



US008155342B2

(12) **United States Patent**
Marlowe

(10) **Patent No.:** **US 8,155,342 B2**
(45) **Date of Patent:** ***Apr. 10, 2012**

(54) **MULTIMEDIA DEVICE INTEGRATION SYSTEM**

(76) Inventor: **Ira Marlowe**, Fort Lee, NJ (US)
(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 516 days.
This patent is subject to a terminal disclaimer.

(21) Appl. No.: **11/475,847**
(22) Filed: **Jun. 27, 2006**

(65) **Prior Publication Data**
US 2007/0015486 A1 Jan. 18, 2007

Related U.S. Application Data
(63) Continuation-in-part of application No. 11/071,667, filed on Mar. 3, 2005, which is a continuation-in-part of application No. 10/732,909, filed on Dec. 10, 2003, which is a continuation-in-part of application No. 10/316,961, filed on Dec. 11, 2002, now Pat. No. 7,489,786.

(51) **Int. Cl.**
H04B 1/00 (2006.01)
(52) **U.S. Cl.** **381/86; 701/36; 455/345**
(58) **Field of Classification Search** 381/86;
340/825.24; 700/94; 710/303; 455/99, 3.06;
348/837, 838; 725/75; 701/36
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
3,940,743 A 2/1976 Fitzgerald 340/172.5
(Continued)
FOREIGN PATENT DOCUMENTS
CN 1474252 A 2/2004
(Continued)

OTHER PUBLICATIONS

Gilroy, Amy, "Blitz Safe Bows New SkyLink," This Week in Consumer Electronics (TWICE), Nov. 24, 2003 (1 page).

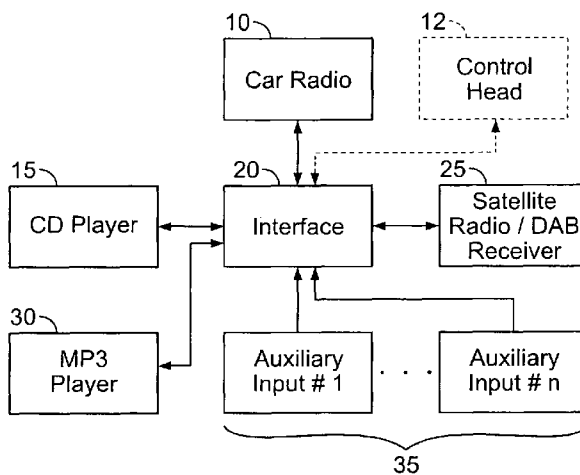
(Continued)

Primary Examiner — Xu Mei
(74) *Attorney, Agent, or Firm* — Anatoly S. Weiser, Esq.; Acuity Law Group

(57) **ABSTRACT**

An **multimedia** device integration system is provided. One or more after-market audio or video devices, such as a CD player, CD changer, digital media device (e.g., MP3 player, MP4 player, WMV player, Apple iPod, portable media center, or other device) satellite receiver (e.g., XM or Sirius receiver), DAB receiver, video device (e.g., DVD player), cellular telephone, or any other device or combinations thereof, is integrated for use with an existing OEM or after-market car stereo or video system, wherein control commands can be issued at the car stereo or video system and data from the after-market device can be displayed on the car stereo or video system. Control commands generated at the car stereo or video system are received, processed, converted into a format recognizable by the after-market device, and dispatched to the after-market device for execution. Information from the after-market device is converted into a format recognizable by the car stereo or video system, and dispatched to the car stereo or video system for display thereon. One or more auxiliary input sources can be integrated with the car stereo or video system, and selected using the controls of the car stereo or video system. A docking station is provided for docking a portable audio or video device for integration with the car stereo or video system. **Wireless integration between the portable audio or video device and a car stereo or video system is provided, and voice recognition and speech synthesis capabilities are provided in the portable audio or video device or the car stereo or video system.**

121 Claims, 36 Drawing Sheets



U.S. PATENT DOCUMENTS

4,047,162	A	9/1977	Dorey et al.	364/200
4,068,104	A	1/1978	Werth et al.	179/175.3
4,091,455	A	5/1978	Woods et al.	364/200
4,234,919	A	11/1980	Bruce et al.	364/200
4,562,533	A	12/1985	Hodel et al.	364/200
4,772,079	A	9/1988	Douglas et al.	312/257
4,817,130	A	3/1989	Frimmel, Jr.	379/88
4,943,978	A	7/1990	Rice	375/1
5,263,199	A	11/1993	Barnes et al.	
RE34,536	E	2/1994	Frimmel, Jr.	379/88
5,339,362	A	8/1994	Harris	381/86
5,410,675	A	4/1995	Shreve et al.	395/500
5,537,673	A	7/1996	Nagashima et al.	
5,794,164	A	8/1998	Beckert et al.	701/1
5,808,373	A	9/1998	Hamanishi et al.	
5,859,628	A	1/1999	Ross et al.	
5,897,155	A	4/1999	Kerner et al.	
5,978,689	A	11/1999	Tuoriniemi et al.	
6,005,488	A	12/1999	Symanow et al.	340/825.56
6,052,603	A	4/2000	Kinzalow et al.	455/557
6,058,319	A	5/2000	Sadler	455/569
6,134,456	A *	10/2000	Chen	455/569.2
6,157,725	A	12/2000	Becker	381/86
6,163,079	A	12/2000	Miyazaki et al.	307/10.1
6,163,711	A	12/2000	Juntunen et al.	
6,175,789	B1	1/2001	Beckert et al.	
6,192,340	B1	2/2001	Abecassis	
6,243,645	B1 *	6/2001	Moteki et al.	701/211
6,255,961	B1	7/2001	Van Ryzin et al.	
6,278,697	B1	8/2001	Brody et al.	370/310
6,282,464	B1	8/2001	Obradovich	
6,295,033	B1	9/2001	Chatzipetros et al.	343/713
6,330,337	B1	12/2001	Nicholson et al.	381/86
6,346,917	B1	2/2002	Fuchs et al.	343/713
6,374,177	B1	4/2002	Lee et al.	701/200
6,389,332	B1	5/2002	Hess et al.	701/1
6,389,560	B1	5/2002	Chew	
6,396,164	B1	5/2002	Barnea et al.	307/10.1
6,397,086	B1	5/2002	Chen	
6,411,823	B1	6/2002	Chen	
6,529,804	B1	3/2003	Draggon et al.	
6,539,358	B1 *	3/2003	Coon et al.	704/275
6,591,085	B1	7/2003	Grady	455/42
6,608,399	B2	8/2003	McConnell et al.	
6,622,083	B1	9/2003	Knockeart et al.	
6,629,197	B1	9/2003	Bhagal et al.	711/111
6,648,661	B1	11/2003	Byrne et al.	439/188
6,653,948	B1	11/2003	Kunimatsu et al.	340/995.19
6,678,892	B1 *	1/2004	Lavelle et al.	725/75
6,721,489	B1	4/2004	Benjamin et al.	
6,772,212	B1	8/2004	Lau et al.	
6,816,577	B2	11/2004	Logan	
6,889,064	B2	5/2005	Baratono et al.	
6,990,208	B1	1/2006	Lau et al.	
6,993,615	B2	1/2006	Falcon	710/303
7,031,477	B1 *	4/2006	Mella et al.	381/86
7,062,255	B2	6/2006	Nakanaga	
7,151,950	B1	12/2006	Oyang et al.	
7,187,947	B1	3/2007	White et al.	
7,288,918	B2	10/2007	DiStefano	
7,324,833	B2	1/2008	White et al.	
7,440,772	B2	10/2008	White et al.	
7,486,926	B2	2/2009	White et al.	
7,489,786	B2	2/2009	Marlowe	
7,493,645	B1 *	2/2009	Tranchina	725/75
2001/0044664	A1	11/2001	Mueller et al.	700/94
2002/0009978	A1 *	1/2002	Dukach et al.	455/99
2002/0084910	A1	7/2002	Owens et al.	
2002/0085730	A1	7/2002	Holland	381/334
2002/0091863	A1	7/2002	Schug	709/250
2002/0133610	A1	9/2002	Hadland	709/230
2002/0180767	A1	12/2002	Northway et al.	345/698
2002/0197954	A1	12/2002	Schmitt et al.	455/41
2003/0007649	A1	1/2003	Riggs	381/86
2003/0026440	A1 *	2/2003	Lazzeroni et al.	381/86
2003/0053638	A1	3/2003	Yasuhara	381/86

2003/0156200	A1	8/2003	Romano et al.	
2003/0215102	A1	11/2003	Marlowe	381/77
2004/0091123	A1	5/2004	Stark et al.	381/86
2004/0117442	A1 *	6/2004	Thielen	709/203
2004/0145457	A1	7/2004	Schofield et al.	
2004/0151327	A1	8/2004	Marlowe	381/86
2004/0266336	A1	12/2004	Patsiokas et al.	
2005/0021190	A1	1/2005	Worrell et al.	
2005/0172001	A1	8/2005	Zaner et al.	
2005/0239434	A1	10/2005	Marlowe	455/345
2005/0282600	A1	12/2005	Paradice	
2007/0149115	A1	6/2007	White et al.	
2007/0230099	A1	10/2007	Turner et al.	
2007/0293183	A1	12/2007	Marlowe	
2007/0294710	A1	12/2007	Meeseman	
2008/0123285	A1	5/2008	Fadell et al.	
2008/0125031	A1	5/2008	Fadell et al.	
2009/0017866	A1	1/2009	White et al.	
2009/0018682	A1	1/2009	Fadell et al.	

FOREIGN PATENT DOCUMENTS

JP	11-273321	10/1999
JP	2000-286874	10/2000
KR	1020010035788	5/2001
KR	1020010059192	7/2001
WO	WO 2004/053722	6/2004
WO	WO 2006/094281	9/2006
WO	WO 2008/002954	1/2008

OTHER PUBLICATIONS

Gilroy, Amy, "XM Exceeds Forecasts," This Week in Consumer Electronics (TWICE), Nov. 24, 2003 (2 pages).
 "BlitzSafe News," http://www.blitzsafe.com/blitz_news/news031124/body_news031124.html, Nov. 24, 2003 (1 page).
 "XM Satellite Radio Introduces XM Direct," http://www.blitzsafe.com/blitz_news/news031117/body_news031117.html, Nov. 17, 2003 (3 pages).
 "Digital Audio Radio," http://www.blitzsafe.com/blitz_news/news052003a/body_news052003a.html, 2003 (4 pages).
 "BlitzSafe Winner of 2003 Autosound Grand Prix Accessories Supplier of the Year," Audiovideo Magazine, Mar. 3, 2003 (1 page).
 "BlitzSafe Releases World's First XM Satellite Radio, Auxiliary and CD Interfaces for Landrover Freelander 2003," http://www.blitzsafe.com/blitz_news/news092002b/body_news09002b.html, Sep. 16, 2002 (1 page).
 "BlitzSafe Releases World's First XM Satellite Radio, Auxiliary and CD Interlaces for Lexus," http://www.blitzsafe.com/blitz_news/news092002a/body_news09002a.html, Sep. 14, 2002 (1 page).
 Pohlmann, et al. "Satellite Radio A to Z," http://www.blitzsafe.com/blitz_news/news072002a/body_news072002a.html, 2002 (7 pages).
 "BlitzSafe Launches XM and Six Interfaces for the 'Mini Cooper,'" http://www.blitzsafe.com/blitz_news/news062002a/body_news062002a.html, Jun. 25, 2002 (1 page).
 "Digital Connect," Mobile Electronics, May 2002 (1 page).
 Solomon, Brett, "Selling 12V: OEM Integration," Dealerscope, May 2002 (1 page).
 "XM Xtra.," Mobile Entertainment, Apr./May 2002 (1 page).
 "BlitzSafe Introduces New Line of XM Digital Connect Cables," The 12 Volt News, Feb. 20, 2002 (2 pages).
 "XM Radio Losses Mount As Do Subscribers," http://www.blitzsafe.com/blitz_news/news012002d/body_news012002d.html, Jan. 24, 2002 (3 pages).
 "Blitzsafe Expects 3 Mil. XM Subscribers Within Three Years," http://www.blitzsafe.com/blitz_news/news012002c/body_news012002c.html, Jan. 2002 (1 page).
 "XM Signs Over 30,000 Subscribers in First 8 Weeks," XM Radio, Jan. 7, 2002 (4 pages).
 "BlitzSafe Unveils the First DVD Interface," Automedia, Feb. 1999 (1 page).
 "MBALP V.2A2 CD Changer Converter Mercedes Benz Model for

- “CD Changer Converter—Porsche Model Year 1996,” http://www.blitzsafe.com/blitz_news/pr02071996/body_pr02071996.html, Feb. 7, 1996 (1 page).
- “CD Changer Converter—Mercedes Benz 1996 MY,” http://www.blitzsafe.com/blitz_news/pr08231995/body_pr08231995.html, Aug. 23, 1995 (1 page).
- Office Action dated Jun. 5, 2006, from co-pending U.S. Appl. No. 10/316,961 (40 pages).
- Office Action dated Nov. 14, 2006, from co-pending U.S. Appl. No. 10/316,961 (51 pages).
- Office Action dated Apr. 19, 2007, from co-pending U.S. Appl. No. 10/316,961 (69 pages).
- Office Action dated Jul. 12, 2007, from co-pending U.S. Appl. No. 10/316,961 (71 pages).
- Office Action dated Feb. 20, 2008, from co-pending U.S. Appl. No. 10/316,961 (52 pages).
- Interview Summary dated Apr. 9, 2008, from co-pending U.S. Appl. No. 10/316,961 (4 pages).
- Interview Summary dated Apr. 21, 2008, from co-pending U.S. Appl. No. 10/316,961 (4 pages).
- Office Action dated Aug. 8, 2006, from co-pending U.S. Appl. No. 10/732,909 (29 pages).
- Interview Summary dated Dec. 15, 2006, from co-pending U.S. Appl. No. 10/732,909 (3 pages).
- Interview Summary dated Jan. 3, 2007, from co-pending U.S. Appl. No. 10/732,909 (3 pages).
- Office Action dated Apr. 20, 2007, from co-pending U.S. Appl. No. 10/732,909 (20 pages).
- Office Action dated Oct. 3, 2007, from co-pending U.S. Appl. No. 10/732,909 (28 pages).
- Interview Summary dated Oct. 26, 2007, from co-pending U.S. Appl. No. 10/732,909 (3 pages).
- International Search Report of the International Searching Authority mailed May 12, 2004, issued in connection with International Patent Appln. No. PCT/US03/39493 (4 pages).
- International Search Report of the International Searching Authority mailed Sep. 24, 2007, issued in connection with International Patent Appln. No. PCT/US06/008043 (4 pages).
- Written Opinion of the International Searching Authority mailed Sep. 24, 2007, issued in connection with International Patent Appln. No. PCT/US06/008043 (5 pages).
- International Preliminary Report on Patentability issued Oct. 16, 2007, issued in connection with International Patent Appln. No. PCT/US06/008043 (1 page).
- Russian Official Action with translation, issued by the Patent Office of the Russian Federation on Dec. 24, 2007, in connection with Russian App. No. 2006101060 (21 pages).
- Written Opinion, mailed by the Australian Patent Office on Aug. 28, 2007, in connection with Singapore App. No. 200601303-1 (6 pages).
- International Search Report of the International Searching Authority mailed Sep. 25, 2008, issued in connection with International Patent Appln. No. PCT/US07/72182 (3 pages).
- Written Opinion of the International Searching Authority mailed Sep. 25, 2008, issued in connection with International Patent Appln. No. PCT/US07/72182 (7 pages).
- Office Action dated Jul. 9, 2008, from co-pending U.S. Appl. No. 10/732,909 (33 pages).
- Notice of Allowance mailed Jul. 31, 2008, issued in connection with co-pending U.S. Appl. No. 10/316,961 (12 pages).
- Notice of Allowance mailed Dec. 29, 2008, issued in connection with co-pending U.S. Appl. No. 10/316,961 (8 pages).
- Office Action dated Feb. 24, 2009, from co-pending U.S. Appl. No. 10/732,909 (20 pages).
- Mobile Electronics: News, “Soundgate to Release New GM and BMW Interfaces,” Dec. 2, 2002, ME-Mag.com (1 page).
- “Welcome to Ventura Technology,” from venturatechnology.com (2 pages).
- Office Action dated Nov. 25, 2009, from co-pending U.S. Appl. No. 10/732,909 (16 pages).
- Office Action dated Mar. 18, 2009, from co-pending U.S. Appl. No. 11/805,799 (10 pages).
- Substantive Examination Adverse Report mailed by the Malaysian Patent Office on Mar. 13, 2009 in connection with Malaysian Patent Application No. PI 20060884 (5 pages).
- Office Action with English translation, dated May 8, 2009, issued by the Chinese Patent Office in connection with Chinese Patent Application No. 200610059421.7 (12 pages).
- Examiner’s First Report dated Mar. 30, 2009, issued by the Australian Patent Office in connection with Australian Patent Application No. 2003297898 (3 pages).
- Supplementary European Search Report dated Jun. 30, 2009, issued by the European Patent Office in connection with European Patent Application No. EP03796968 (5 pages).
- Office Action mailed by the Japanese Patent Office on Aug. 15, 2008 in connection with Japanese Patent Application No. JP2006-056718 (3 pages).
- Office Action mailed by the Japanese Patent Office on Mar. 27, 2009 in connection with Japanese Patent Application No. JP2006-056718 (2 pages).
- Office Action dated Dec. 11, 2009, from co-pending Application No. 11/805,799 (14 pages).
- Russian Official Action with translation, issued by the Patent Office of the Russian Federation, in connection with Russian App. No. 2006101060 (11 pages).
- Official Action dated Dec. 14, 2009, issued by the Canadian Patent Office in connection with Canadian Patent Application No. 2,538,053 (2 pages).
- Official Action dated Dec. 25, 2009, issued by the Chinese Patent Office in connection with Chinese Patent Application No. 200610059421.7, with English translation (14 pages).
- Official Action dated Jul. 16, 2009, issued by the Mexican Institute of Industrial Property in connection with Mexican Patent Application No. PA/a/2006/002421, with an English translation.(5 pages).
- Official Action dated Mar. 19, 2010, issued by the Mexican Institute of Industrial Property in connection with Mexican Patent Application No. PA/a/2006/002421, with an English translation (4 pages).
- Office Action dated Mar. 18, 2010, from co-pending U.S. Appl. No. 11/071,667 (13 pages).
- Office Action dated Aug. 30, 2010, from co-pending U.S. Appl. No. 11/805,799 (13 pages).
- Office Action dated Jul. 20, 2010, from co-pending U.S. Appl. No. 10/732,909 (17 pages).
- Examiner’s First Report dated Apr. 29, 2010, issued by the Australian Patent Office in connection with Australian Patent Application No. 2006200895 (2 pages).
- Office Action of Feb. 2, 2011 in U.S. Appl. No. 10/071,667, 18 pages.
- Office Action of Apr. 18, 2011 in U.S. Appl. No. 10/732,909, 18 pages.
- Official Action of Mar. 29, 2011 in Chinese Patent Application 200610059421.7.
- VoiceBox Technologies, printout from website <http://www.voiceboxtechnologies.com/auto.php> (2 pages), 2001-2006.
- “Video: A Dashboard That is Really a PC,” printout from website http://news.com.com/1606-2_3-6052333.html (3 pages), 2006.
- “Blitz Safe Offers XM Cables for Radios,” printout from website <http://www.twice.com/article/CA190041.html?text=blitz+safe> (2 pages), 2002.
- “Integration Products May Impact Satellite Radio,” printout from website <http://www.twice.com/article/CA200541.html?text=blitz+safe> (3 pages), 2002.
- “OEM Integration Poised for Strong Growth,” printout from website <http://www.twice.com/article/CA200523.html?text=blitz+safe> (3 pages), 2002.
- “Blitzsafe Overview,” from Blitzsafe.com website—“The Worldwide Leader in Aftermarket Interfaces and OEM Engineering” (1 page).
- “Delphi XM SKYFI(TM) Radio,” product description from XM Satellite Radio website (2 pages), 2003.
- The New Delphi XM SKYFi Radio Add it to Any Car or Home Audio System, product description from www.xmradio.com (1 page), 2002.

- "Automedia," magazine pages from Jun./Jul. 1996 issue (2 pages).
- "Automedia," magazine pages from Jan. 1998 issue (2 pages).
- "Automedia," magazine pages from Feb. 1998 issue (2 pages).
- "Automedia," magazine pages from Jul. 1998 issue (2 pages).
- "Automedia," magazine pages from Sep. 1998 issue (2 pages).
- "Automedia," magazine pages from Nov. 1998 issue (12 pages).
- "Automedia," magazine pages from Feb. 1999 issue (2 pages).
- "Car Stereo Review," magazine pages from Jun. 1998 issue (5 pages).
- "Car Stereo Review," magazine pages from Jan. 1999 issue (2 pages).
- "Car Stereo Review," magazine pages from Apr. 1999 issue (3 pages).
- "Car Audio and Electronics," magazine pages from Dec. 1998 issue (2 pages).
- "Car Audio and Electronics," magazine pages from Apr. 1999 issue (2 pages).
- "Car Audio and Electronics," magazine pages from Jun. 1999 issue (2 pages).
- "Carsound," magazine pages from May/June. 1999 issue (3 pages).
- "Mobile Electronics Retailer," magazine pages from Aug. 1997 issue (4 pages).
- "Mobile Electronics," magazine pages from Jul. 1999 issue (7 pages).
- "Mobile Electronics," magazine pages from Aug. 2000 issue (2 pages).
- "Cesmobile," magazine pages from Jan. 1999 issue (3 pages).
- "The 12 Volt News," magazine pages from Mar. 2002 issue (2 pages).
- "P.I.E. Millennium Price Guide Make the Precision Decision," Precision Interface Electronics, Inc. (6 pages), 2000.
- "PIE 1999 Price Guide," Precision Interface Electronics, Inc. (4 pages).
- "Design & Engineering Showcase Award," award presented to Precision Interface Electronics, Inc. for DPX Technology Digital Protocol Converter FRDN/PC-KNW, 2000 International CES (1 page).
- "Design & Engineering Showcase Award," award presented to Precision Interface Electronics, Inc. for DPX Technology Digital Protocol Converter GM9/PC-KNW, 2000 International CES (1 page).
- Invoice dated Jan. 28, 1998 from Precision Interface Electronics, Inc. for "Ford FCU-Sanyo Protocol," and "Ford RCU Sanyo Protocol" (1 page).
- Invoice dated Jan. 29, 1999 from Precision Interface Electronics, Inc. for "Ford NCU-Sanyo Protocol" (1 page).
- Invoice dated Apr. 26, 1999 from Precision Interface Electronics, Inc. for "9 Pin GM-Kenwood Protocol," and "10 Pin GM-Kenwood Protocol" (1 page).
- Invoice dated Apr. 27, 1999 from Precision Interface Electronics, Inc. for "9 Pin GM-Kenwood Protocol" (1 page).
- Invoice dated May 27, 1999 from Precision Interface Electronics, Inc. for "10 Pin GM-Kenwood Protocol," and "9 Pin GM-Kenwood Protocol" (1 page).
- Invoice dated Mar. 20, 2000 from Precision Interface Electronics, Inc. for "98-2000 Pre-Wired VW 6 DIS" (1 page).
- Invoice dated Mar. 20, 2000 from Precision Interface Electronics, Inc. for "98/2000 Pre-Wired VW 8 DIS," and "1998-2000 Audi to Pan 8 PC" (1 page).
- Invoice dated Dec. 17, 2001 from Precision Interface Electronics, Inc. for "98-02 Ford/Lincoln/Mercury" (1 page).
- Invoice dated May 29, 2002 from Precision Interface Electronics, Inc. for "95-01 GMC/Chev/Pontiac AUX," and "98-02 Ford/Lincoln/Merc AU" (1 page).
- Toyota/Avox Interface Rev. Eng., Peripheral Model TIAS, created Feb. 15, 1998 (1 page).
- GM/Kenwood Translator diagram, created Feb. 4, 1999 (2 pages).
- Ford/Audiovox Translator diagram, created Dec. 29, 1997 (2 pages).
- Component Side Silkscreen, created Dec. 31, 1997 (2 pages).
- Component Xray, created Feb. 4, 1992 (2 pages).
- "SoundGate, Ventura Announce Sophisticated OEM-Integration Interfaces," article from The 12 Volt News, Dec. 2002 (1 page).
- "XMDirect Smart Digital Adapter," product description (3 pages), 2001-2004.
- "Breaking Protocol a Look at BlitzSafe's New DMX Protocol Converter Technology," Nov. 1998 printout from http://www.blitzsafe.com/blitz_news/news101998/body_news101998.html (2 pages).
- "PIE Virtual Catalog," printout from <http://web.archive.org/web/19981205005802/http://www.pie.net/sec12sbl.htm> (2 pages), 2005.
- "The UniLink Project," printout from website (2 pages), 1999.
- "CD Changer Interfaces," printout from <http://web.archive.org/web/19991012021952/soundgate.com/cd-inter.html> (1 page), 1999.
- "Digital Obsessions a Spotlight on Audio Gadgetry, ZDNet Music: The PhatNoise Car Audio System," printout from <http://web.archive.org/web/20000815203327/music.zdnet.com/features/phatnoise> (3 pages), 2000.
- "Bypassing and Switching With the CD4053 CMOS Analog MUX," printout from website (4 pages), 2000.
- "Device Profile: PhatNoise PhatBox Car MP3 Player," Nov. 1, 2000, printout from <http://techupdate.zdnet.com/techupdate/stories/main/0,14179,2649276,00.htm> (4 pages).
- "The EZ Protoboard," printout from <http://web.archive.org/web/20010613095105/http://www.ajud.org/~edward/ezproto> (2 pages), 2001.
- "TDIClub Forums: Reverse Engineering CD Changer Progress,," Apr. 3, 2001, printout from website (3 pages).
- "TDIClub Forums: Reverse Engineering CD Changer Progress Reports" Apr. 5, 2001, printout from website (8 pages).
- "Multi Technology Equipment—Home of the Neo MP3 Player," printout from <http://web.archive.org/web/20010413222617/ssiamerica.com/products/neo35/> (1 page), 2005.
- "TDIClub Forums: Reverse Engineering CD Changer Protocol Update," Apr. 18, 2001, printout from website (3 pages).
- "The Car CD Changer Interface Page," printout from website (10 pages), 2001-2002.
- "SourceForge.net: Project Info—GNUnilink," printout from <http://sourceforge.net/projects/gnunilink/> (3 pages), 2005.
- "EZ Protoboard News," printout from website (3 pages), 2001-2002.
- "GNUnilink—For All Your AUX-IN Needs . . .," printout from <http://gnunilink.sourceforge.net/> (4 pages), 2002.
- "VWCDPIC News," printout from <http://web.archive.org/web/20020701101541/http://www.ajud.org/~edward/vwcdpic/> (8 pages), 2001-2002.
- "VWCDPIC News," printout from <http://web.archive.org/web/20021009014959/http://www.ajud.org/~edward/vwcdpic/> (10 pages), 2001-2002.
- "Mobile Electronic E-Newsletter" dated Jan. 13, 2005 (4 pages).
- "Axxess Introduces Two iPod Integration Units" product description dated Jan. 19, 2005 (1 page).
- "Even More iPod Adapters on the Way," printout from twice.com website (2 pages), 2005.
- "Alpine Showing First Most-Ready Product," printout from twice.com website (2 pages), 2005.
- "Bluetooth Gradually Enters Car Audio," printout from twice.com website (2 pages), 2005.

* cited by examiner

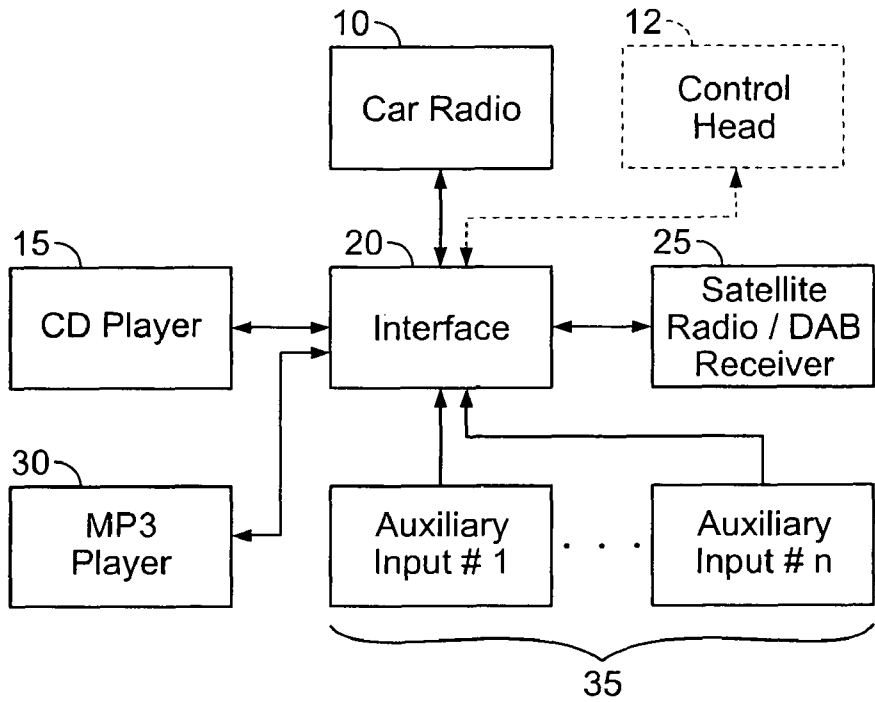


FIG. 1

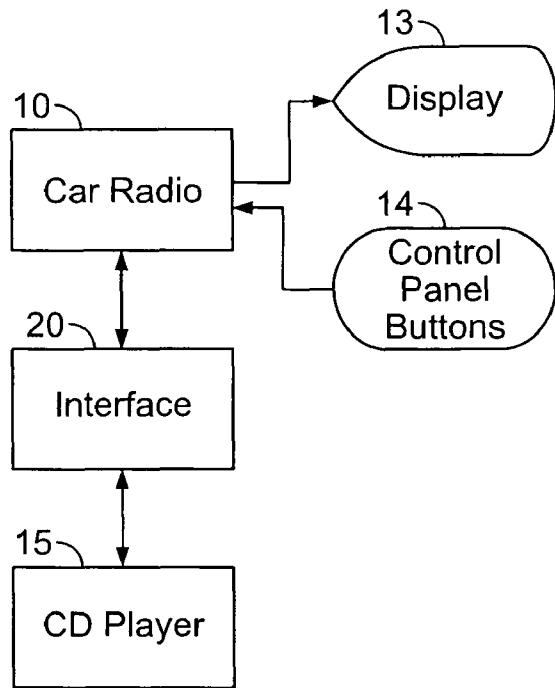


FIG. 2A

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.