revolution comes to radio (disk-

Chris McConnell, "The tapeless revolution comes to radio (diskbased radio broadcasting storage, production and editing systems)," Broadcasting & Cable, v124, n41, p. 77, Oct. 10, 1994, Copyright 1995 Info Access Co., 4 pages.

"Blockbuster and IBM Announce New Multimedia Ventures," May 11, 1993, 2 pages.

"IBM Launches Business to Deploy Multimedia Applications and Services," Jan. 20, 1993, 3 pages.

"The Not So Hard Disk," Wheatstone Corporation, 5 pages.

"Audio Switcher Model CCSW84-01," Computer Concepts Corp. Digital Commercial System, Feb. 1991, 3 pages.

"DCS Live! Live Radio Just Got Easier," Computer Concepts Corporation, 1 page.

"DCS Overview," Computer Concepts Corporation, 1 page.

"The Computer Concepts Traffic System. You'll wonder how you managed without it," Computer Concepts Corporation, 1 page.

"Digital On-Air Studio System," Jan. 31, 1994, Copyright format only 1997 Knight-Ridder Info., 1 page.

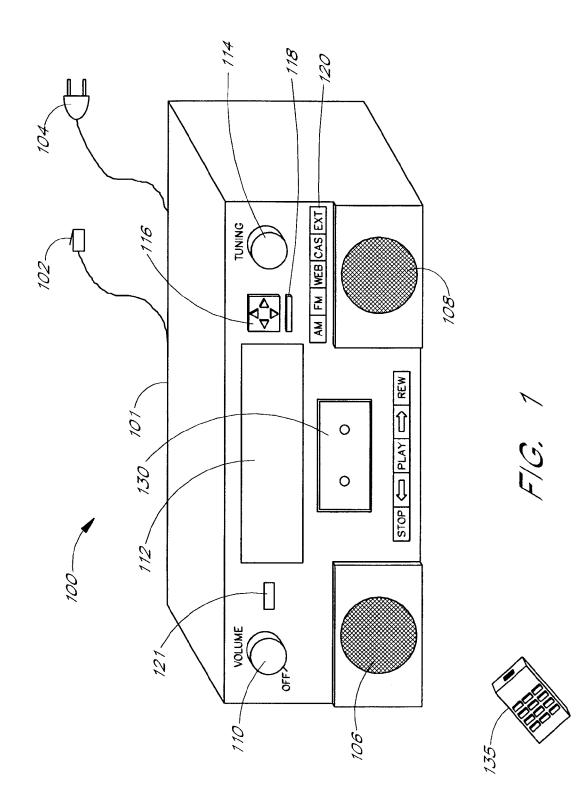
"Relatable's Open Source Audio Signature Solution, TRM," http://web.archive.org/web/20001117082600/http://www.relatable.com/

tech/trm.html, copyright Relatable 2000, printed Nov. 28, 2007, 2 pages.

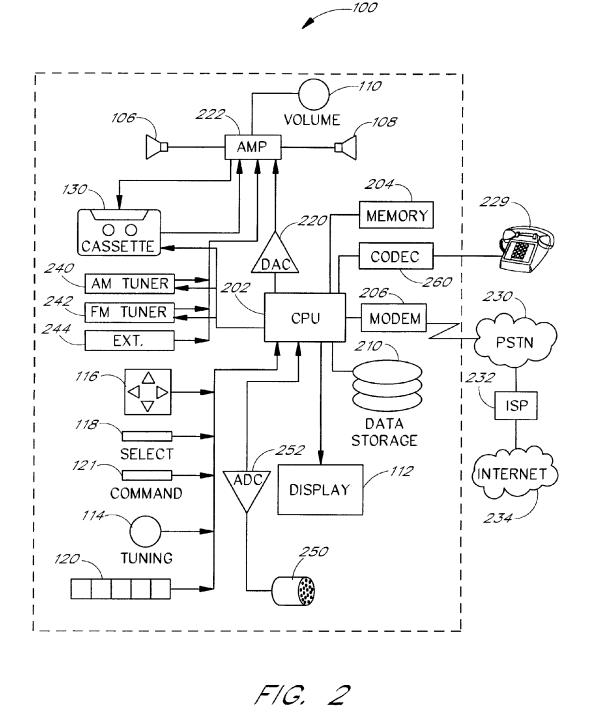
Kevin C. Almeroth et al., "An Alternative Paradigm for Scalable On-Demand Applications: Evaluating and Deploying the Interactive Multimedia Jukebox," IEEE Transactions on Knowledge and Data Engineering, vol. 11, No. 4, Jul./Aug. 1999, pp. 658-672, copyright 1999 IEEE, 15 pages.

* cited by examiner

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