United States District Court
Western District of Texas
Austin Division

Affinity Labs of Texas, LLC, Plaintiff, v. Netflix, Inc. Defendant.	)	Case No. 1:15-cv-00849-RP **Jury Trial Demanded**

First Amended Complaint for Patent Infringement

Plaintiff Affinity Labs of Texas, LLC (Affinity Labs) files this First Amended Complaint against Defendant Netflix, Inc. (Netflix) and alleges as follows:

Parties

1. Plaintiff Affinity Labs is a Texas limited liability company having offices at 31884 RR 12, Dripping Springs, TX 78620.

2. Defendant Netflix, Inc. is a Delaware corporation with a principal office located at 100 Winchester Circle, Los Gatos, CA 95032. Netflix is registered to do business in and actively engages in business within the State of Texas, and maintains an agent for service of process at National Registered Agents, Inc., 1999 Bryan St., Ste. 900, Dallas, TX 75201-3136.

Jurisdiction

3. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the federal patent statutes, 35 U.S.C. §§ 271 and 281-285.

4. This Court has general and specific personal jurisdiction over Netflix. Netflix has committed and continues to commit acts giving rise to this action within Texas and within this judicial district and Netflix has established minimum contacts within the forum such that the exercise of jurisdiction over Netflix would not offend traditional notions of fair play and substantial justice. For example, Netflix has committed and continues to commit acts of patent infringement in this judicial district, as set forth below. In conducting its business in Texas and this judicial district, Netflix derives substantial revenue from its patent infringement.

Venue

5. Venue in the Western District of Texas is proper pursuant to 28 U.S.C. §§ 1391(b) and (c) and 1400(b) because Netflix has committed acts within this judicial district giving rise to this action, and Netflix has and continues to conduct business in this judicial district, including one or more acts of using, selling, and offering to sell its Netflix on-demand Internet streaming media service that constitutes patent infringement in this judicial district, and providing service and support to Netflix's customers in this judicial district.

6. On information and belief, Netflix operates distribution and shipping centers within the state of Texas and this judicial district, including in Austin, Houston, San Antonio, and Dallas, TX.

7. Venue in the Western District of Texas is also proper because Affinity Labs is headquartered in this judicial district in Dripping Springs, Texas.

8. Venue in the Western District of Texas is also proper because the majority of Affinity Labs' documents and relevant evidence is located at Affinity Labs' headquarters within this judicial district and numerous witnesses are also located within this judicial district.

9. Venue in the Western District of Texas is also proper because Affinity Labs is organized and governed by the limited liability company laws of Texas and is subject to taxes in Texas. Affinity Labs maintains a registered agent for service of process in Texas.

10. Venue in the Western District of Texas is also proper because of judicial economy. The Honorable Judge Lee Yeakel in this judicial district previously presided over *Affinity Labs of Texas, LLC v. Clear Channel Broadcasting*, C.A. No. A-12-CV-205-LY, involving another Affinity Labs patent, United States Patent No. 7,970,379, which is in the same patent family sharing the same specification as the Asserted Patent in this matter. In the previous case, Judge Yeakel conducted a fully-briefed claim construction hearing and issued a claim construction order on this related technology.

Background

11. Affinity Labs was founded in 2008 by Russell White and Harlie Frost.

12. Russell White is a successful entrepreneur and inventor with over 30 issued patents owned by Affinity Labs, Apple, AT&T, and others. Mr. White grew up in Houston, Texas, and has an undergraduate degree in mechanical engineering from Texas A&M. Mr. White also graduated from the University of Temple Law School, which he attended at night while working full time as an engineer for The Lincoln Electric Company. After

earning his law degree, Mr. White moved to Austin and co-founded SBC Knowledge Ventures, an entity within AT&T.

13. Mr. White is a prolific inventor listed on at least thirty-four separate United States patents.

14. On March 28, 2000, Mr. White and Kevin R. Imes filed a detailed patent application, No. 09/537,812 (the '812 application) with the United States Patent and Trademark Office (PTO).

15. The '812 application broadly addressed the problem of accessing, managing, and delivering digital audio and video content. In doing so, the '812 application disclosed a number of inventions and defined, for the first time, what is now a ubiquitous digital media ecosystem. These inventions laid the foundation for a revolution in streaming technology that is responsible for the current transformation in how individuals consume media.

16. For instance, according to Netflix's Fourth Quarter 2015 Letter to Shareholders regarding its quarterly earnings dated January 19, 2016, Netflix accounted for 37% of North American downstream Internet traffic in 2015 during peak download times, streaming 42.5 billion hours during the year.

17. More particularly, the inventions detailed in the '812 application and claimed in the '802 patent underpin the streaming technology known generally as Hypertext Transfer Protocol adaptive bitrate (HTTP ABR) streaming. HTTP ABR streaming is now ubiquitously utilized among content providers—including Netflix—to stream video to users' electronic devices.

18. HTTP ABR streaming technology dynamically detects local bandwidth and CPU conditions (for example, how fast data in a buffer is being processed) and seamlessly

switches the video quality of media files that a player receives. Users with a fast network connection can experience higher quality videos than users with slower network connections, while both users enjoy a seamless, uninterrupted streaming video experience.

19. Additionally, HTTP ABR streaming technology uses the hypertext transfer protocol (HTTP). Since the Internet was built on HTTP, it is much easier and cheaper to serve streaming data over this protocol as opposed to specialized streaming protocols (i.e., Real Time Streaming Protocol, Microsoft Media Server, and Real Time Messaging Protocol, among others) as was typically the case prior to 2008.

20. In HTTP ABR streaming, the video/audio source is cut into many short segments ("chunks") that are formatted for delivery. The video/audio is received by the user's device as a series of downloads of these segments or chunks. A playlist file that is sent to the user's device at the inception of streaming includes a list of network locations, or URLs, that tell the user's device where and in what order the user's device should request the segments of the video/audio. The "adaptive" part of the technology is achieved by formatting the video/audio source into multiple bitrate files, generating segments of various sizes of the video. The user's device can then choose between the segments of different sizes based upon the device's current network connection or the device's CPU performance.

21. Variable network connection speeds can be illustrated where a mobile user traveling in a car connects to different networks with variable data transmission rates during the same media stream. For example, a child may request delivery of a movie or television show while sitting in the back of the family's car waiting to start a family road trip. The media delivery begins when the requesting device is still connected to a home Wi-Fi network connection. In the middle of the stream, however, the car starts up and backs out of

the family's driveway, causing the requesting device to disconnect from the higher-speed Wi-Fi network and reconnect to a wireless 4G network with slower data transmission rates. Later, the family nears the outskirts of town and the requesting device again disconnects from the higher-speed 4G network and reconnects to a wireless 3G network with even slower data transmission rates.

22. Alternatively, a user who is connected to the same network may encounter variable network connection speeds and speed slowdowns based on network traffic or other factors the user does not control. Without the benefit of HTTP ABR streaming in both of these scenarios, if the user's data transmission rate dropped below the rate required for continuous streaming of the digital media, the user would experience complications, such as interruptions or delays, in streaming the media.

United States Patent No. 9,094,802 (the '802 patent)

23. On July 28, 2015, the PTO issued U.S. Patent No. 9,094,802 (the '802 patent), entitled "System and Method to Communicate Targeted Information." A copy of this patent is attached as Exhibit A. The '802 patent was issued from a continuation application claiming priority to the '812 application, which was filed with the PTO on March 28, 2000. The '802 patent issued over nearly a thousand pieces of prior art (674 domestic and foreign patents and patent applications; and 308 non-patent references), was explicitly found to satisfy all sections of the patent laws including §§ 101, 102, 103, and 112, was explicitly determined to have March 28, 2000 as its priority date, is presumed valid, and is valid.

24. The '802 patent sought to solve several problems specifically arising from digital media streaming and delivery. In doing so, the inventors conceived of solutions that

are now foundational to today's streaming technologies. For example, the inventors recognized that users would experience varying network connection speeds, either on the same network or by switching between networks while on the go, and that the changes in speeds would prevent smooth and continuous media playback. Furthermore, the inventors recognized the importance and advantage of delivering media using conventional Internet website technology and infrastructure, for example, by using webservers and links or URLs to identify the differently formatted media segments.

25. The '802 patent further offered particular technical solutions to protect streaming digital media from delays or interruptions when users experience slowdowns or congestion in a delivery network. For example, the '802 patent disclosed that digital media "may be formatted and transmitted to achieve a desirable transmission rate." Ex. A, 5:23-25. "In one embodiment, the information may be wirelessly communicated at a relatively slow transmission rate." *Id.* at 5:52-53. "In this manner, communication networks having less or slower transfer rates may be used to wirelessly communicate the selected audio information to the electronic device." *Id.* at 5:62-65. In other circumstances, "high-speed wireless communications networks may be used to communicate the selected audio information" *Id.* at 5:66-6:1. In yet another embodiment, "a hybrid of wireless communication rates may be deployed depending on the requirements of the selected audio information and/or the electronic device." *Id.* at 6:5-8. Thus, a user experiencing variable network connection speeds, such as the child sitting in the back of the family car during a road trip, can still receive a continuous media stream without breaks or interruptions in the media because the delivery system includes a playlist that facilitates varied data transmission rates to the requesting device.

26. The '802 patent accomplishes this variable rate solution by breaking up and formatting the digital media into segments so that the same media can be delivered in different resolutions or qualities at different transmission rates. *See, e.g.*, *id.* at 3:26-29 ("For example, an audio file may be formatted, segmented, compressed, modified, etc. for the purpose of providing or communicating the audio invention."); *id.* at 4:58-63 ("For example, a wireless device may be operable to receive packets of information having a specific size and in a specific format. In such an embodiment, communications engine 102 could format the information into a desirable format for wirelessly communicating the information to electronic device 103.")

27. During prosecution of the '802 patent, the Patent and Trademark Office considered the Office's post-*Alice* guidelines and determined that all the claims of the '802 patent claim patent eligible subject matter and surpassed the requirements set forth in § 101.

28. No claim of the '802 patent relates to a fundamental economic practice.

29. No claim of the '802 patent relates to a method of organizing human activity.

30. No claim of the '802 patent could be performed in full by the human mind or with a pen-and-paper.

31. No claim of the '802 patent recites or claims a mathematical relationship or formula.

32. No claim of the '802 patent claims recites a computer merely receiving, processing, and storing data in a generic manner.

33. No claim of the '802 patent recites a longstanding or historical commercial practice.

34. As of March 2000, every claim of the '802 patent recites a combination of elements that were not well-understood, routine, or conventional to those of ordinary skill in the art.

35. Every claim of the '802 patent recites patent eligible subject matter as required by § 101.

36. Numerous other companies have recognized the value and importance of Affinity Labs' innovation. For instance, twenty-eight companies have licensed Affinity Labs' patent portfolio for the patents in the same family as the Asserted Patent.

37. Netflix does not have a license to the '802 patent or any patent in Affinity Labs' patent portfolio.

United States Patent No. 9,444,868 (the '868 patent)

38. On September 13, 2016, the PTO issued U.S. Patent No. 9,444,868 (the '868 patent), entitled "System to Communicate Media." A copy of the '868 patent is attached as Exhibit B. Similar to the '802 patent, the '868 patent also issued from a continuation application claiming priority to the '812 application, which was filed with the PTO on March 28, 2000. The '868 patent issued over nearly a thousand pieces of prior art, was explicitly found to satisfy all sections of the patent laws including §§ 101, 102, 103, and 112, was explicitly determined to have March 28, 2000 as its priority date, is presumed valid, and is valid.

39. Similar to the '802 patent, the '868 patent claims particular technical solutions to protect streaming digital media from delays or interruptions when users experience slowdowns or congestion in a delivery network.

40. These problems are unique to streaming digital media and the '868 patent offers systems for breaking up and formatting the digital media into segments so that the same media can be delivered in different resolutions or qualities at different transmission rates to end user devices.

41. During prosecution of the '868 patent, the applicant discussed §§ 101, 102, 103, and 112 with the examiner in a telephonic interview on May 4, 2016.

42. During the May 4, 2016 interview, the examiner confirmed that the claims of the '868 patent comply with all of these statutory provisions.

43. During prosecution of the '868 patent, the Patent and Trademark Office considered the final written decision of the Patent Trial and Appeals Board regarding U.S. Patent No. 8,359,007 and § 103.

44. The PTO issued the claims of the '868 patent after considering the final written decision of the Patent Trial and Appeals Board described in ¶ 43.

45. During prosecution of the '868 patent, the PTO also considered U.S. Patent Nos. 6,678,215 to Treyz and 6,711,622 to Fuller. The Treyz and Fuller references served as the basis for the PTAB's final written decision identified in ¶ 43.

46. The PTO issued the claims of the '868 patent after considering the Treyz and Fuller references.

47. The PTO issued the claims of the '868 patent after also considering over 75 press releases from RealNetworks regarding its streaming technologies, as well as user manuals from RealNetwork for its streaming technologies, including RealJukebox Plus, RealPlayer 7 Plus, and RealPlayer Plus G2.

48. During prosecution of the '868 patent, the PTO considered the Office's post-*Alice* guidelines and determined that all the claims of the '802 patent claim patent eligible subject matter and surpassed the requirements set forth in § 101.

49. No claim of the '868 patent relates to a fundamental economic practice.

50. No claim of the '868 patent relates to a method of organizing human activity.

51. No claim of the '868 patent could be performed in full by the human mind or with a pen-and-paper.

52. No claim of the '868 patent recites or claims a mathematical relationship or formula.

53. No claim of the '868 patent claims recites a computer merely receiving, processing, and storing data in a generic manner.

54. No claim of the '868 patent recites a longstanding or historical commercial practice.

55. As of March 2000, every claim of the '868 patent recites a combination of elements that were not well-understood, routine, or conventional to those of ordinary skill in the art.

56. Every claim of the '868 patent recites patent eligible subject matter as required by § 101.

57. Netflix does not have a license to the '868 patent or any patent in Affinity Labs' patent portfolio.

Count I

Infringement of U.S. Patent No. 9,094,802 by Netflix

58. Affinity Labs restates and realleges each of the allegations set forth above and incorporates them herein.

59. Affinity Labs holds all legal title, interest, and rights in the '802 patent.

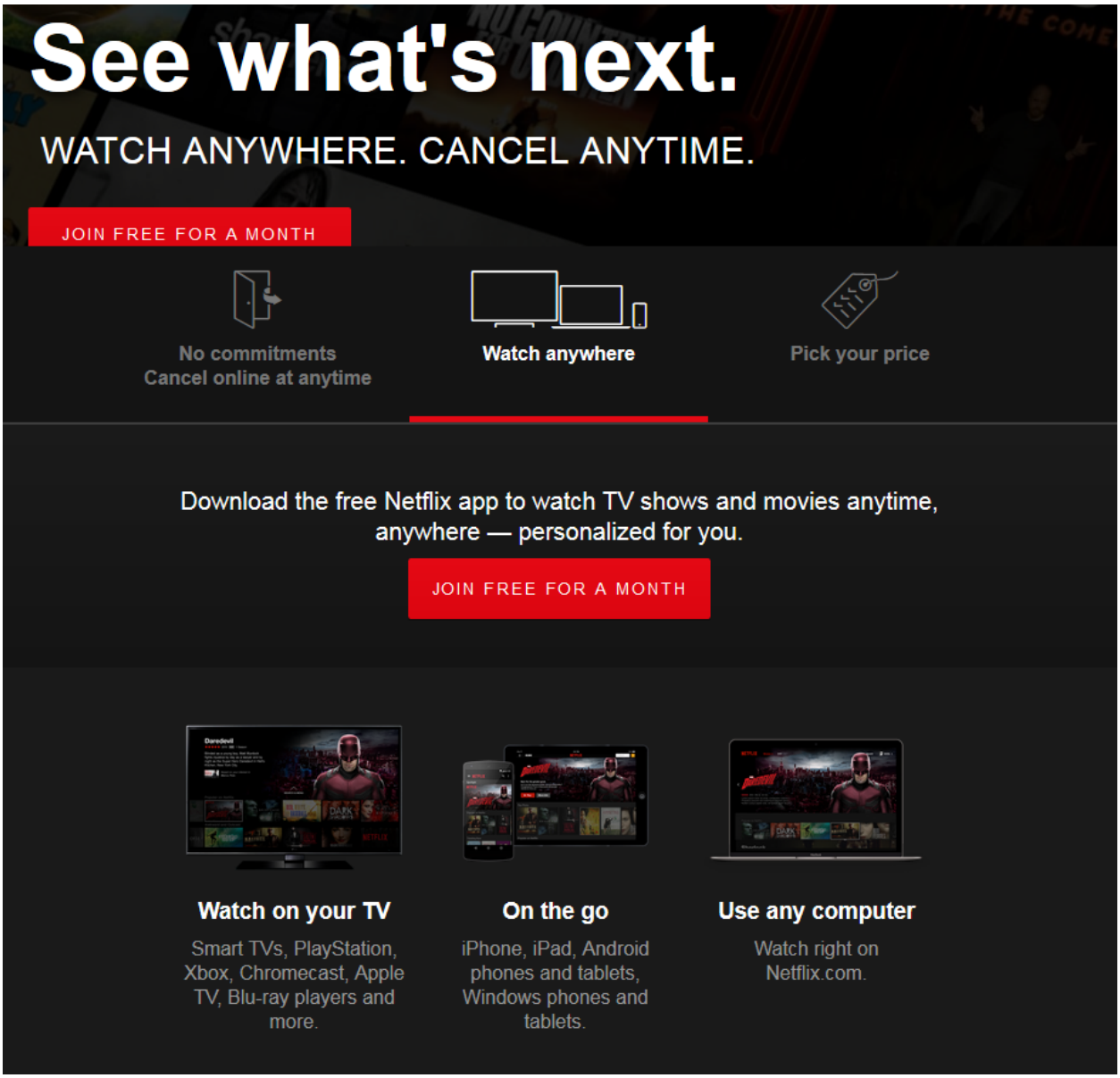
60. Netflix did not and does not have authority to make, use, sell, or offer for sale any system covered by any claim of the '802 patent.

61. Netflix has and continues to manufacture, use, sell, and offer to sell, without authority, its Netflix on-demand Internet streaming media service.

62. End users and subscribers use the Netflix on-demand Internet streaming media service to watch Netflix's movie and television media library on any Internet-connected device that offers a Netflix application, such as a computer, gaming console, DVD or Blu-ray player, HDTV, set-top box, home theater system, phone, or tablet.

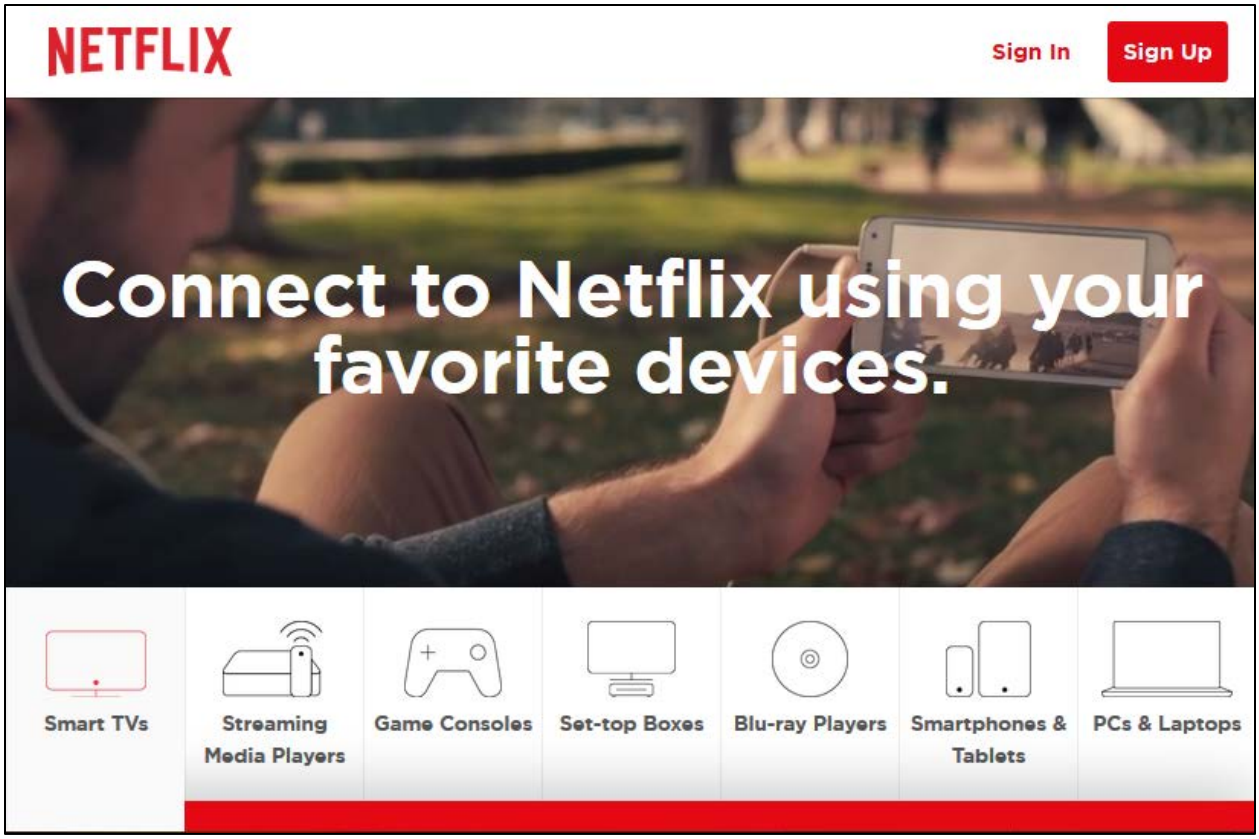
63. For example, Netflix advertises on its homepage that users can "Watch Anywhere," including "on your TV" using Smart TVs, Playstation, Xbox, Chromecast, Apple TV, and Blu-ray players; "on the go" using iPhone, iPad, Android phones and tablets, and Windows phones and tablets; or using "any computer" on Netflix.com.[1]

[1] https://www.netflix.com (last visited Sept. 13, 2016).



64. Netflix also advertises that its users can "connect to Netflix using your favorite devices," including on Smart TVs, Streaming Media Players, Game Consoles, Set-top Boxes, Blu-ray Players, Smartphones & Tablets, and PCs & Laptops.[2]

[2] *See Netflix Supported Devices*, Netflix, Inc., https://devices.netflix.com (last visited Sept. 13, 2016).



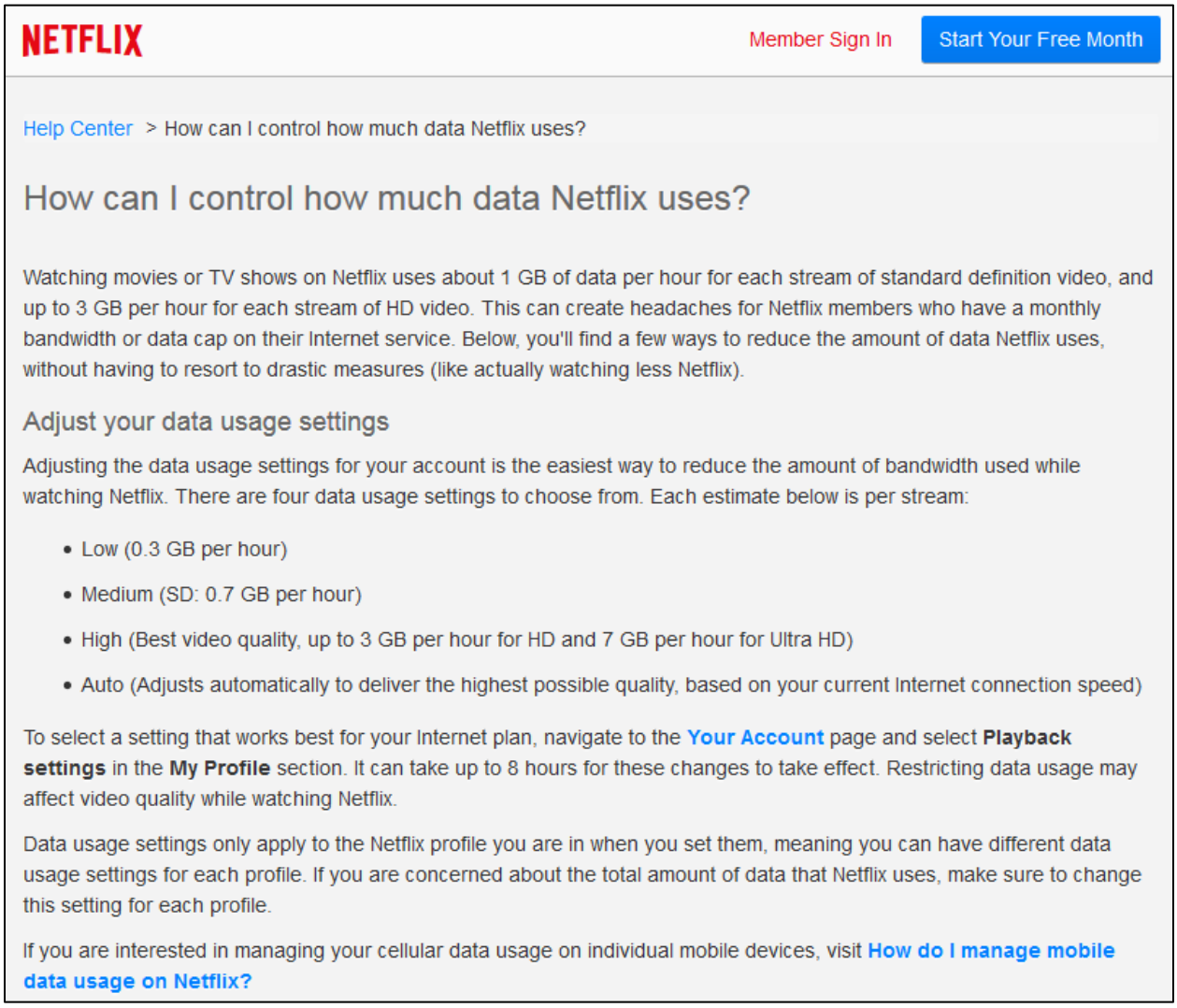
65. Netflix uses and controls a media delivery system to stream and deliver movies and television programs to its subscribers and end users using HTTP ABR streaming.

66. As part of its media delivery system, Netflix maintains media, such as movies and television programs, available for delivery to end users' requesting device as a series of segments.

67. The segments are configured to allow delivery via network links capable of delivering information at different rates.

68. For example, Netflix maintains its streaming media library for "watching movies or TV shows" at different video qualities or resolutions. The "Low" setting streams content at approximately 0.3 GB per hour, the "Medium" setting streams standard definition "SD" content at approximately 0.7 GB per hour, the "High" setting streams high

definition "HD" content and ultra high definition "Ultra HD" content at approximately 3 to 7 GB per hour, and the "Auto" setting "[a]djusts automatically to deliver the highest possible quality, based on your current Internet connection speed."[3]



NETFLIX

Member Sign In | Start Your Free Month

Help Center > How can I control how much data Netflix uses?

How can I control how much data Netflix uses?

Watching movies or TV shows on Netflix uses about 1 GB of data per hour for each stream of standard definition video, and up to 3 GB per hour for each stream of HD video. This can create headaches for Netflix members who have a monthly bandwidth or data cap on their Internet service. Below, you'll find a few ways to reduce the amount of data Netflix uses, without having to resort to drastic measures (like actually watching less Netflix).

Adjust your data usage settings

Adjusting the data usage settings for your account is the easiest way to reduce the amount of bandwidth used while watching Netflix. There are four data usage settings to choose from. Each estimate below is per stream:

- Low (0.3 GB per hour)
- Medium (SD: 0.7 GB per hour)
- High (Best video quality, up to 3 GB per hour for HD and 7 GB per hour for Ultra HD)
- Auto (Adjusts automatically to deliver the highest possible quality, based on your current Internet connection speed)

To select a setting that works best for your Internet plan, navigate to the **Your Account** page and select **Playback settings** in the **My Profile** section. It can take up to 8 hours for these changes to take effect. Restricting data usage may affect video quality while watching Netflix.

Data usage settings only apply to the Netflix profile you are in when you set them, meaning you can have different data usage settings for each profile. If you are concerned about the total amount of data that Netflix uses, make sure to change this setting for each profile.

If you are interested in managing your cellular data usage on individual mobile devices, visit **How do I manage mobile data usage on Netflix?**

69. Netflix's media delivery system includes a media playlist with the different network locations of the configured segments.

[3] *How can I control how much data Netflix uses?*, Netflix, Inc., https://help.netflix.com/en/node/87 (last visited Sept. 13, 2016). Mobile devices have additional settings, such as "Off" and "Unlimited" to control the data streamed over mobile networks such as a cellular connection. *See How do I manage mobile data usage on Netflix?*, Netflix, Inc., https://help.netflix.com/en/node/43701 (last visited Sept. 13, 2016).

70. Netflix's media delivery system also maintains a delivery resource that responds to a plurality of file requests to deliver a continuous stream of the requested media to the end users' requesting device.

71. The Netflix on-demand Internet streaming media service allows Netflix's end users to stream media at different rates using HTTP ABR streaming for continuous viewing on the end users' requesting device, even during fluctuating network conditions.

72. In violation of 35 U.S.C. § 271(a), Netflix has infringed, and if not enjoined, will continue to infringe claims of the '802 patent by manufacturing, using, selling, and/or offering to sell, without authority, a media delivery system that includes the Netflix on-demand Internet streaming media service, which is covered by one or more claims of the '802 patent, literally and/or under the doctrine of equivalents, in this judicial district and elsewhere in the United States.

73. For example, Netflix directly infringes at least claims 1, 9, and 14 of the '802 patent by having and continuing to make, use, sell, and/or offer to sell its media delivery system that includes the Netflix on-demand Internet streaming media service.

74. Netflix has known of the '802 patent since at least August 5, 2015. For instance, Mr. Frost, President of Affinity Labs, wrote Netflix's CEO, Reed Hastings, on August 5, 2015. In that letter, Mr. Frost enclosed a copy of the '802 patent because of Netflix's media delivery system.

75. Despite Affinity Labs' written notice of and Netflix's knowledge of the '802 patent, Netflix has not stopped its infringement. Instead, Netflix continues to make, use, sell, and/or offer for sale its media delivery system that includes the Netflix on-demand Internet streaming media service, which infringes the '802 patent.

76. Netflix's infringement of the '802 patent has been and is willful because Netflix has known of the '802 patent, knew or was at least reckless with respect to its infringement of the '802 patent, and yet continues to offer the Netflix on-demand Internet streaming media service in at least reckless disregard of Affinity Labs' patent rights.

77. Netflix does not have a license or permission to use the claimed subject matter in the '802 patent.

78. Affinity Labs has been injured and has been caused significant financial damage as a direct and proximate result of Netflix's infringement of the '802 patent.

79. Netflix will continue to infringe the '802 patent, and thus cause irreparable injury and damage to Affinity Labs unless enjoined by this Court.

80. Affinity Labs is entitled to recover from Netflix the damages sustained by Affinity Labs as a result of Netflix's wrongful acts in an amount subject to proof at trial.

Count II

Infringement of U.S. Patent No. 9,444,868 by Netflix

81. Affinity Labs restates and realleges each of the allegations set forth above and incorporates them herein.

82. Affinity Labs holds all legal title, interest, and rights in the '868 patent.

83. Netflix did not and does not have authority to make, use, sell, or offer for sale any system covered by any claim of the '868 patent.

84. Netflix has and continues to manufacture, use, sell, and offer to sell, without authority, its Netflix on-demand Internet streaming media service.

85. Netflix works with device manufacturers, such as "global TV manufacturers," to preinstall software to operate its media delivery system on end user devices, such as Smart TVs, before the end user receives the device.[4]

86. In violation of 35 U.S.C. § 271(a), Netflix has infringed, and if not enjoined, will continue to infringe claims of the '868 patent by manufacturing, using, selling, and/or offering to sell, without authority, a media delivery system that includes the Netflix on-demand Internet streaming media service, which is covered by one or more claims of the '868 patent, literally and/or under the doctrine of equivalents, in this judicial district and elsewhere in the United States.

87. For example, Netflix directly infringes at least claim 7 of the '868 patent by having and continuing to make, use, sell, and/or offer to sell its media delivery system that includes the Netflix on-demand Internet streaming media service.

88. Netflix has known of the claims in the '868 patent since at least May 2016.

89. On May 19, 2016, counsel for Affinity Labs wrote Netflix, through its counsel as an agent for Netflix, and directed Netflix to the patent application that led to the '868 patent, and the claims in that application.

90. The claims of the '868 patent have not changed since the last amendment on May 19, 2016.

91. Netflix has been aware that the claims of the '868 patent would issue at least as early as July 14, 2016.

[4] *Netflix Recommended TVs*, Netflix, Inc., https://devices.netflix.com/en/recommendedtv/2016/ (last visited Sept. 13, 2016); *see also Netflix Supported Devices*, Netflix, Inc., https://devices.netflix.com (last visited Sept. 13, 2016).

92. On July 14, 2016, counsel for Affinity Labs wrote Netflix, through its counsel as an agent for Netflix, and informed Netflix that the examiner issued a Notice of Allowance for the claims of the '868 patent.

93. On August 24, 2016, Affinity Labs, through its counsel, and Netflix, through its counsel, participated in a conference call with Special Master Karl Bayer.

94. During the call on August 24, Affinity Labs and Netflix discussed adding the '868 patent to this litigation.

95. Specifically, and in light of Affinity Labs' intent to assert the '868 patent upon issuance, Netflix represented and agreed that the '868 patent should be included in this case because of the relationship between the claims of the '868 patent that were set to issue and the claims in the '802 patent.

96. By no later than the August 24 call, Netflix was aware of and had reviewed the claims of the '868 patent.

97. Since at least August 26, 2016, Netflix knew that the '868 patent would issue on September 13, 2016.

98. On August 26, 2016, counsel for Affinity Labs wrote Netflix, through its counsel as an agent, and informed Netflix of the issue date for the '868 patent.

99. Despite Affinity Labs' written notice of and Netflix's knowledge of the '868 patent and its claims, Netflix has not taken any actions to avoid infringing the '868 patent.

100. Instead, Netflix continues to make, use, sell, and/or offer for sale its media delivery system that includes the Netflix on-demand Internet streaming media service, which infringes the '868 patent.

101. Netflix's infringement of the '868 patent has been and is willful because Netflix has known of the '868 patent, knew or was at least reckless with respect to its infringement of the '868 patent, and yet continues to offer the Netflix on-demand Internet streaming media service in at least reckless disregard of Affinity Labs' patent rights.

102. In violation of 35 U.S.C. § 271(b), Netflix has indirectly infringed one or more claims of the '868 patent by inducing others (e.g., its subscribers and end users) to directly infringe the '868 patent at least by using the Netflix on-demand Internet streaming media service in this judicial district and elsewhere in the United States.

103. Netflix advertises to its end users that streaming content from Netflix requires certain available network connection speeds depending on the quality of the streaming content.

104. For example, Netflix requires a minimum 0.5 Megabits per second download available from the user's internet network to stream movies and TV shows, with 3.0 Megabits per second recommended for SD content, 5.0 Megabits per second for HD content, and 25 Megabits per second for Ultra HD content.[5]

105. Netflix preinstalls its software capable of using Netflix's media delivery system on at least some end user devices before users receive the device.[6]

106. Additionally, Netflix instructs its users how to use its media delivery system on end user devices by downloading an application or by using Netflix.com.[7]

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[5] *Internet Connection Speed Recommendations*, Netflix, Inc., https://help.netflix.com/en/node/306 (last visited Sept. 13, 2016).
[6] *See Netflix Supported Devices*, Netflix, Inc., https://devices.netflix.com (last visited Sept. 13, 2016).
[7] *See id.*

107. Netflix instructs its end users to use its media delivery system to automatically adjust the quality of the media content "to deliver the highest possible quality, based on your current Internet connection speed."[8]

108. Netflix knowingly encouraged and intended—and continues to encourage and intend—for its subscribers and end users to directly infringe the '868 patent, including at least claims 1, 7, and 14, by instructing and advertising that its end users and subscribers stream Netflix's media library of movies and television programs to the end users' requesting device.

109. Netflix intended these actions by its end users and subscribers while the '868 patent is in force. With full knowledge of the '868 patent, Netflix continues to intend that its end users use its media delivery system to directly infringe the claims of the '868 patent.

110. Netflix knew of the '868 patent and knew that its instructions and encouragement, and its continued instruction and encouragement, has and will continue to result in infringement of the '868 patent. Netflix, therefore, specifically intended to induce its subscribers and end users to directly infringe the '868 patent when they used its media delivery system, including the Netflix on-demand Internet streaming media service.

111. Alternatively, Netflix knew that there was a high probability that the acts by its subscribers and end users would infringe the '868 patent but took deliberate steps to avoid learning of that infringement.

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[8] *How can I control how much data Netflix uses?*, Netflix, Inc., https://help.netflix.com/en/node/87 (last visited Sept. 13, 2016); *see also How do I manage mobile data usage on Netflix?*, Netflix, Inc., https://help.netflix.com/en/node/43701 (last visited Sept 13, 2016) (using the "Unlimited" setting "will stream at the highest possible quality for your device and the content you are viewing. This may use 1 GB per 20 minutes or more depending on your device and network speeds").

112. Despite knowing that the ’868 patent would issue since at least July 2016, Netflix has not made changes to its media delivery system to avoid infringement and continues to encourage its end users to directly infringe the ’868 patent.

113. On information and belief, Netflix did not obtain an opinion of counsel regarding the infringement or non-infringement of the ’868 patent before the filing of this Complaint.

114. In violation of 35 U.S.C. § 271(c), Netflix actively contributes to the infringement and actively continues to commit such contributory infringement of the ’868 patent in this judicial district and elsewhere.

115. Netflix has made, used, sold, and offered for sale, and continues to make, use, sell, and offer to sell the Netflix on-demand Internet streaming media service.

116. Netflix made, used, sold, and offered for sale, and continues to make, use, sell, and offer for sale at least components of the media delivery system that infringes the ’868 patent, such as the Netflix on-demand Internet streaming media service, including the Netflix application for streaming devices, that automatically adjusts the rate of streaming content to end user devices.

117. These components include a material part of the claimed inventions of the ’868 patent and have no other substantial non-infringing uses.

118. Netflix’s media delivery system is especially made to infringe the ’868 patent, for example by automatically adjusting the rate of streaming content to end user devices.

119. Netflix has known that these components are used by its end users and subscribers in a manner that infringes the ’868 patent because Netflix instructs its customers

to use its media delivery system to automatically adjust the rate of streaming content to end user devices,[9] and Netflix continues to offer these components for such use and infringement.

120. Alternatively, Netflix knew that there was a high probability that the acts by its subscribers and end users would infringe the '868 patent but took deliberate steps to avoid learning of that infringement.

121. Despite knowing that the '868 patent would issue since at least July 2016, Netflix has not made changes to its media delivery system to avoid infringement and continues to encourage its end users to directly infringe the '868 patent.

122. Netflix does not have a license or permission to use the claimed subject matter in the '868 patent.

123. Affinity Labs has been injured and has been caused significant financial damage as a direct and proximate result of Netflix's infringement of the '868 patent.

124. Netflix will continue to infringe the '868 patent, and thus cause irreparable injury and damage to Affinity Labs unless enjoined by this Court.

125. Affinity Labs is entitled to recover from Netflix the damages sustained by Affinity Labs as a result of Netflix's wrongful acts in an amount subject to proof at trial.

Demand for Trial by Jury

Affinity Labs demands a jury trial on all issues so triable, pursuant to Rule 38 of the Federal Rules of Civil Procedure.

[9] *How can I control how much data Netflix uses?*, Netflix, Inc., https://help.netflix.com/en/node/87 (last visited Sept. 13, 2016); *see also How do I manage mobile data usage on Netflix?*, Netflix, Inc., https://help.netflix.com/en/node/43701 (last visited Sept 13, 2016).

Prayer for Relief

Plaintiff Affinity Labs prays for the following relief:

1. A declaration that Netflix has infringed and is infringing the '802 and '868 patents and is liable to Affinity Labs for infringement;

2. An order enjoining Netflix from infringing the '802 and '868 patents;

3. If a permanent injunction is not granted, a judicial determination of the conditions for future infringement such as an ongoing royalty;

4. An award of damages, including pre-judgment and post-judgment interest, in an amount adequate to compensate Affinity Labs for Netflix's infringement of the '802 and '868 patents, and that the damages be trebled pursuant to 35 U.S.C. § 284;

5. An equitable accounting of damages owed by Netflix for the period of infringement of the '802 and '868 patents, following the period of damages established by Affinity Labs at trial;

6. A finding that this case is exceptional and an award of attorneys' fees pursuant to 35 U.S.C. § 285;

7. An award of costs, expenses, and disbursements; and

Such other and further relief as the Court deems Affinity Labs may be entitled to in law and equity.

Dated: September 16, 2016

Respectfully Submitted,

By: */s/ Patrick M. Arenz*

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EXHIBIT A

US009094802B2

(12) **United States Patent**
White et al.

(10) **Patent No.: US 9,094,802 B2**
(45) **Date of Patent: Jul. 28, 2015**

(54) **SYSTEM AND METHOD TO COMMUNICATE TARGETED INFORMATION**

(71) Applicant: **Affinity Labs of Texas, LLC**, Drippings Springs, TX (US)

(72) Inventors: **Russell W. White**, Austin, TX (US); **Kevin R. Imes**, Austin, TX (US)

(73) Assignee: **Affinity Labs of Texas, LLC**, Dripping Springs, TX (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/168,201**

(22) Filed: **Jan. 30, 2014**

(65) **Prior Publication Data**

US 2014/0207581 A1 Jul. 24, 2014

Related U.S. Application Data

(63) Continuation of application No. 13/854,232, filed on Apr. 1, 2013, now Pat. No. 8,688,085, which is a continuation of application No. 13/117,507, filed on May 27, 2011, now Pat. No. 8,521,140, which is a continuation of application No. 12/495,190, filed on Jun. 30, 2009, now Pat. No. 7,953,390, which is a continuation of application No. 12/015,320, filed on Jan. 16, 2008, now Pat. No. 7,778,595, which is a continuation of application No. 10/947,755, filed on Sep. 23, 2004, now Pat. No. 7,324,833, which is a continuation of application No. 09/537,812, filed on Mar. 28, 2000, now Pat. No. 7,187,947.

(51) **Int. Cl.**

H04L 29/08	(2006.01)
G06Q 30/02	(2012.01)
H04W 4/06	(2009.01)

(Continued)

(52) **U.S. Cl.**

CPC ***H04W 4/06*** (2013.01); ***G06F 3/0482*** (2013.01); ***G06F 3/0488*** (2013.01); ***G06F 3/04842*** (2013.01); ***G06Q 30/0267*** (2013.01); ***G06Q 30/0269*** (2013.01); ***G11B 31/02*** (2013.01); ***H04L 65/60*** (2013.01); ***H04L 67/02*** (2013.01); ***H04M 1/6091*** (2013.01); ***H04W 84/12*** (2013.01); ***H04W 88/06*** (2013.01); *H04H 60/27* (2013.01); *H04M 1/7253* (2013.01); *H04M 1/7255* (2013.01); *H04M 1/72547* (2013.01); *H04M 1/72558* (2013.01); *H04M 1/72561* (2013.01); *H04M 2250/64* (2013.01)

(58) **Field of Classification Search**

CPC G06Q 30/0267; G06Q 30/0269; G11B 31/02; H04M 1/6091; H04W 84/12; H04W 4/06; H04W 88/06; G06F 3/04842; G06F 3/0488; G06F 3/0482; H04L 65/60; H04L 67/02

See application file for complete search history.

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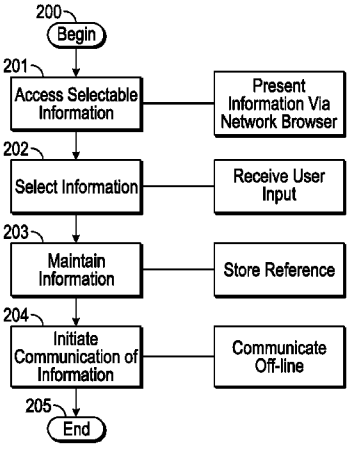
Primary Examiner — Kashif Siddiqui

(57) **ABSTRACT**

A method for targeted advertising is disclosed. The method includes accessing at least one piece of demographic information associated with a user of a portable device, selecting an advertisement to be delivered to the user based at least in part on the demographic information, and initiating communication of a version of the advertisement configured for presentation at the portable device.

20 Claims, 8 Drawing Sheets



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G11B 31/02	(2006.01)
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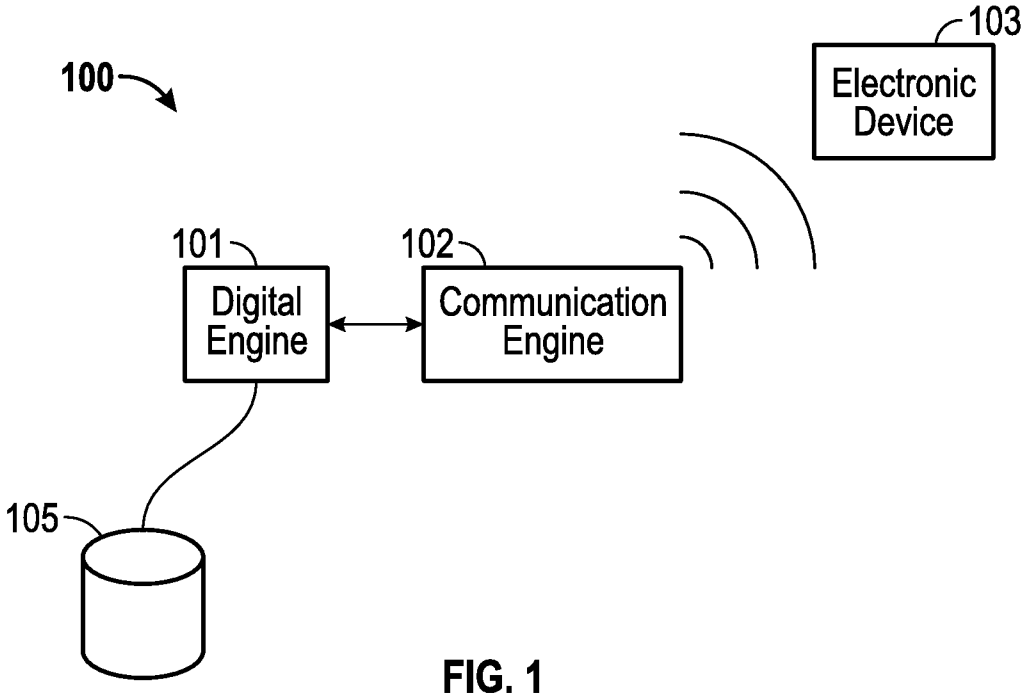
100
103
Electronic Device
101
Digital Engine
102
Communication Engine
105

FIG. 1

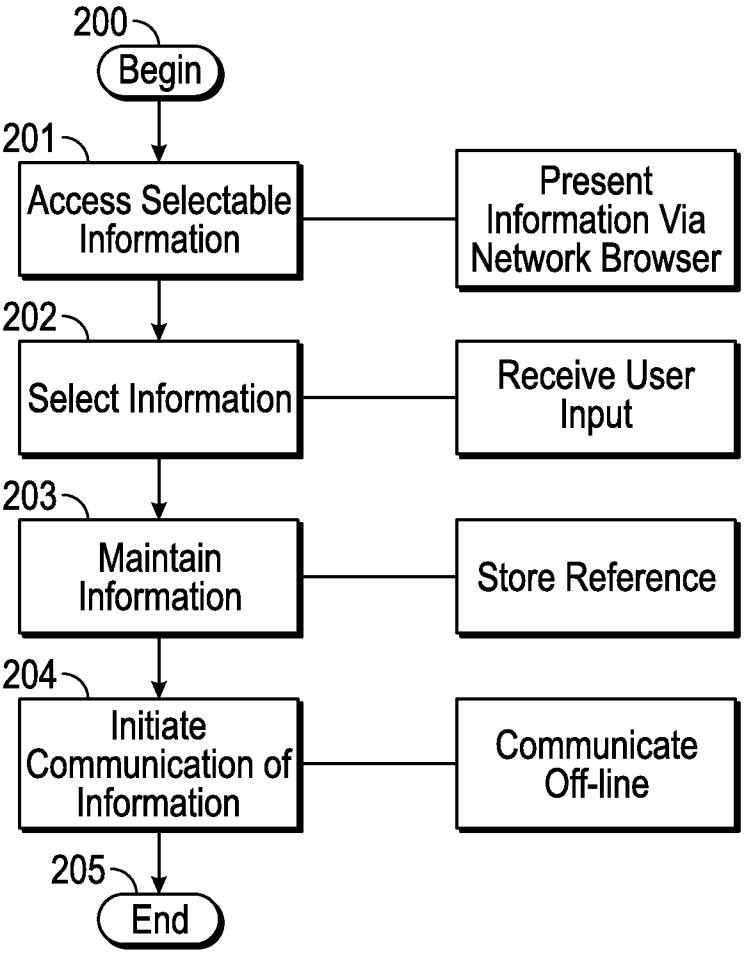
200
Begin
201
Access Selectable Information
Present Information Via Network Browser
202
Select Information
Receive User Input
203
Maintain Information
Store Reference
204
Initiate Communication of Information
Communicate Off-line
205
End

FIG. 2

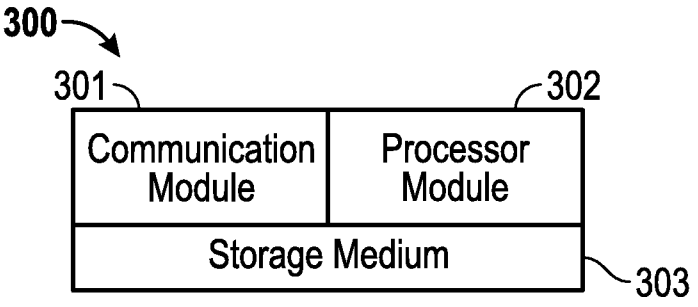
300
301
302
Communication Module
Processor Module
Storage Medium
303

FIG. 3

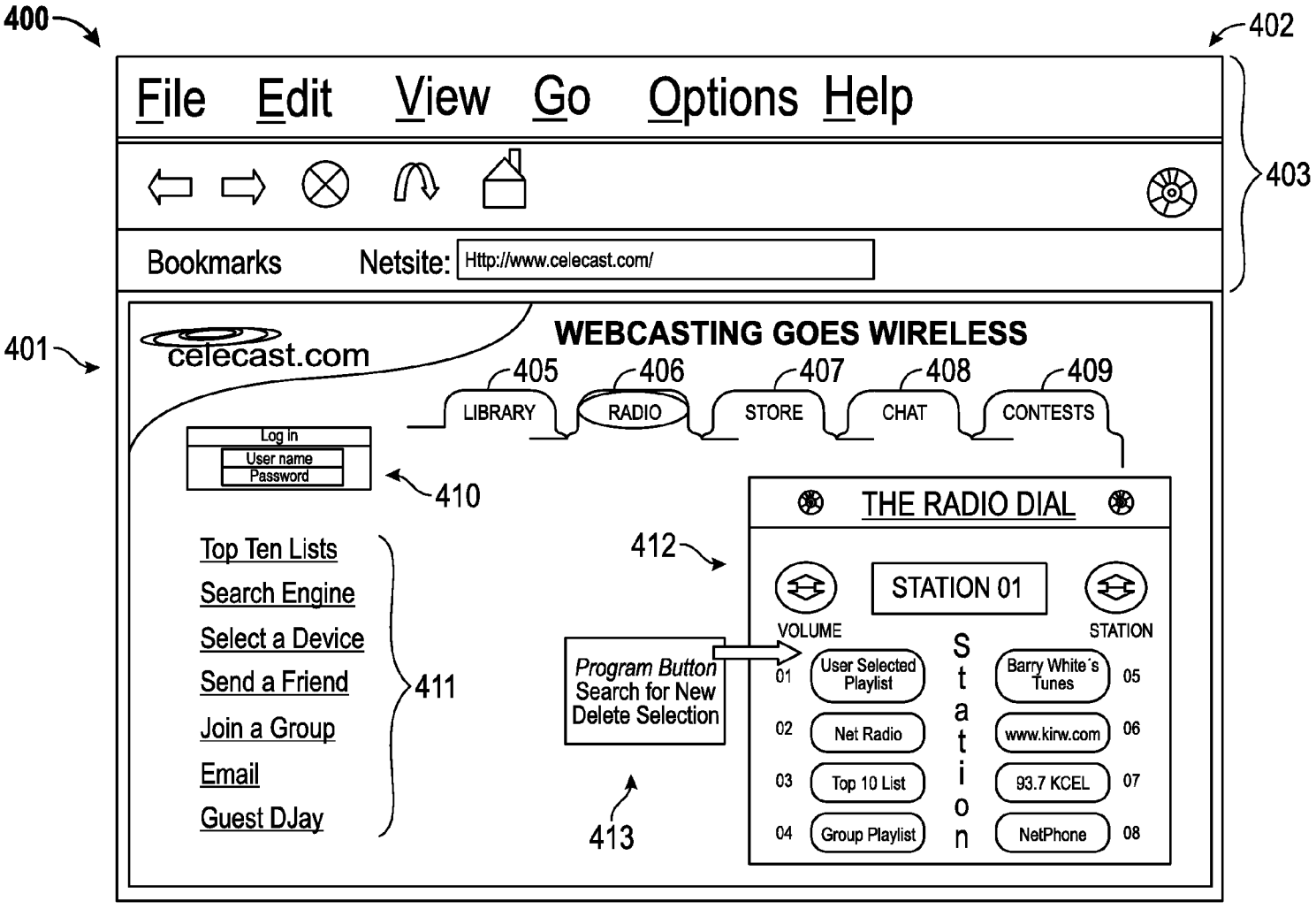
400
402
File Edit View Go Options Help
403
Bookmarks
Netsite:
Http://www.celecast.com/
401
celecast.com
WEBCASTING GOES WIRELESS
405
406
407
408
409
LIBRARY
RADIO
STORE
CHAT
CONTESTS
Log In
User name
Password
410
THE RADIO DIAL
412
Top Ten Lists
Search Engine
Select a Device
Send a Friend
Join a Group
Email
Guest DJay
411
STATION 01
VOLUME
STATION
Program Button
Search for New
Delete Selection
413
01
User Selected Playlist
02
Net Radio
03
Top 10 List
04
Group Playlist
Station
Barry White's Tunes
05
www.kirw.com
06
93.7 KCEL
07
NetPhone
08

FIG. 4

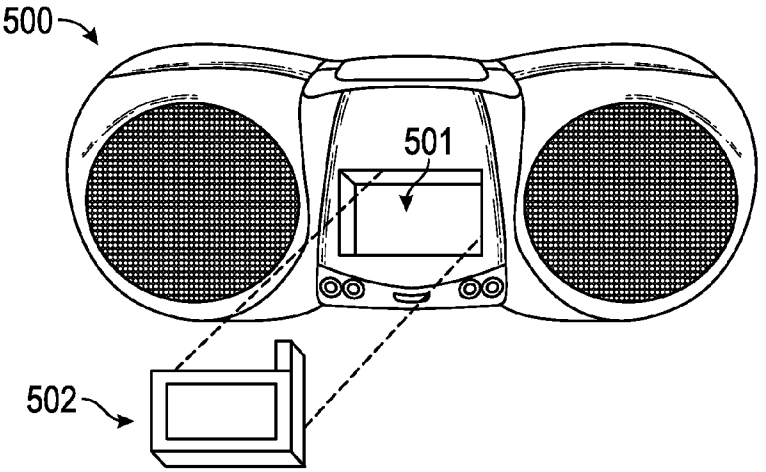

FIG. 5A

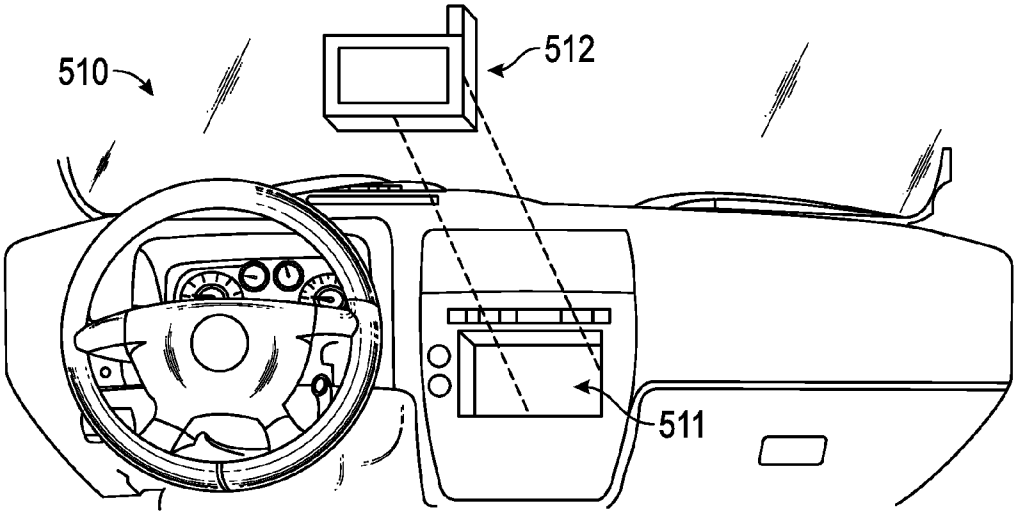

FIG. 5B

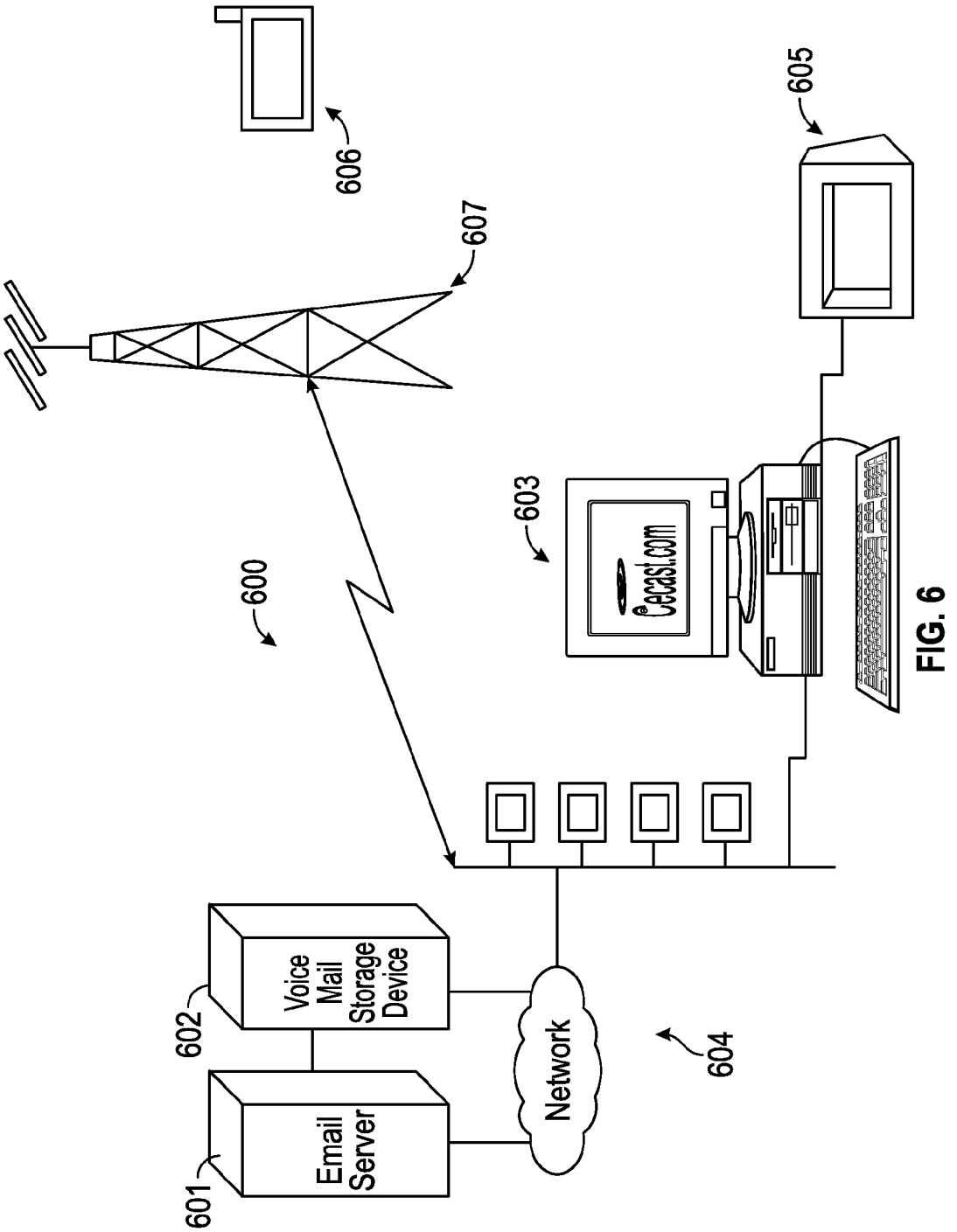
606
605
607
603
600
Comcast.com
Voice Mail Storage Device
602
Network
604
Email Server
601

FIG. 6

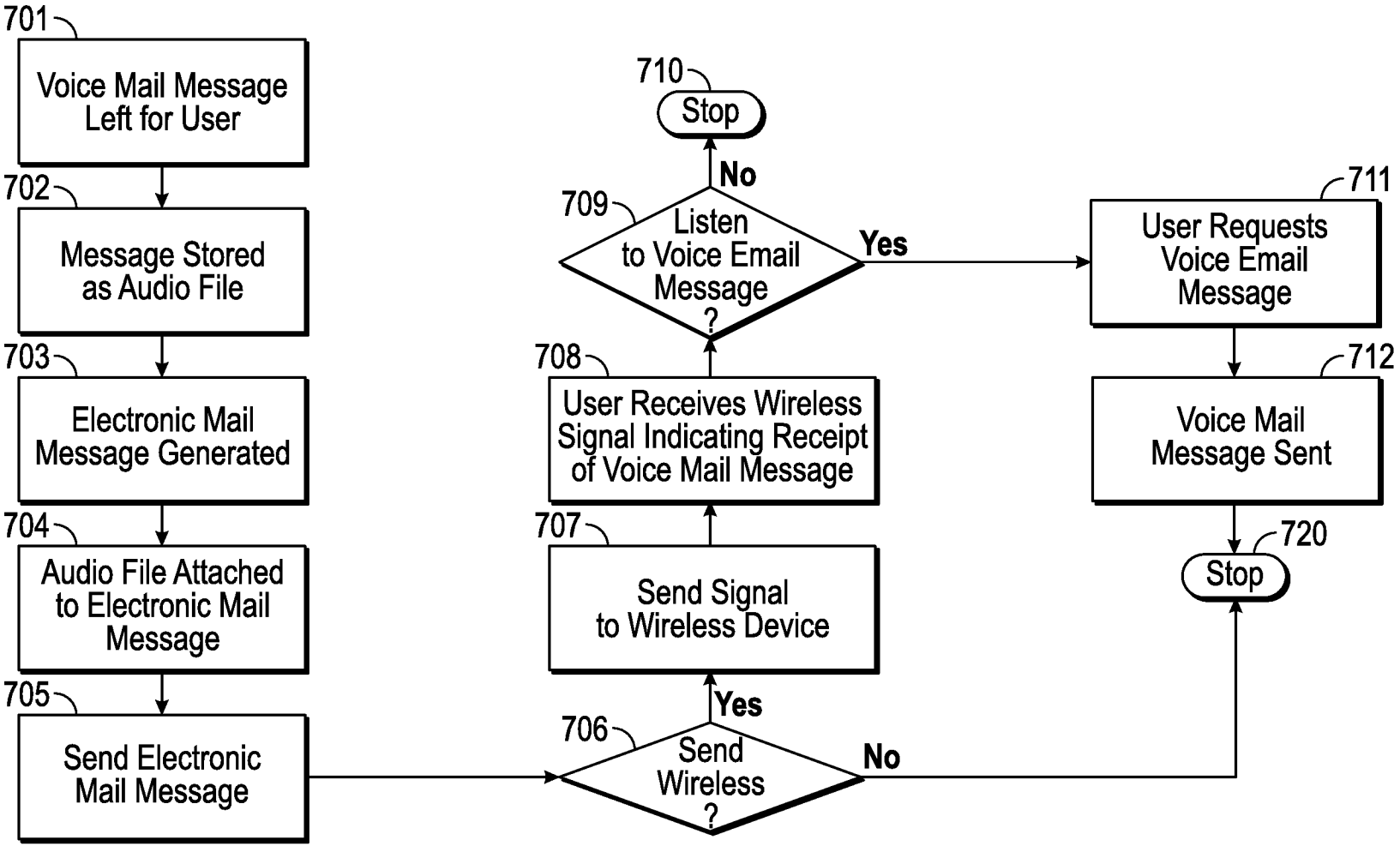
701
Voice Mail Message Left for User
702
Message Stored as Audio File
703
Electronic Mail Message Generated
704
Audio File Attached to Electronic Mail Message
705
Send Electronic Mail Message
706
Send Wireless ?
Yes
No
707
Send Signal to Wireless Device
708
User Receives Wireless Signal Indicating Receipt of Voice Mail Message
709
Listen to Voice Email Message ?
Yes
No
710
Stop
711
User Requests Voice Email Message
712
Voice Mail Message Sent
720
Stop

FIG. 7

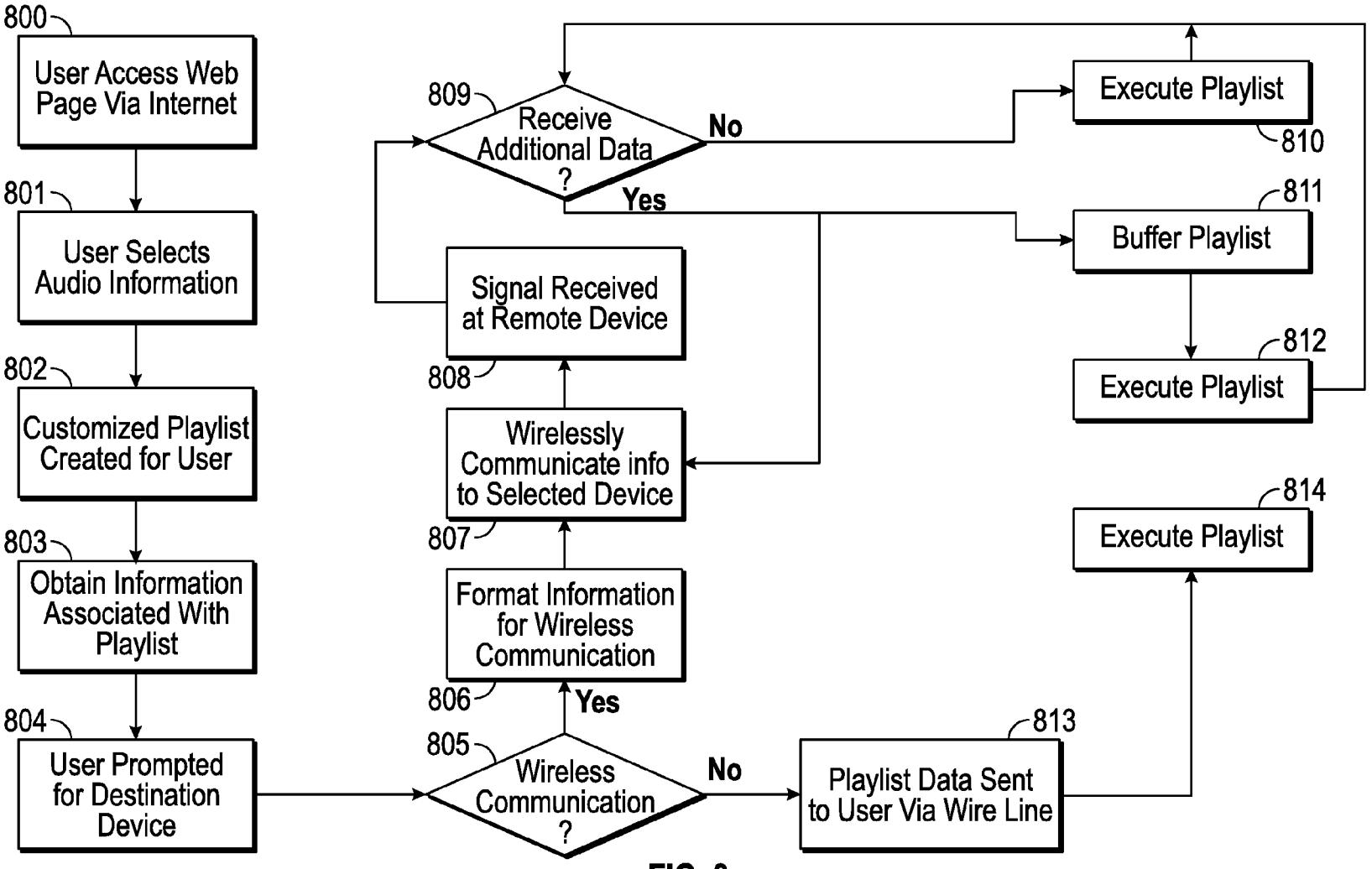
800
User Access Web Page Via Internet
801
User Selects Audio Information
802
Customized Playlist Created for User
803
Obtain Information Associated With Playlist
804
User Prompted for Destination Device
805
Wireless Communication ?
No
Yes
806
Format Information for Wireless Communication
807
Wirelessly Communicate info to Selected Device
808
Signal Received at Remote Device
809
Receive Additional Data ?
No
Yes
810
Execute Playlist
811
Buffer Playlist
812
Execute Playlist
813
Playlist Data Sent to User Via Wire Line
814
Execute Playlist

FIG. 8

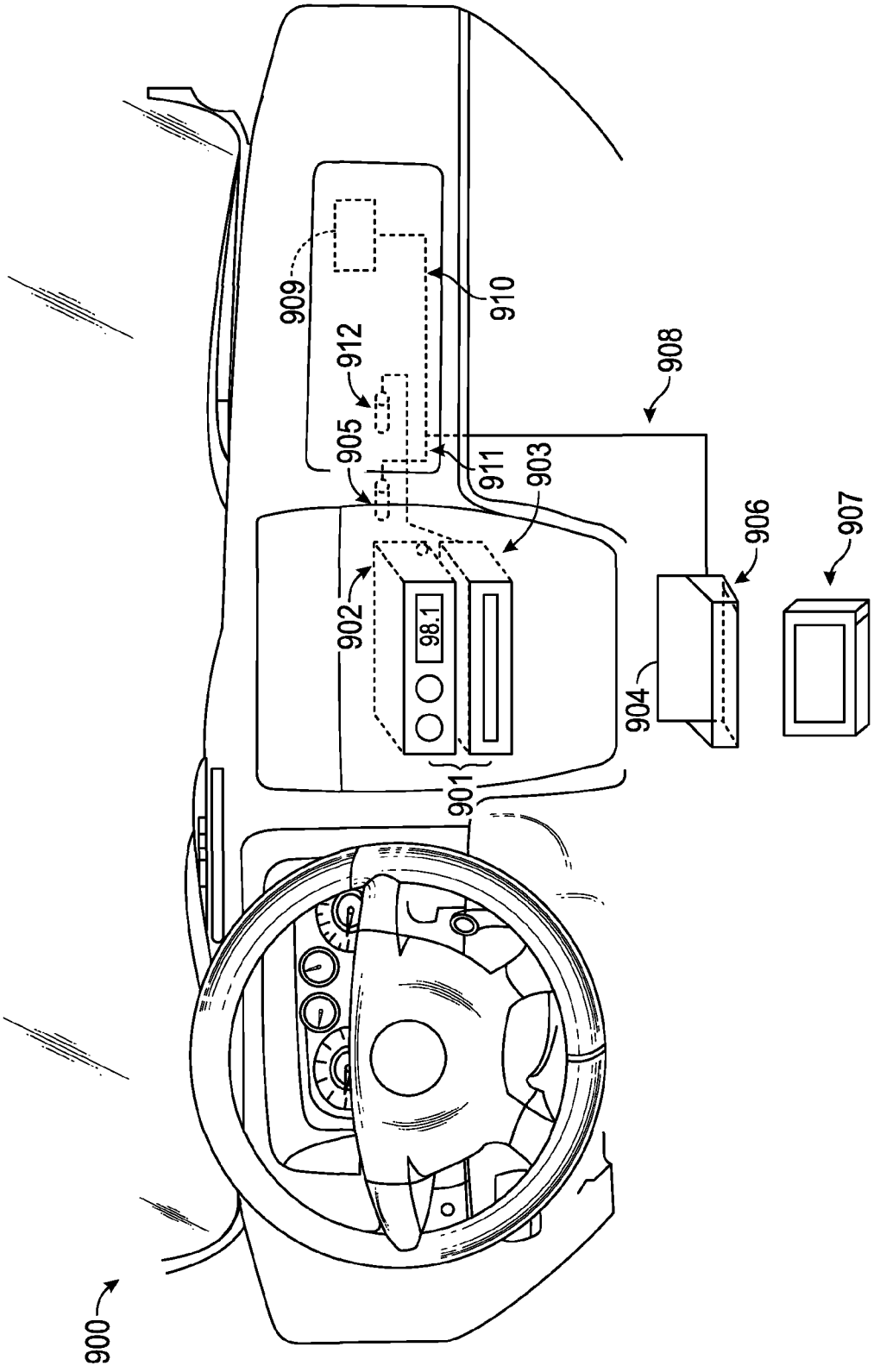

FIG. 9

SYSTEM AND METHOD TO COMMUNICATE TARGETED INFORMATION

This application is a continuation of U.S. patent application Ser. No. 13/854,232, filed Apr. 1, 2013, which is a continuation of U.S. patent application Ser. No. 13/117,507, filed May 27, 2011, which is now U.S. Pat. No. 8,521,140, which issued Aug. 27, 2013, which is a continuation of U.S. patent application Ser. No. 12/495,190, filed on Jun. 30, 2009, which is now U.S. Pat. No. 7,953,390, which issued on May 31, 2011, which is a continuation of U.S. patent application Ser. No. 12/015,320, filed Jan. 16, 2008, which is now U.S. Pat. No. 7,778,595, which issued on Aug. 17, 2010, which is a continuation of U.S. patent application Ser. No. 10/947,755, filed on Sep. 23, 2004, which is now U.S. Pat. No. 7,324,833, which issued on Jan. 29, 2008, which is a continuation of U.S. patent application Ser. No. 09/537,812, filed on Mar. 28, 2000, which is now U.S. Pat. No. 7,187,947, which issued on Mar. 6, 2007, the disclosures of which are all hereby incorporated herein by reference in their entirety for all purposes.

FIELD OF THE DISCLOSURE

The present disclosure relates to digitally stored content and, more specifically, to a content delivery system and method.

BACKGROUND

The first commercial radio stations in the United States began operation around 1920. Today, there may be as many as 12,000 radio stations in the United States programming in several distinct formats. When broadcasting their respective signals, these radio stations often use an analog signal, which may be modulated based on frequency or amplitude. Frequency modulated (FM) radio appears to be the dominant entertainment medium while amplitude modulated (AM) radio seems to be a popular outlet for news and information.

Unfortunately, analog radio may be unable to provide the sound quality and consistency that radio listeners desire. As such, several broadcasting related companies have begun to consider a movement to digital radio. Unlike analog radio reception, digital radio reception may be able to provide compact disk (CD) quality sound while remaining virtually immune to interference. Being immune to interference may result in reducing static growls or "multipath" echoes, echoes caused by signal reflections off buildings or topographical features.

Some countries, like Canada and many European countries, may choose to have digital radio operate in a single digital radio band such as the L-band between 1452-1492 megahertz (MHz). This band would allow the reception of both terrestrially and satellite-originated signals. By comparison, FM radio typically operates between 88 and 108 MHz while AM radio typically operates between 0.525 and 1.705 MHz. Neither of these bands allows for easy transmission via satellite.

Canada proposed using the L-Band for digital radio as early as 1992. Several countries throughout the world have since agreed to use the L-Band for digital radio with one notable exception. It appears the United States has chosen not to operate its digital radio within the L-Band. In the United States, the L-Band may already be committed for military uses. Apparently, the United States plans to adopt a system called in-band on-channel, or IBOC, which fits within the AM and FM frequencies.

IBOC technology may offer some advantages over L-Band transmissions. For example, there may be no need for new spectrum allocations. There may be backward and forward compatibility with existing AM and FM systems on both the transmitter and receiver sides, and there may be a low-investment upgrade to digital systems. Unfortunately, a workable IBOC solution is yet to be seen though technology may someday make IBOC digital radio commercially possible.

Even if an IBOC solution becomes commercially available in the United States, IBOC digital radio may suffer from several shortcomings. For example, there may global standardization problems. Though the United States favors IBOC, the European and Canadian communities seem to favor L-Band making the establishment of a global standard difficult.

BRIEF DESCRIPTION OF THE DRAWINGS

A more complete understanding of the present embodiments and advantages thereof may be acquired by referring to the following description taken in conjunction with the accompanying drawings, in which like reference numbers indicate like features, and wherein:

FIG. **1** depicts a general system for wirelessly communicating selective information to an electronic device in accordance with one aspect of the present invention;

FIG. **2** illustrates a block diagram of a method of wirelessly communicating selected information to an electronic device;

FIG. **3** illustrates an electronic device operable to receive selected audio information in accordance with the teachings of the present invention;

FIG. **4** illustrates a graphical user interface (GUI) for displaying selectable audio information according to one aspect of the present invention;

FIG. **5**A illustrates a portable radio system having a mount for an electronic device according to one embodiment of the present invention;

FIG. **5**B illustrates an automobile console having a mount for coupling an electronic device according to one aspect of the present invention;

FIG. **6** illustrates a block diagram of a system for communicating voice mail messages using email according to one embodiment of the present invention;

FIG. **7** illustrates a flow chart for providing voice email messages according to one embodiment of the present invention;

FIG. **8** illustrates a flow diagram of a method for providing selected audio information to an electronic device according to one embodiment of the present invention; and

FIG. **9** illustrates an automobile console having a mount for an electronic device according to one embodiment of the present invention.

DETAILED DESCRIPTION

The conceptual groundwork for the present invention includes wirelessly communicating selective information to an electronic device. According to one aspect, a user may interact with the Internet to select information, such as audio information, and wirelessly communicate the selected information to an electronic device. The electronic device receives the information via a wireless communications network and processes the information accordingly. In a particularized form, a user may select information from an Internet website operable to allow selectivity of audio information such as songs, on-line radio stations, on-line broadcasts, streaming audio, or other selectable information. Upon selecting the

audio information, information or data associated with the selected audio information is wirelessly communicated to an electronic device. The electronic device may then be used to process the selected audio information. In this manner, a user may receive selective audio information via a wireless electronic device.

In one form, the electronic device may be operable to communicate with an individual's automobile audio system. A user may select audio information utilizing a personal computer with access to a website operable to display selectable audio information. The selected audio information may then be wirelessly communicated to the electronic device associated with an automobile's audio system. Therefore, upon receiving the selected audio information, a user may access and play the received audio information utilizing the electronic device in association with the automobile's audio system.

The present invention is not limited to communicating only audio information. One skilled in the art can appreciate that other types of information, such as video, textual, etc. may be communicated utilizing the systems and methods disclosed herein without departing from the spirit and scope of the present invention. Additionally, it will be understood that information may be formatted in a plurality of ways at different phases of communication without loosing the underlying content of the selected information. For example, an audio file may be formatted, segmented, compressed, modified, etc. for the purpose of providing or communicating the audio invention. Therefore, the term "audio information" or "information" is used in a general sense to relate to audio information in all phases of communication.

FIG. **1** depicts a general system for wirelessly communicating selective information to an electronic device in accordance with one aspect of the present invention. The system, illustrated generally at **100**, includes a digital engine **101** coupled to a communications engine **102**. Communications engine **102** is remotely coupled to an electronic device **103**. Digital engine **101** may be directly or indirectly coupled to storage device **105** operable to store information. Digital engine **101** maintains information or data associated with selected information in a digital format. The information may be stored within storage device **105** or other storage devices operable to maintain data or information associated with the selected information.

Communications engine **102** is communicatively coupled to digital engine **101** and operable to wirelessly communicate the selected information to electronic device **103**. During operation, audio information may be selected by a user utilizing a personal computer or other devices operable to communicate with an information network. Digital engine **101** is operable to maintain information associated with the selected audio information. For example, the information could be several songs or titles configured as an audio file and formatted in a digital format such as an MP3 file, wave file, etc. The maintained information may also be a reference to a network location where an audio file may be stored, a network location where a network broadcast of audio information may be located, etc. or other network locations having information associated with the selected audio information. Therefore, digital engine **101** may maintain a plurality of different types of information or data associated with the selected audio information.

System **100**, utilizing communication engine **102**, may wirelessly communicate data or information associated with the selected audio information to electronic device **103** thereby providing wireless communication of selected information to an electronic device operable to receive wireless communications. In one embodiment, digital engine **101** may be used in association with an Internet website configured to provide access to selectable information. The Internet website operably associated with digital engine **101** allows a user to select information to be wirelessly communicated to electronic device **101** utilizing a network environment. The Internet website may include several different types of information related to audio information.

FIG. **4**, described in greater detail below, illustrates one embodiment of providing an Internet website for displaying selectable audio information. For example, the Internet website may include music and/or artist search engines, playlists, top 10 charts, artists by genre, and other information associated with audio information. A user may select information associated with the audio information and digital engine **101** can maintain the information or data associated with the selected information in a digital format. Communications engine **102** coupled to digital engine **101** may wirelessly communicate data associated with the selected audio information to electronic device **103**. Therefore, a user may access and select audio information via an Internet website and wirelessly communicate the data to an electronic device. As such, system **100** advantageously allows for wireless communication of selected audio information to electronic devices that may be remotely located from a conventional terrestrial communication network.

Electronic device **105** may be configured in a plurality of ways for receiving wireless communication of selected audio information. In one embodiment, electronic device **105** may be operable as a component configured to receive a cellular signal comprising the selected information communicated by the communication engine. For example, a device having a cellular modem may be operable to receive the information at specified intervals. Upon receiving the information the electronic device may process the received information. Electronic devices are described in more detail below and may include a network radio, a modular device, an audio system, a personal digital assistant (PDA), a cellular phone, or other electronic devices operable to receive information wirelessly communicated by communication engine **102**.

Communications engine **102** may be operable to wirelessly communicate selected information to electronic device **103** in a plurality of ways. The present invention advantageously allows for several different embodiments of wirelessly communicating selected audio information to electronic device **103** and is not limited to any specific configuration described below. Several different types or combinations of wireless communication may be realized by the present invention. Communications engine **102** may be operable to wirelessly communicate the selected information from an information network, such as the Internet, to an electronic device operable to receive wireless communications. In one embodiment, communications engine **102** may comprise a conduit to interface information with a wireless communication network. The conduit may configure the information located within the information network into a format operable to be transmitted via wireless communication.

For example, a wireless device may be operable to receive packets of information having a specific size and in a specific format. In such an embodiment, communications engine **102** could format the information into a desirable format for wirelessly communicating the information to electronic device **103**. Several types of wireless communication may be used by communications engine **102** to communicate the selected information to an electronic device. Communications networks such as GSM, Digital Satellite communication, SB, Radio bands, DRC, SuperDRC or other systems or types of

transmission such as TDMA, CDMA, spread spectrum, etc. or frequencies such as between about 1.7 GHz and 2.0 GHz may be realized by the present invention for communicating information or data representing the selected audio information to electronic device **103**.

In one embodiment, the selective information may be communicated using a digital broadcast signal. Digital broadcast includes providing information via a signal such as AM, FM, and the like. Digital information may be included or encoded as a sub-carrier within the broadcast signal and received by electronic device **103**. A digital sub-carrier may include a selective bandwidth of frequencies for a specific radio station (i.e., 6 MHz for FM). The selective information may be wirelessly communicated to electronic device **103** utilizing a communication engine **102** operable to communicate the selective information via a digital FM signal. In this manner, selective information may be communicated within digital FM sub-carriers to an electronic device operable to receive the information. For example, a user may subscribe to communicate the information via an FM sub-carrier and receive the selective data through wireless communication via a specified FM sub-carrier.

In one embodiment, the selected information may be formatted and transmitted to achieve a desirable transmission rate. For example, conventional systems may transmit information at a speed of 10 kilobits per second. Therefore, for 1 megabyte of information to be communicated to an electronic device, a transmission time of approximately 800 seconds may be required. The present invention may allow for a relative increase in transmission speed by removing the requirement that information be communicated asynchronously to an electronic device. For example, conventional wireless communication utilizes a specified frequency to communicate information in two directions (i.e., cellular phones). As such, information is communicated across a channel in an asynchronous manner to provide a continuous audio signal to the recipient.

The present invention advantageously allows for signals to be transmitted to an electronic device in a less than asynchronous manner. For example, if a user selected a song to be wirelessly communicated to an electronic device, system **100** could communicate the information in a less than asynchronous manner allowing the selected information to be transmitted efficiently thereby decreasing the overall download time for the selected audio information. In one embodiment, the selected information may be compressed and transmitted across the same frequency but at different phases thereby allowing plural signals having different phases to be wirelessly communicated to an electronic device. Therefore, the electronic device may be operable to receive multiple phased signals and process the selective information accordingly.

In one embodiment, the information may be wirelessly communicated at a relatively slow transmission rate. For example, a user may schedule when the selected audio information may be used by electronic device **103**. The user may select several different audio tracks or songs to be transmitted to an electronic device associated with the user's vehicle such that the user can listen to the user selected audio information during the drive home at the end of a workday. Therefore, it may be desirable to utilize a slower transfer speed due to the extended amount of time available prior to actual use of the selected audio information. In this manner, communications networks having less or slower transfer rates may be used to wirelessly communicate the selected audio information to the electronic device.

In another embodiment, high-speed wireless communication networks may be used to communicate the selected audio information. For example, a user may want to listen to an Internet broadcast of an Internet radio station. Therefore, high-speed communication may be required to wirelessly communicate or stream the selected audio information to an electronic device. In another embodiment, a hybrid of wireless communication rates may be deployed depending on the requirements of the selected audio information and/or the electronic device. For example, the selected audio information may first be transmitted to the electronic device via high-speed communication until enough information has been wirelessly communicated and buffered into a memory device operably associated with the electronic device. Upon communication of a certain percentage of the selected audio information, slower communication speeds may then be used to communicate additional selected audio information.

Therefore, system **100** may be configured in a plurality of ways to communicate selected information to electronic device **103**. Digital engine **101** may be used to maintain data or information associated with the selected information and communication engine **102**, communicatively coupled to digital engine **101**, may wirelessly communicate selected information to electronic device **103**.

FIG. **2** illustrates a block diagram of a method of wirelessly communicating selected information to an electronic device. The method may be used in association with the system illustrated in FIG. **1** or other systems operable to utilize the method of FIG. **2**.

The method begins generally at step **200**. At step **201**, selectable audio information may be accessed utilizing a network communications device. For example, selectable audio information may be displayed at an Internet website accessible by a personal computer. In another embodiment, the selectable information may be accessed utilizing a wireless communications device such as, a cellular phone, a PDA device, or other devices operable to provide access to the selectable audio information.

Upon accessing the selectable information, the method proceeds to step **202** where a user can identify or select audio information to be wirelessly communicated to an electronic device. For example, a user may select an entire album to be wirelessly communicated to a PDA device.

Upon the user selecting the audio information, the method proceeds to step **203** where the method maintains information associated with the selected information. In one embodiment, the information may be an audio file, such as a wave file, and MP3 file, etc. representative of the selected audio information. In another embodiment, a network location that comprises a file representing the selected information may be maintained. Another example may include a network location of a network broadcast of audio information. Therefore, the method at step **203** may maintain several different types of information associated with the selected audio information.

Upon maintaining information or data associated with the selected information, the method proceeds to step **204** where the method wirelessly communicates information associated with the selected information to an electronic device. For example, if an audio file associated with the selected audio information was maintained, the method would communicate the audio file to the electronic device. In another embodiment, a link or network address broadcasting the selected audio information may be accessed and, at step **204**, wirelessly communicated to an electronic device. In another embodiment, a combination of different types of audio information may be wirelessly communicated to an electronic device. Upon transmitting the selected audio information, the method proceeds to step **205** where the method ends.

Selected audio information may be communicated in a plurality of ways as described above including communicating via a cellular communications network to an electronic device operable to receive cellularly-communicated signals. For example, the information may be selected from a website operable to display selectable information. Upon selecting the audio information, a data file representing the selected audio information may be wirelessly communicated to an electronic device thereby allowing a user to select audio information via the Internet and wirelessly communicate the information to an electronic device.

In some embodiments, the wireless communication to an electronic device may occur in an off-line environment. For example, a user may go "on-line" to access a website and select information and then go "off-line" or end the browsing session. The wireless communication may then occur while the user is off-line thereby removing the confines of using an active or on-line browsing environment (i.e. Internet radio broadcast, streaming audio, etc.) for accessing selected information. Therefore, the method of FIG. **2** allows for information, such as audio information, to be communicated from a network location such as a web site, to an electronic device "via" wireless communication. The present invention advantageously allows users to access and download information accessible by a network location to an electronic device operable to receive wireless communications thereby reducing the need for land lines, terrestrial communication networks, etc. for communicating selective information.

In one embodiment, the method of FIG. **2** may be deployed in association with an Internet website operable to display selectable links for downloading information. The information may include audio information such as MP3s, streaming audio, streaming. Internet broadcasts, etc. are selectable by a user and operable to be wirelessly communicated to an electronic device. By providing a user with a website of selectable audio information operable to be wireless communicated to an electronic device, a user may customize information communicated to an electronic device. In one embodiment, a user may communicate information to an electronic device that may not be owned by the user. For example the method of FIG. **2** could be modified to allow a user to wirelessly communicate audio information to a plurality of electronic devices that may or may not be owned by the user.

FIG. **3** illustrates an electronic device operable to receive selected audio information in accordance with the teachings of the present invention. Electronic device **300** includes a communication module **301** such as a transceiver coupled to storage medium **303** such as a high speed buffer, programmable memory, or other devices operable to store information. Electronic device **300** may also include processor **302** operably associated with communication module **301** and storage medium **303**. Processor **302** may be operable to process wirelessly communicated selected information and in one embodiment may be integrated as part of communication module **301** of storage medium **303**. In the same manner, as larger scale integration of electronic devices proliferate, communication module **301**, processor **302**, and storage medium **303** may be integrated into one communication component or device operable as electronic device **300**.

Processor **302** may be operable using software that may be stored within storage medium **303**. In one embodiment, software upgrades may be communicated to electronic device **300** via wireless communication allowing for efficient system upgrades for electronic device **300**. Storage medium **303** may include one or several different types of storage devices. For example, storage medium **303** may include programmable gate arrays, ROM devices, RAM devices, EEPROMs, minidisks or other memory devices operable to store information.

During use, electronic device **300** receives wireless communications of selective information. The information may be transmitted via a wireless communications network and received by electronic device **300** via transceiver **301**. Transceiver **301** may be operable to convert the received wireless communication signal into a desirable format and store the received information within storage medium **303**. The received information may then be processed by electronic device **300**.

In one embodiment, electronic device **300** may be operable as an audio player configured to play digital representations of music. For example, electronic device **300** may also include an MP3 player operable to process the received information into an audio signal. Therefore, electronic device **300** may be used to receive wirelessly communicated MP3 audio files and play these files using an MP3 player when desired. In another embodiment, electronic device **300** may be configured as a PDA wherein the PDA includes a web browser operable to wirelessly communicate with the Internet. The PDA device may include a user interface allowing a user to select information to be wirelessly communicated to electronic device **300**.

By providing a website of selectable information, the PDA devices may provide an efficient embodiment for electronic device **300** in that is allows a user to access and select information using a wireless communication network and receive the selected information using the same or different wireless communication network. In yet another embodiment, electronic device **300** may be configured as a component operable to receive selective information via wireless communication and communicate the information to a second electronic device such as an automobile sound system, home stereo, etc.

For example, electronic device **300** may utilize transceiver **301** to receive wirelessly communicated information. Electronic device **300** may then be coupled to an automobile sound system using an interface and communicate the received information to the automobile sound system. In this manner, electronic device **300** may be used to provide the automobile sound system with audio files received via wireless communication.

In another embodiment, electronic device **300** may be operable to communicate the received audio information to an audio system via a localized communications-signaling network. One such network may include utilizing "Bluetooth" communication standard, used to provide communication between electronic devices in a proximal setting. In one embodiment, electronic device **300** may be integrated into an audio component such as a radio receiver. Electronic device **300** integrated into an audio component may be configured to process digital audio files wirelessly communicated to an audio component. In another embodiment, electronic device **300** may be operable to communicate with an analog receiver at a predetermined frequency.

For example, a specific frequency may be selected (i.e., 93.7 MHz) for communicating the wireless received selected information from electronic device **300** to a localized audio system. Electronic device **300** communication of the wirelessly received information allows a conventional receiver to receive the selected audio information. In one embodiment, the conventional receiver may be configured to receive a digital sub-carrier, on-carrier, or other within a specified frequency. Therefore, electronic device **300** may be operable to locally transmit the signal at a specific frequency thereby allowing the conventional receiver to receive the information. In another embodiment, electronic device **300** may be oper-

able to scan plural bandwidths to receive the selective information. For example, transceiver **301** may be operable to receive selective information across several frequencies and process the received information accordingly.

In another embodiment, electronic device **300** may be operable to scan several frequencies to obtain the desirable information. For example, a user may select several Internet broadcasts comprised of streaming audio information. Therefore, the information may be transmitted across several wireless frequencies receivable by electronic device **300**. Electronic device **300** may then be operable to allow a user to scan wirelessly communicated Internet broadcast signals thereby providing a user selected virtual broadcast radio network. In another embodiment, electronic device **300** may include a user interface operable to communicate with an Internet website operable to display selectable audio information. The Internet website may be configured as a user-preferred environment displaying a users selected audio information. Internet broadcast selections, streaming audio selections, etc.

With a display device for displaying a Website having selectable information, electronic device **300** may allow a user to select audio information via a user interface and receive the selected information via wireless communication thereby providing a customizable WebRadio device for the user. In another embodiment, electronic device **300** may be a modular device configured to be coupled to, for example, a portion of a cars interior. For example, electronic device **300** may be mounted to a portion of a car's console thereby providing a removably coupled electronic device operable to wirelessly receive selected audio information. As a removable device, electronic device **300** may also be coupled to a home audio system, a portable radio system or other systems thereby providing a versatile electronic device operable to receive wirelessly communicated selected audio information.

In another embodiment, electronic device **300** may be operable as a PDA and/or a cellular phone that may be mounted to an automobile's console. Electronic device **300** may then integrate with a user's automobile to provide an all-encompassing communications device. For example, electronic device **300** configured as a PDA and cellular phone may allow for communication with a user's email account, voice mail account, the Internet, as well as allowing for the receipt of selected audio information via wireless communication. Electronic device **300** may be operable in a hands-free mode allowing a user to maintain safe driving fundamentals. During use, electronic device **300** may be processing selective audio information for communicating with an automobile audio system and may further be operating to receive incoming cellular calls.

Electronic device **300** may be set-up by the user to pause the music being played and allow the received cellular call to be communicated either via an independent speaker or utilizing the automobiles "audio system." Additionally, electronic device **300** may be operable to adjust the listening level of an automobile's audio system, it may play received voice mail messages, allow a user to view the Internet, etc. In one embodiment, electronic device **300** may be operable as a dual mode electronic device capable of receiving both digital and analog wireless communication signals. In this manner, electronic devices may efficiently utilize available bandwidth for receiving selected information from a communications engine. For example, transceiver **301** may be a wireless communications modem operable to receive digital or analog signals.

FIG. **4** illustrates a graphical user interface (GUI) for displaying selectable audio information according to one aspect of the present invention. The GUI may be operable with a computer system, cellular device, PDA, or other electronic devices or systems operable to display the GUI of FIG. **4**. The GUI, shown generally at **400**, may be displayed using a conventional web browser **402** such as Microsoft™ Internet Explorer, a WAP browser, or other browsers operable to display the audio information. Browser **402** includes browser functions, shown collectively at **403**, for navigating a network such as the Internet or an intranet. Homepage **401** may be displayed using browser **402** and may include several functions, features, information, etc. related to audio information. Home page **401** may be developed using several different types of programming (i.e., HTML, XML, Java, etc.) used to developing a network location or website.

The present invention is not limited to any one specific type of software and may be realized in plurality of ways as can be appreciated by those skilled in the art. Homepage **401** may also include login region **410** allowing a user to log into homepage **401** and display a user-preferred environment. For example, a user may want Radio Dial **412** to appear when a user logs into homepage **401**. In another embodiment, a user may want to view a current playlist selected by the user or the status of wirelessly communicated playlist. A user may also provide demographic information allowing advertisers to access the demographic information and provide advertisements based upon the demographic information. For example, an advertiser may want to target Hispanic females in the 21-25 year old age group.

Through providing demographic information to advertisers, when a user logs into homepage **401** selective advertising can be "targeted" for a group of users. Homepage **401** may also include several tabs for efficiently navigating homepage **401**. Library tab **405** may be provided to allow a user to browse available audio information that may be presented by title, genre, artist, decade, culture, etc. Store tab **407** may also be provided for locating items available for purchase such as CDs, PDA devices, MP3 players, wireless communication hardware, interfaces, software or other types of products that may be purchased while on-line. Chat tab **408** may also be provided allowing a user to chat with other users of home page **401**. For example, a guest musical artist may be available to chat with visitors of home page **401** via a chat page associated with chat tab **408**. Home page **401** may also include contest tab **409** for displaying current contests, prizes, and/or winners.

Radio tab **406** may also be provided for displaying audio information. For example, radio tab **406** may display a collective menu **411** of selectable functions or features associated with audio information. Top ten lists may be provided to a user based on several different billboard polls or genres. A search engine may be provided allowing a user to search for a specific type of audio information such as an artist, song title, and genre. Internet radio station, etc. In one embodiment, a user may input the lyrics to a song within the search engine. As such, the search engine may locate several different songs having the desirable lyrics and allow a user to select the search results. A user may also use a select a device feature that allows a user to select a destination device for communicating selected audio information. For example, a user may want to communicate a playlist to several different devices such as a PDA, a home computer system, a work computer system, etc.

As such, a user can communicate selective information to several devices without having to download the information separately for each device. A send a friend link may also be provided allowing a user to send selective audio information to a friend's electronic device. A user may also join a group comprised of individuals that select a certain genre of music

to be communicated to the user's electronic device. For example, a user may want to join a group that plays only 50s swing music. As such, the user could communicate the group's selected songs to the user's electronic device. A user may also utilize an email account provided by homepage **401** allowing a user to correspond with others via email. A user may also access a list of guest DJs that may provide playlists of songs chosen by the guest DJ and selectable by a user.

In one embodiment, a user's radio dial **412** may be provided when a registered user logs into homepage **401**. As such, radio dial **412** may include several functional buttons similar to conventional systems such as a volume control and a station control. However, radio dial **412** surpasses the limitations of conventional systems through providing a programmable radio dial of user customized audio information. Radio dial **412** includes several stations that may be programmed using program interface **413**. The preset stations may include several different types of user customized preset information such as user selected playlists, Internet broadcast stations, top lists, group playlists, artist-selected lists, on-line radio station, conventional radio stations. Internet phone, cellular phone, etc. and other functions, features, or information associated with audio information.

Radio dial **412** may also be displayed as a separate user interface and in some embodiments, does not require a "browsing" environment to view radio dial **412**. For example, an electronic device, such as a PDA, having a display may graphically present radio dial **412** to a user. One example may be using electronic device in association with an automobile audio system. Electronic device may display radio dial **412** and may allow a user to navigate, modify, select, adjust volume, access daytimer, access phone lists, etc. or perform other functions while the electronic device is used in association with an automobile sound system. Therefore, radio dial **412** may be operable as an application for use with several different types of electronic devices (i.e., computer systems, portable computing devices, cellular phones, etc.) operable to display radio dial **412** and in come embodiments may be wirelessly communicated to an electronic device.

In another embodiment, homepage **401** may allow a user to select when to download the information to an electronic device. For example, a user may want to listen to a certain genre of music at a specific time of day thereby allowing a user to select the information. As such, a user may select a different playlist for every day of the week thereby allowing a user to listen to different songs on different days of the week. The user can further identify when the selected playlist should be available for listening. For example, if a user wanted to listen to "playlist #1" on Monday morning during the drive into work between 8:00 am and 9:00 am, the user would enter the time and the day "playlist #1" would be available for listening. In this manner, the playlist may be communicated to the electronic device thereby allowing a user to listen to selective audio information at a desirable time.

FIG. **5**A illustrates a portable radio system having a mount for an electronic device according to one embodiment of the present invention. Portable radio **500** includes a mount **501** operable to receive electronic device **502**. Mount **501** may include a connector operable to provide communications and power to electronic device **502**. During use, electronic device **502** when mounted within portable radio **500** communicates with portable radio to provide remotely received selective audio information. In one embodiment, electronic device **502** may include a user interface allowing a user to access the Internet. Therefore, selective audio information located on the Internet may be accessed by the user and remotely communicated to electronic device **502** coupled to portable radio **500**.

In another embodiment, portable radio **500** may include memory operably located within for storing downloaded information. For example, portable radio **500** may include 32 MB of RAM allowing electronic device **502** to receive selective information and download the selective information to memory located within portable radio **500**. In this manner, the downloaded music may be operable to be played within portable radio **500** while allowing electronic device to be removed from portable radio **500**. Therefore, portable radio **500** including electronic device **502** allows a user to communicate selected audio information to portable radio **500**.

FIG. **5**B illustrates automobile console having a mount for coupling an electronic device according to one aspect of the present invention. Console **510** includes mount **511** operable to receive electronic device **512**. Mount **511** may be located in many different locations within an automobile such as coupled to a sun visor, center console, dashboard, floorboard, etc. Mount **511** allows the user to couple electronic device **512** to the automobile and provide an interface for communication between electronic device **512** and the automobile audio system. Mount **511** may also include a power connection that allows electronic device **512** to use the automobiles power during use. The power connection may also be used in association with a recharging circuit operable to recharge a power supply within the electronic device. During operation, electronic device **512** coupled to mount **511** may receive selected audio information via wireless communication and communicate the selective information to the automobile audio system.

In one embodiment, the automobile may include memory operable associated with the automobile for storing-information. The memory may be used in association with mount **511** and electronic device **512** to store the selected audio information. In this manner, voluminous audio information can be stored within the memory allowing electronic device **512** to receive additional information. In one embodiment, a mount may be provided for a home audio system (not shown) for downloading selected audio information for use with a home audio system. For example, a mount device may be coupled to a home stereo system such that the upon placing an electronic device such as electronic device **500** within the mount, selected audio information may be communicated to the home audio system thereby allowing a home audio system to be used in association with an electronic device.

FIG. **6** illustrates a block diagram of a system for communicating voice mail messages using email according to one embodiment of the present invention. The system, indicated generally at **600**, includes email server **601** coupled to a voice mail storage device **602**. System **600** further includes a computer system or network terminal **603** such as a computer coupled to network **604**. System **600** further includes mount **605** for mounting electronic device **606** for hardwire communication of information. Device **606** may also communicate with network **604** using a wirelessly communication network operably associated with network **604** and coupled, for example, via tower **607**.

During operation, system **600** communicates voice mail messages to a user utilizing email server **601**. For example, if a user receives a voice mail message, email server **601** would be notified and a voice mail message would be sent to the user's email account in the form of an email message. For example, a voice mail message would be sent to a user's email account within intranet **604** in the form of an audio file as an attachment to the email. Upon receiving the email, a user may

click on the audio file representing the voice mail message to hear the message left by a caller.

In one embodiment, a user may be accessing the Internet via a phone line and, as such, be unable to receive notification that a voice mail message has been received. System **600** would receive the voice mail message and send an email comprising the voice mail message to the user email account. In this manner, a user can remain connected to the network and receive voice mail without having to log off or disconnect from the Internet. In one embodiment, a user may receive the voice mail message via a portable electronic device. For example, a user may be using remote device **605** operable to receive wirelessly communicated information. System **600** would receive the voice mail message and forward the voice mail message to a user's portable electronic device **606**. In this manner, a user may be capable of receiving voice emails at remote locations.

In another embodiment, a user may subscribe to use an Internet email account that may be operably associated with system **600**. Utilizing an Internet email account may allow a user the flexibility to check voice email messages from any location in the world. For example, a user may access a "Hotmail" email account while traveling on business in a foreign country. The user, upon gaining access to the "Hotmail" account, would be able to listen to voice mail messages sent to the user via the "Hotmail" email account. Through utilizing an email account to receive voice mail messages, a user may be afforded great flexibility in communicating voice mail messages. For example, a user may be able to forward a voice mail message received in the form of an email to one or a plurality of other email accounts. In this manner, a voice email message may be sent efficiently to other email users.

For example, a user may maintain a distribution list of individuals working on a particular project that may have a need to hear certain voice email messages. In this manner, a user may efficiently disseminate information to other individuals while adding additional textual information to the body of the email allowing a user to comment on the original voice email message. In another embodiment, a user may forward a received voice email message to another account operable to receive forwarded voice email messages. For example, system **600** may be operable to receive an email message having a voice mail message as an attachment. The system would then be operable to forward the voice mail message to specified phone number, separate email account, and/or voice mail account, etc. thereby providing a user flexibility in receiving voice email.

In one embodiment, a user may utilize an email account to establish an answering service for voice mails. For example, a user's telephone number may be operable with an email account to provide an answering service. A user may record a message for a specified phone number or extension and, upon receiving an incoming call; the recorded message may be played back to incoming the call's initiator. System **600** would then forward the received voicemail message via an email account to the user. For example, a user may have an account set up at a residence for receiving voicemail messages via a user-defined email account. The user could then forward all received voice mails from the home account to an email account at a place of work. Therefore, the user may have complete access to received voicemail messages. In the same manner, a user could set up their work phone number to forward a voicemail message to the user's home email account thereby allowing a user to receive a voicemail at a home email account. Therefore, system **600** may be operable in a plurality of ways to provide email messages comprised of voicemail messages received via a voice mail or email account.

FIG. **7** illustrates a flow chart for providing voice email messages according to one embodiment of the present invention. The method begins at step **701** where a voice mail message is left for a user. The message could be at a residence, place of business, etc. The method then proceeds to step **702** where the message may be stored as an audio file within a database operable to store a file comprised of the voice mail message. Upon storing the file, the method proceeds to step **703** where an electronic mail message may be generated. The electronic mail message may be addressed to the recipient of the voice mail message. The method then proceeds to step **704** where the audio file representing the voice mail message is attached to the electronic message.

Upon attaching the audio file, the method then proceeds to step **705** where the email message may be sent to the email address. Upon sending the email message the method proceeds to step **706** where the method determines if the email message should be sent to a wireless electronic device. If the message is not to be sent to a wireless device, the method proceeds to step **720** where the method ends. If the message is to be sent to a wireless electronic device, the method proceeds to step **707** where a signal may be sent to the wireless electronic device and at step **708** an indication is provided to the electronic device indicating that a voicemail message has been received via a user's email account. The method may then proceed to step **709** where the user decides whether or not to listen to the voice email message. If the user decides not to listen to the voice email message, the method may proceed to step **710** where the method ends. If the user decides to listen to the voice email message, the method proceeds to step **711** where a request may be sent by the electronic device requesting the voice email message be forwarded to the user's electronic device.

At step **712**, the voicemail message may be sent to the user's electronic device. Upon forwarding the voicemail message to the user the method may proceed to step **720** where the method ends. As such, FIG. **7** depicts one method of providing an email message comprised of a voice mail message. Certainly, other methods may be deployed as advancements in technology and are made without departing for the spirit and scope of the present invention.

FIG. **8** illustrates a flow diagram of a method for providing selected audio information to an electronic device according to one embodiment of the present invention. The method begins at step **800** where a user accesses a webpage via the Internet. The webpage may be a home page illustrated in FIG. **4** or other web pages operable to display selectable references to audio information. The method proceeds to step **801** where a user selects desirable audio information. For example, a user may select a single song, a plurality different songs, an entire album, a broadcast station, streaming audio, etc. or other selectable audio information. Upon the user selecting a reference to audio information, the method may proceed to step **802** where a playlist may be created that represents the user's selected audio information.

The playlist may be variable in size and comprised of a plurality of different types of available audio information. Upon creating a playlist, the method may proceed to step **803** where information associated with the playlist is obtained. For example, a list of network or URL locations comprised of the desirable audio information may be obtained. In this manner, desirable audio information may be obtained from many different sources such as URLs, network addresses,

hard drives, databases comprised of audio information, etc. The sources may be accessed to obtain the selected audio information.

Upon obtaining data associated with the customized playlist, the method may proceed to step **804** where the user is prompted for a destination for the playlist. For example, a user may want to communicate the selected audio information to a remote electronic device, an automobile audio system, a home stereo system, a home computer, an electronic device coupled to a home network or computer system, etc. or other locations or devices operable to receive the selected audio information. In one embodiment, a user may select a device owned by a friend to accept the selected audio information. For example, a husband may want to send a romantic playlist to his wife on their anniversary. In this situation, the husband would select his wife's electronic device as the receiving device for the selected audio information.

Upon selecting a device, the method proceeds to step **805** where the method determines the destination of the selected audio information. If the information is to be sent to a device via a wire line connection, the method proceeds to step **813** where playlist data is sent to a user via a wire line connection. The method may then proceed to step **814** where the playlist is executed at the device. If the information is to be sent to a device requiring wireless communication, the method proceeds to step **806** where the information is formatted for communicating the information to a wireless electronic device. For example, a wireless PDA device may be selected as a destination device for the selected audio information. The PDA device may include an audio player, such as an MP3 player operable to play or execute MP3 audio files. In such an embodiment, the method could format the information such that the information may be wirelessly communicated and subsequently played by the MP3 player.

Upon formatting the information, the method may then proceed to step **807** where the audio information is wirelessly communicated to the selected device. In some embodiments, the device may be operable to receive a limited amount of information based upon storage capacity of the device (i.e., 16 MB). In such a case, the method may divide the information into component parts and periodically communicate the component parts, such as packets, to the electronic device. Upon communicating the audio information, the method may then proceed to step **808** where the signal may be received by the destination or electronic device.

The method may then proceed to step **809** where the method determines if all of the audio information has been received. For example, if 16 MB or 32 MB of selected audio information was initially transmitted due to capacity limitations of the selected device, the method may query the selected device to determine if capacity is available. If available memory exists, the method may proceed to step **807** where the method may communicate additional audio information based upon the amount of available memory. The method repeats until all of the selected audio information has been transmitted.

Upon communicating the selected information, the method may proceed to step **810** where the playlist may be executed. For example, a user may select a continuous communication of selected audio information (e.g., several hours of music. Internet broadcast, etc.). As such, the method may continuously play or execute the received audio information. In another embodiment, the method may proceed to step **811** where the method may store or buffer the received information until it is desirable to execute the received selected audio information. As such, upon executing the selected audio information, the method may proceed to step **809** where the method may repeat. In one embodiment, a user may elect to download a broadcast of an on-line radio station. For example, a user may want to listen to a radio station located in a remote location wherein conventional radio receivers could not receive the desired broadcast. For example, a person living in Houston, Tex. may not be able to receive a radio broadcast signal from a radio station in Seattle, Wash. utilizing a conventional radio receiver.

In accordance with the teachings of the present invention, a user may select an on-line broadcast or radio station as all or a part of the selected audio information. The user may then receive radio broadcasts without having to use a home computer system or conventional radio receiver.

At step **804**, a user may select a device that does not require remote communication of information. For example, a user may elect to communicate the selected audio information to device, such as a personal computer, PDA device, MP3 player, etc. coupled via a network connection to the Internet or an Intranet. The user may receive the selected playlist at the determined device for eventual playing. In one embodiment, a user may select a plurality of devices as destination devices for receiving downloads of the selected audio information. For example, the user may want to download the information to a home stereo system, a PDA device, and an automobile stereo. As such, the selected information may be communicated to more than one destination device. In addition, the format of the download may match or conform to the selected destination device(s).

The present invention may be configured in a plurality of ways to communicate desirable audio information to users by allowing users to select desirable audio information and transmitting the desirable audio information to a specified destination thereby allowing a user to receive on-demand customized audio information. Moreover, the download may occur in an off-line environment, allowing a user to enjoy the selected audio information accessed on-line without having to be on-line or utilizing a browsing environment. In one embodiment of the present invention, the method of FIG. **8** may be modified to allow a user to select a "user group" for receiving customized audio information. For example, a "user group" may include users that prefer contemporary jazz wherein a user may request a certain song. Therefore, a virtual request line may be designed for a specific genre of music allowing "members" to transmit audio information to the "group".

In another embodiment of the present invention, the method may be modified to allow a user to select a specific genre to be transmitted to the users device. For example, a user may elect to have random country and western music transmitted to a destination device. The user could efficiently create a radio station format and have the format received at a destination device.

In a further embodiment, a user may select a group of genres to be downloaded to a desirable device. As such, the method may be modified to allow a user to select several different genres to download random music within the specified genres. In another embodiment, a user may elect to download the same music as another individual. For example, a user may want to download the same music as their best friend. Therefore the user could elect to download the same music as their friend or group of friends. In another example, a user may want to listen to the same music that an artist listens to on a specific weekday of evening. For example, a user may want to listen to the same music that Barry White listens to on a Saturday night.

Therefore, the user may select "Barry White's" Saturday night playlist and receive the same playlist Barry White

receives on Saturday night. In another embodiment, the method of FIG. **8** may be modified to allow a user to manipulate song post download. For example, a user may want to store, delete, replay, copy, forward, etc. received audio information. Therefore, the method of FIG. **4** may be modified such that a user can manipulate or process the received audio information in a plurality of ways. In one embodiment of the present invention, an on-line radio station may be provided. For example, the radio station may be created for transmitting audio or on-line broadcasts. The on-line broadcasters or hosts may create their own format for broadcast. For example, an on-line radio station may be provided that transmits only children's songs.

Prior to conception of the present invention, conventional radio stations were monetarily limited to be capable of transmitting music such as children's songs to conventional radio receivers. The present invention, by providing a medium for transmitting selectable audio information, enables the existence of on-line broadcasting with little or no overhead cost for a host. A user may select an on-line broadcast for on-line or off-line delivery. In another embodiment, on-line broadcast of audio information representing books or novels may be provided to individuals such as the visually impaired. For example, an on-line broadcast station may provide several hours of audio information broadcast representing books or novels to be broadcast with very little overhead.

FIG. **9** illustrates an automobile console having a mount for an electronic device according to one embodiment of the present invention. Console **900** includes a conventional audio system **901** comprised of a receiver **902** and CD player **903**. Interface **904** may be coupled to audio system **901** via plug **905** and cable **908**, which may be coupled to an auxiliary line into audio system **901**. Interface **904** may also include contact **906** for contacting electronic device **907**. Cable **908** may be a multiple conductive cable for providing power from the automobiles power system via a protection circuit or fuse **909** for powering electronic device **907**. In one embodiment, interface **904** may be operable to recharge electronic device **907** utilizing a power source associated with an automobile.

During operation, electronic device **907** may be mounted within interface **904**. Electronic device **907** may also be powered or recharged via power line **910** and communicate with the systems audio system via interface cable or bus line **911**. Audio information communicated to electronic device **907** may be transferred to audio system **901** such that a user may listen to selected audio information. For example, a user may have previously selected a plurality of audio files to be transmitted to electronic device **907**. Electronic device **907** may communicate the selected audio information to the automobiles audio system that utilizes interface **901** thereby allowing the user to listen to selected audio information. In one embodiment, cable **908** may be custom-installed to audio system **901**. For example, the cable may be coupled to an auxiliary line for the system's radio or may be coupled to CD player line **912**.

In another embodiment, a radio manufacturer may provide interface **904** as a standard interface integrated into the audio system, thereby allowing communication between electronic device **907**, audio system **901** and/or console **900**. Electronic device **907** may include a plurality of different types of devices. For example, electronic device **907** may include a PDA device operable to store selected audio information. The information may be either remotely downloaded using an Internet web browser and wireless communication to the PDA device. In another embodiment, selected audio information may communicated to a PDA device via a hard wire coupled to a computer system interfacing with the Internet. In another embodiment, electronic device **907** may include an audio file player operable to play audio files such as MP3s, etc.

The audio files may be remotely or locally communicated to electronic device **907** and upon coupling to audio system **901**, the audio files may be transmitted to audio system **901** in a form receivable by audio system **901**. Although the disclosed embodiments have been described in detail, it should be understood that various changes, substitutions and alterations can be made to the embodiments without departing from their spirit and scope.

The benefits, advantages, solutions to problems, and any element(s) that may cause any benefit, advantage, or solution to occur or become more pronounced are not to be construed as a critical, required, or essential feature or element of the present invention. Accordingly, the present invention is not intended to be limited to the specific form set forth herein, but on the contrary, it is intended to cover such alternatives, modifications, and equivalents, as can be reasonably included within the spirit and scope of the invention as provided by the claims below.

While the present invention has been described with respect to a limited number of embodiments, those skilled in the art will appreciate numerous modifications and variations therefrom. It is intended that the appended claims cover all such modifications and variations as fall within the true spirit and scope of this present invention.

What is claimed is:

1. A method to deliver media, comprising:
organizing an available media into a plurality of independent segment files to facilitate delivery;
formatting a given segment to facilitate an outputting of the given segment at a given rate;
formatting a different segment to facilitate an outputting of the different segment at a different rate, wherein the different rate is slower than the given rate;
generating a list that includes an address for each of the plurality of independent segment files;
receiving an HTTP communication that indicates a desire to access the available media;
sending the list in response to receiving the HTTP communication;
sending the given segment; and
sending the different segment.

2. The method of claim **1**, further comprising sending an advertisement.

3. The method of claim **1**, further comprising maintaining the plurality of independent segment files in a storage medium means for storing files, wherein formatting the different segment comprises compressing the different segment into a format that is configured to facilitate an outputting at a playback device at or near the different rate.

4. The method of claim **3**, wherein the available media is a video and the HTTP communication was received from an electronic device comprising an internal battery, a recharging circuit for the internal battery, a display, and an application stored at the electronic device to output the video on the display.

5. The method of claim **1**, further comprising providing a link to the available media on a website.

6. The method of claim **1**, further comprising:
providing a link to the available media on a website;
associating demographic information about a user with the user; and
communicating an advertisement targeted to the user based at least in part on the demographic information.

7. The method of claim 6, wherein the demographic information is selected from a group consisting of an age group demographic, a location demographic, and a gender group demographic, further wherein the HTTP communication is received from a requesting device that is a home media system component.

8. The method of claim 7, wherein the available media is selected from a group consisting of a stored media and a near real time broadcasted media.

9. A streaming method comprising:

receiving an HTTP communication at a media delivery resource that comprises a request for a listing of network locations for segments of available media, further wherein the request is from a device having a buffer, a non-volatile memory, and a collection of instructions stored in the non-volatile memory that are operable: (1) to request a media segment with a formatting that allows the media segment to be delivered from the media delivery resource at a given rate, (2) to consider an amount of information stored in the buffer, and (3) to request a different segment with a different formatting that allows the different segment to be delivered from the media delivery resource at a different rate, wherein the at least two rates are rates at which a streaming media can be output;

sending a message comprising a plurality of network locations for different segments of the available media;

sending a requested segment of the available media, wherein the requested segment has a compression format that allows for use at the given rate; and

sending a different requested segment of the available media, wherein the different requested segment has a different compression format.

10. The method of claim 9, wherein the available media is a video configured for presentation by an application stored at the device.

11. The method of claim 9, wherein the compression format has an outputting characteristic that is measured in bits per second.

12. The method of claim 11, wherein the video is selected from a group consisting of a network stored media and a near real time broadcasted media.

13. The method of claim 9, further comprising:

organizing the available media into a plurality of segments to facilitate delivery;

saving each of the plurality of segments such that each can be individually retrieved; and

periodically sending a requested next segment to the device.

14. A system that facilitates delivery of media, comprising:

a media available for delivery as a series of segments, wherein at least a given one of the segments is configured to allow delivery to a requesting device via a network link capable of communicating information at a first rate and at least another segment is configured to allow delivery to the requesting device via a link capable of communicating information at a different rate;

a media playlist for the available media that includes a network location for a file representing the given one of the segments and a different network location for a different file representing the other segment; and

a delivery resource configured to respond to a plurality of file requests by transmitting information to the requesting device in a manner that facilitates a continuous outputting of the available media by the requesting device.

15. The system of claim 14, wherein the first rate is slower than the different rate.

16. The system of claim 14, wherein the given one of the segments has a format that is designed to be output at or below a given rate measured in bits per second and the format is a way in which the given one of the segments is configured to allow delivery to the requesting device via the network link.

17. The system of claim 16, wherein the delivery resource comprises a formatting engine that puts the given one of the segments into the format.

18. The system of claim 14, wherein the media available for delivery comprises a video, the system further comprising:

a collection of instructions stored in a non-volatile memory and configured to be executed by an electronic device that has an independent power supply and a display, the collection of instructions operable when executed to direct the electronic device to continuously output the video and to periodically request a next file included on the media playlist.

19. The system of claim 18, further comprising:

an advertising module configured to send a targeted advertisement to the electronic device.

20. The system of claim 14, wherein the delivery resource is configured to recognize if a requesting device is a mobile device necessitating a delivery path that comprises at least one wireless link.

* * * * *

EXHIBIT B

US009444868B2

(12) **United States Patent**
White et al.

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(45) **Date of Patent: Sep. 13, 2016**

(54) **SYSTEM TO COMMUNICATE MEDIA**

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CPC G06Q 30/0267; G06Q 30/0269; G11B 31/02; H04M 1/6091; H04W 84/12; H04W 4/06; H04W 88/06; G06F 3/04842; G06F 3/0488; G06F 3/0482; H04L 65/60; H04L 67/02

See application file for complete search history.

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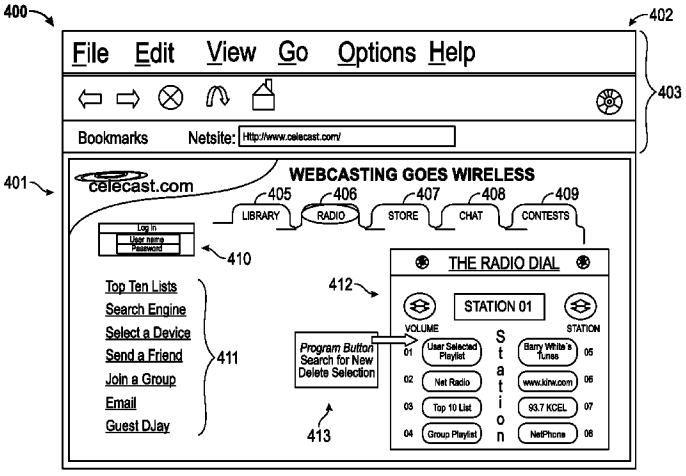
(57) **ABSTRACT**

A system for communicating media is disclosed. Such a system may include, for example, a media broken into a plurality of independent segment files that may represent sequential portions of the media. One of the segment files can be encoded to have a format that is different than the encoded format of another one of the segment files. The formats may be chosen to allow outputting of information in the segments at different rates. A list may include network addresses for the segment files, and a content delivery system may be deployed to distribute media content to remotely located requesting devices by sending the segment files in response to requests for the segment files.

20 Claims, 8 Drawing Sheets



Related U.S. Application Data

continuation of application No. 13/117,507, filed on May 27, 2011, now Pat. No. 8,521,140, which is a continuation of application No. 12/495,190, filed on Jun. 30, 2009, now Pat. No. 7,953,390, which is a continuation of application No. 12/015,320, filed on Jan. 16, 2008, now Pat. No. 7,778,595, which is a continuation of application No. 10/947,755, filed on Sep. 23, 2004, now Pat. No. 7,324,833, which is a continuation of application No. 09/537,812, filed on Mar. 28, 2000, now Pat. No. 7,187,947.

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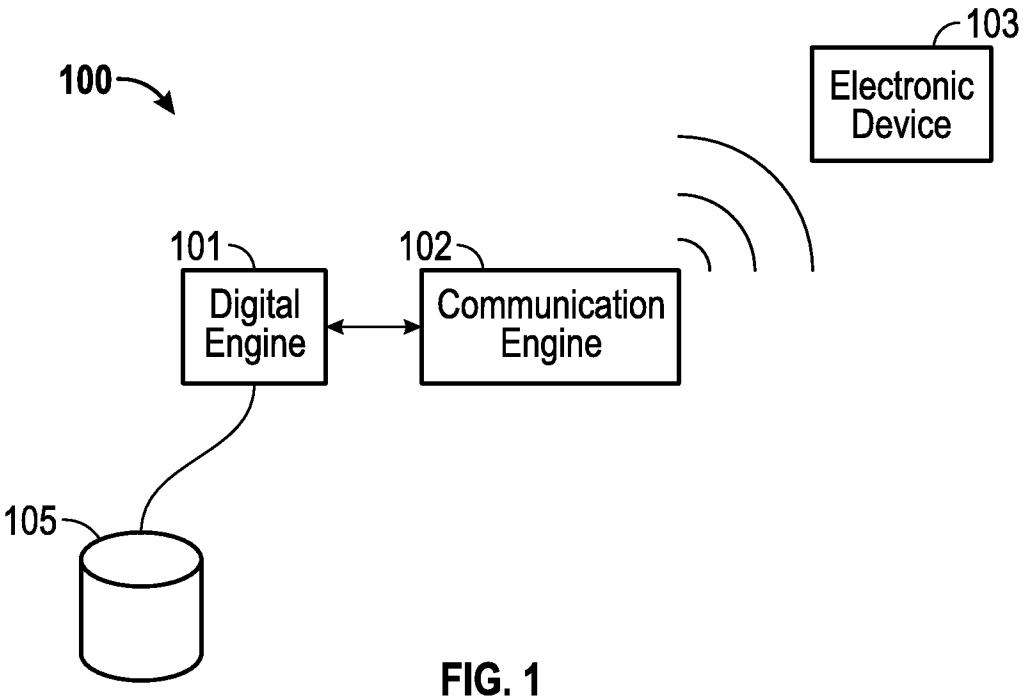
100
103
Electronic Device
101
Digital Engine
102
Communication Engine
105

FIG. 1

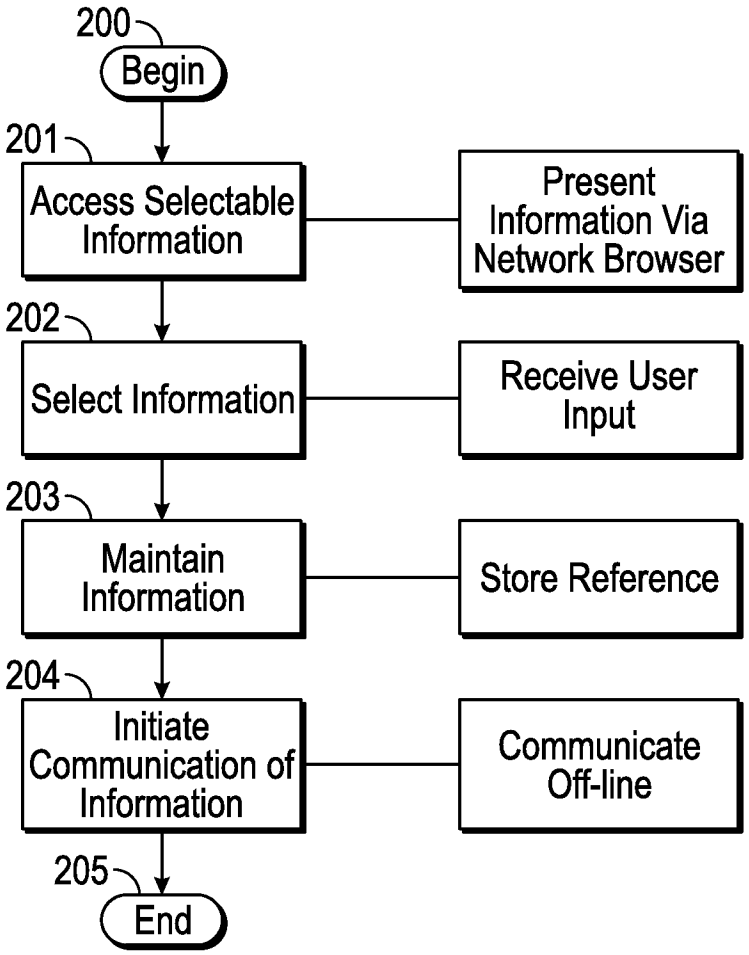
200
Begin
201
Access Selectable Information
Present Information Via Network Browser
202
Select Information
Receive User Input
203
Maintain Information
Store Reference
204
Initiate Communication of Information
Communicate Off-line
205
End

FIG. 2

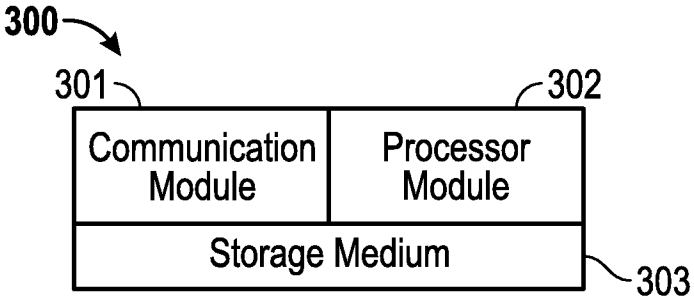
300
301
302
Communication Module
Processor Module
Storage Medium
303

FIG. 3

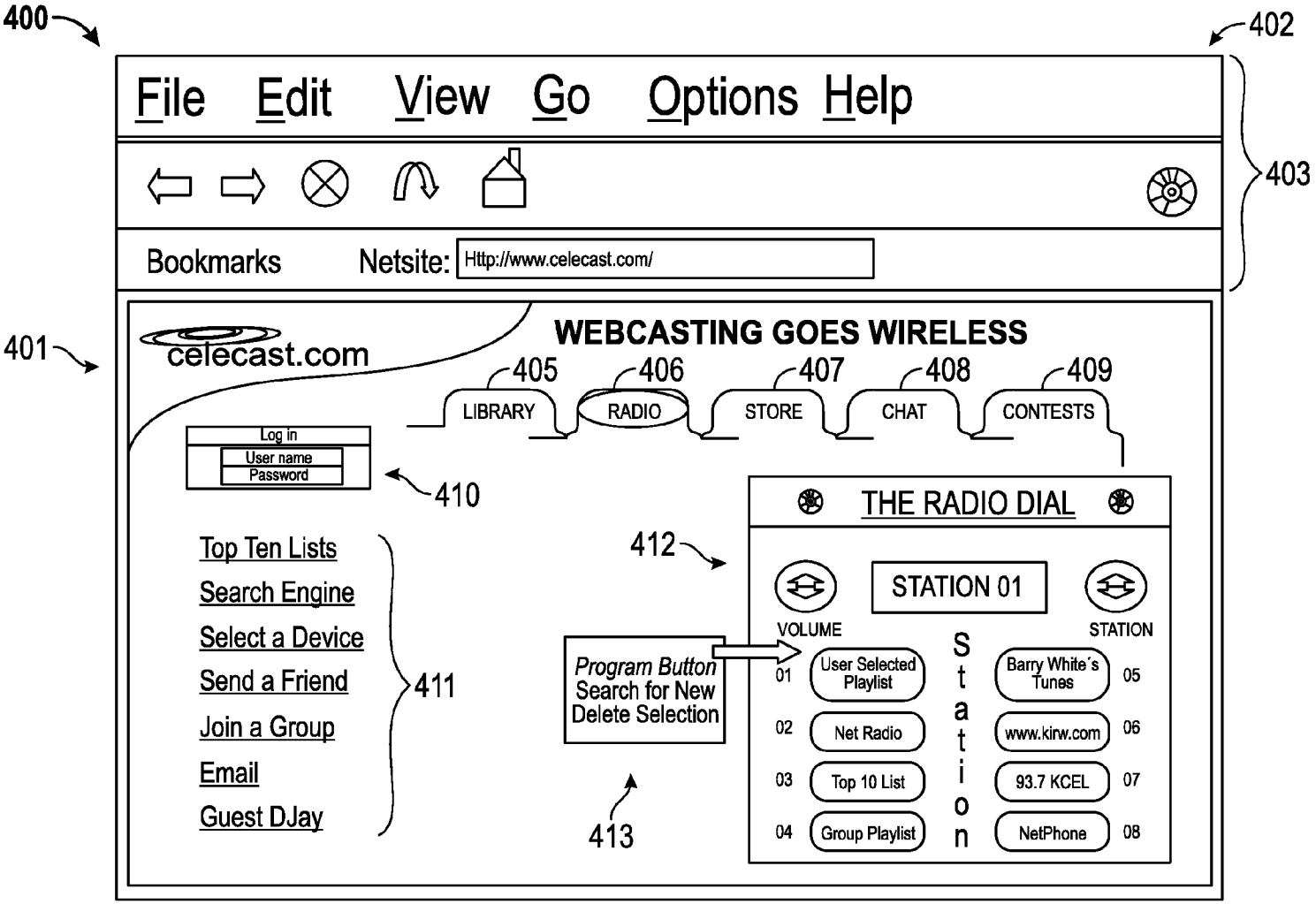
400
402
File Edit View Go Options Help
403
Bookmarks
Netsite:
Http://www.celecast.com/
401
celecast.com
WEBCASTING GOES WIRELESS
405
406
407
408
409
LIBRARY
RADIO
STORE
CHAT
CONTESTS
Log in
User name
Password
410
THE RADIO DIAL
412
Top Ten Lists
Search Engine
Select a Device
Send a Friend
Join a Group
Email
Guest DJay
411
STATION 01
VOLUME
STATION
Program Button
Search for New
Delete Selection
413
Station
01 User Selected Playlist
02 Net Radio
03 Top 10 List
04 Group Playlist
Barry White's Tunes 05
www.kirw.com 06
93.7 KCEL 07
NetPhone 08

FIG. 4

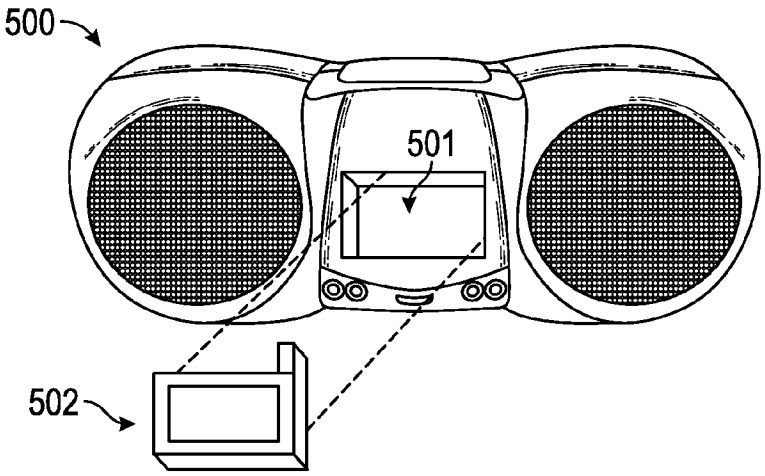

FIG. 5A

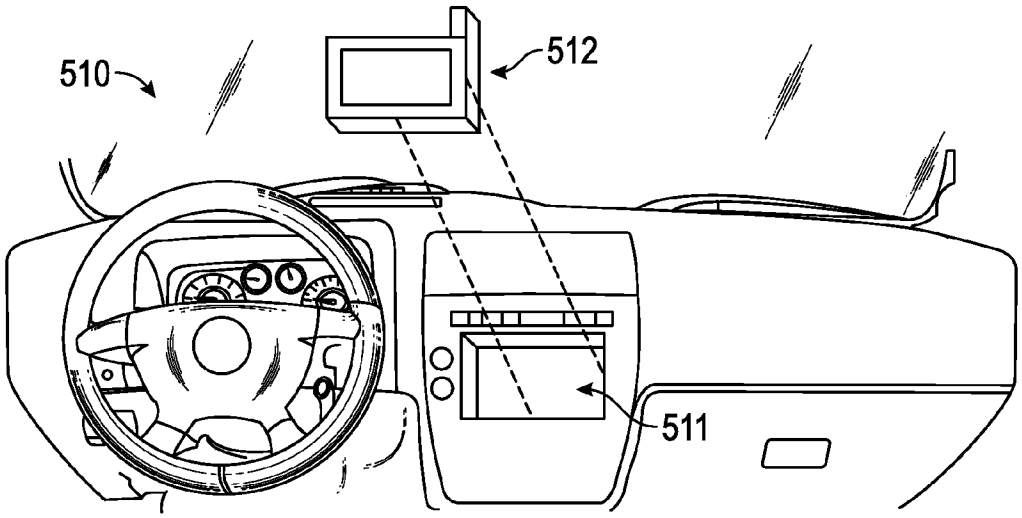

FIG. 5B

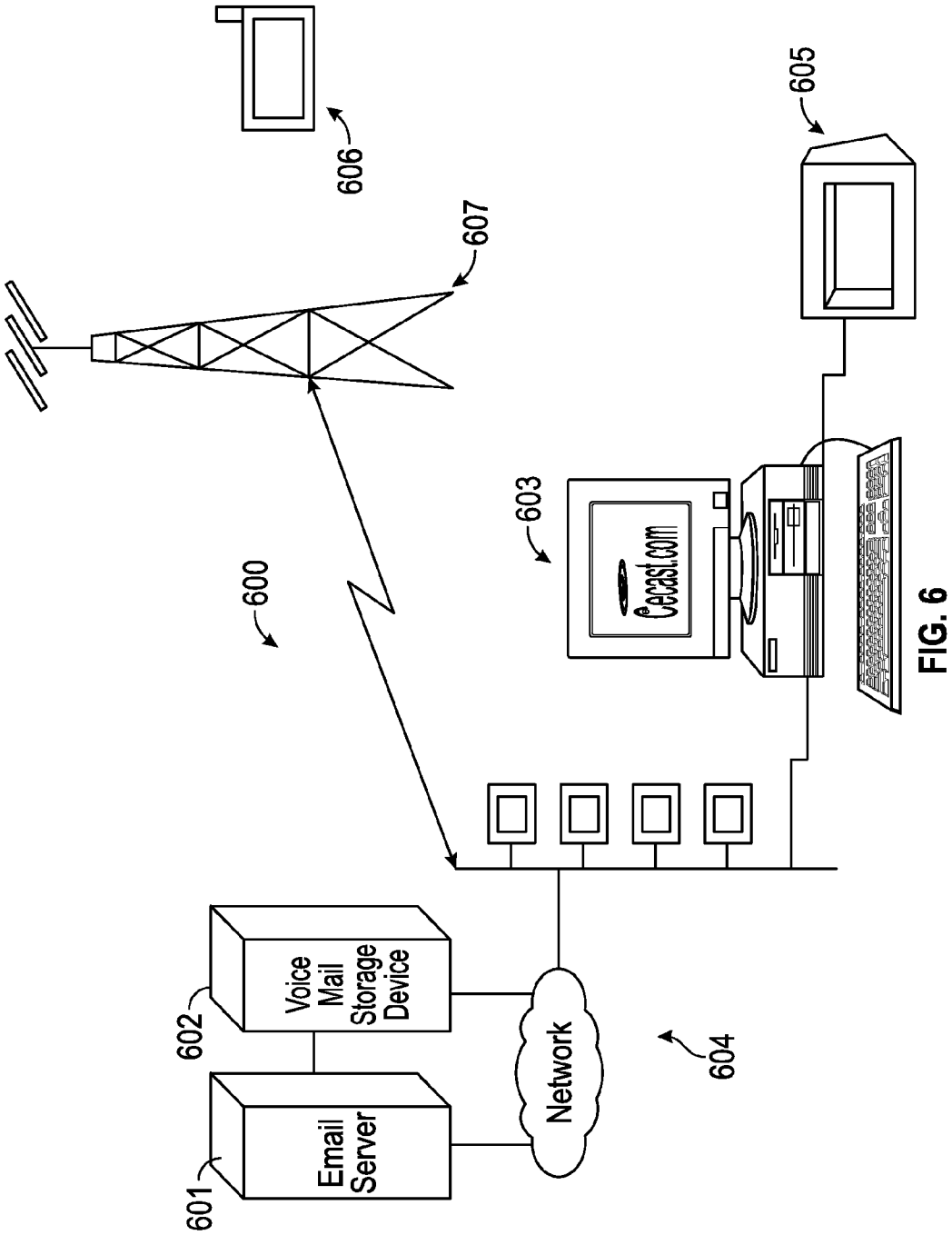
606
607
605
600
603
Comcast.com
Voice Mail Storage Device
602
Email Server
601
Network
604

FIG. 6

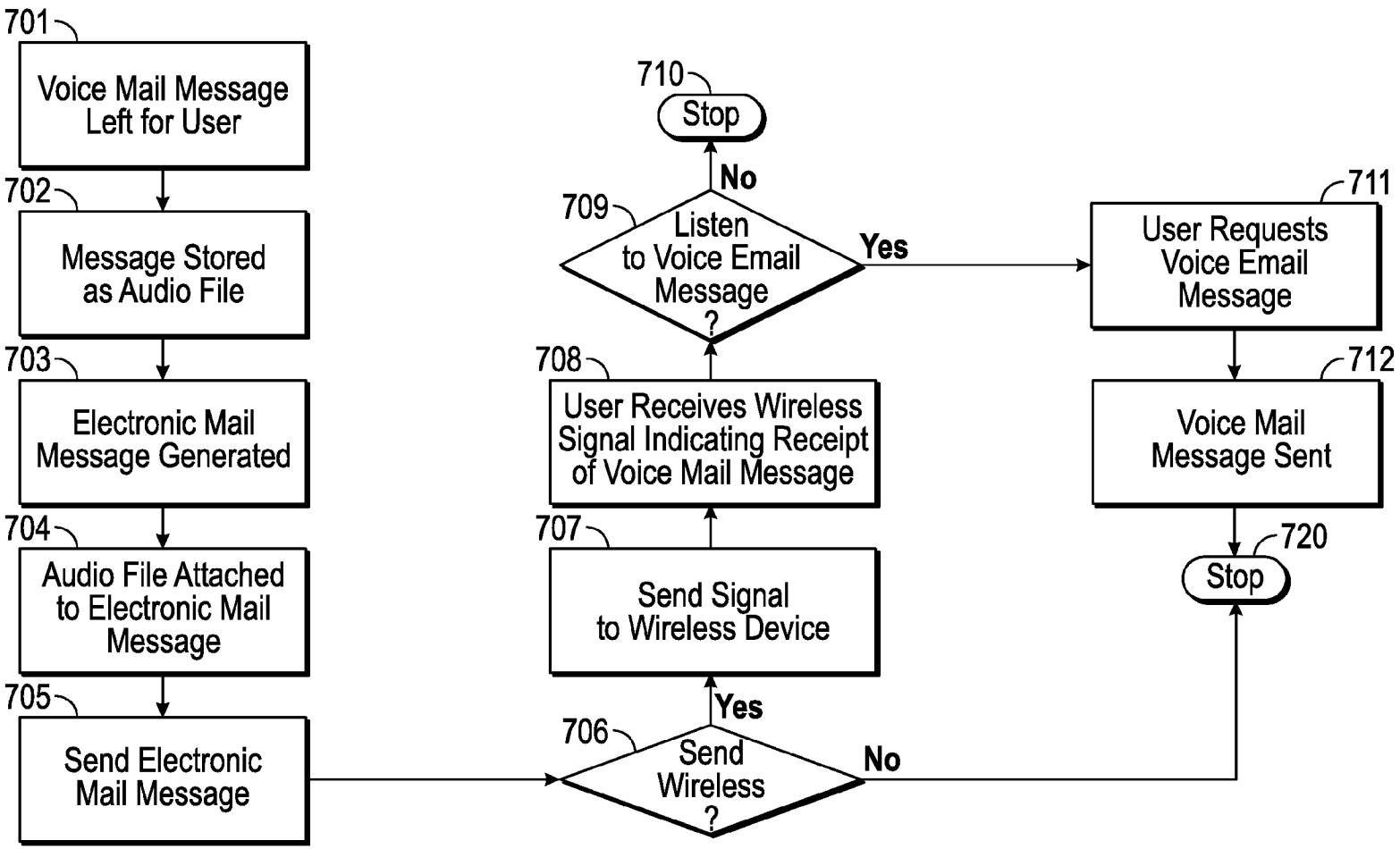
701
Voice Mail Message Left for User
702
Message Stored as Audio File
703
Electronic Mail Message Generated
704
Audio File Attached to Electronic Mail Message
705
Send Electronic Mail Message
706
Send Wireless ?
Yes
No
707
Send Signal to Wireless Device
708
User Receives Wireless Signal Indicating Receipt of Voice Mail Message
709
Listen to Voice Email Message ?
Yes
No
710
Stop
711
User Requests Voice Email Message
712
Voice Mail Message Sent
720
Stop

FIG. 7

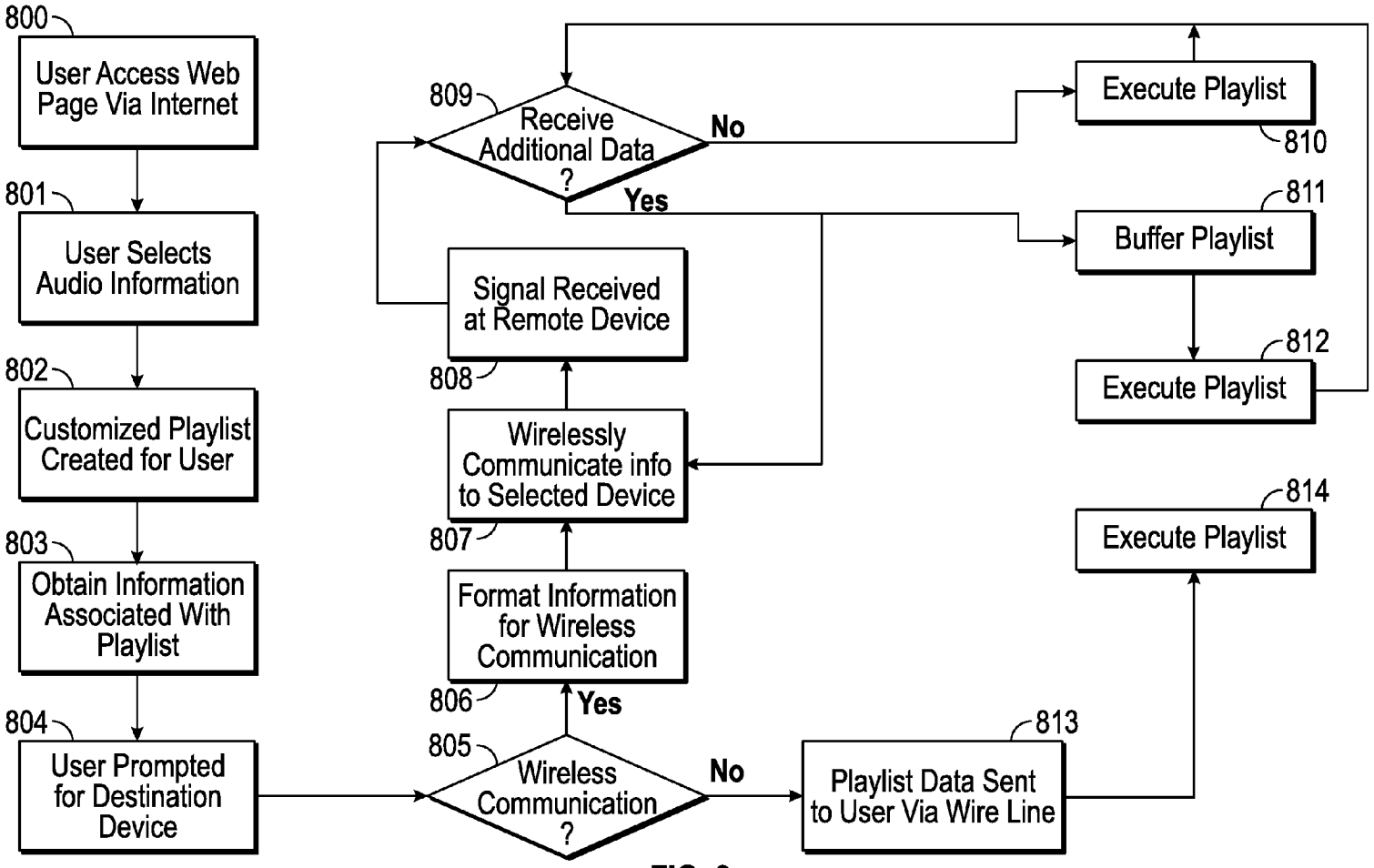
800
User Access Web Page Via Internet
801
User Selects Audio Information
802
Customized Playlist Created for User
803
Obtain Information Associated With Playlist
804
User Prompted for Destination Device
805
Wireless Communication ?
No
Yes
806
Format Information for Wireless Communication
807
Wirelessly Communicate info to Selected Device
808
Signal Received at Remote Device
809
Receive Additional Data ?
No
Yes
810
Execute Playlist
811
Buffer Playlist
812
Execute Playlist
813
Playlist Data Sent to User Via Wire Line
814
Execute Playlist

FIG. 8

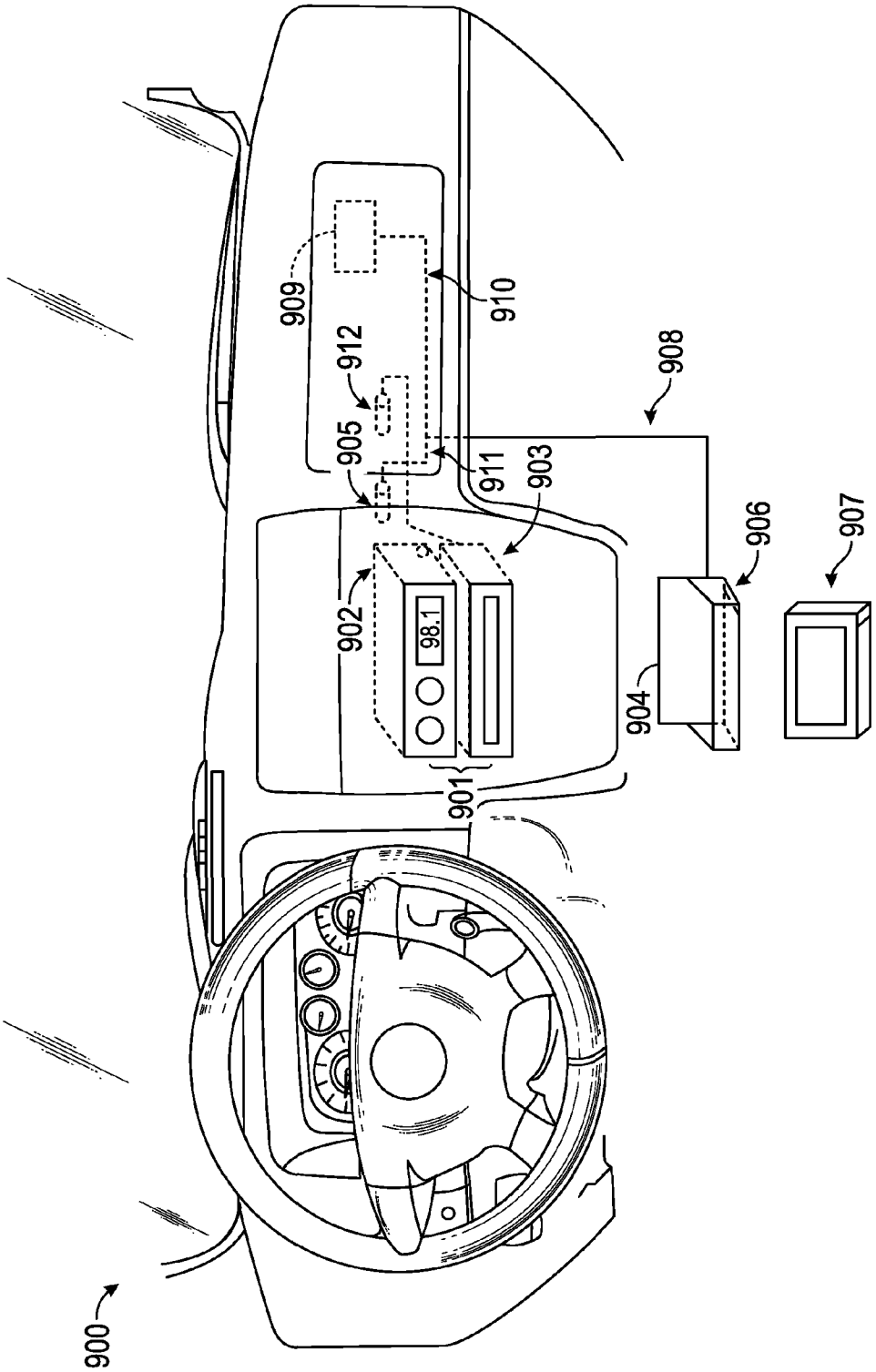

FIG. 9

SYSTEM TO COMMUNICATE MEDIA

This application is a continuation of U.S. patent application Ser. No. 14/168,201, filed Jan. 30, 2014, which is a continuation of U.S. patent application Ser. No. 13/854,232, filed Apr. 1, 2013, now U.S. Pat. No. 8,688,085, issued Apr. 1, 2014, which is a continuation of U.S. patent application Ser. No. 13/117,507, filed May 27, 2011, now U.S. Pat. No. 8,521,140, issued Aug. 27, 2013, which is a continuation of U.S. patent application Ser. No. 12/495,190, filed on Jun. 30, 2009, now U.S. Pat. No. 7,953,390, issued on May 31, 2011, which is a continuation of U.S. patent application Ser. No. 12/015,320, filed Jan. 16, 2008, now U.S. Pat. No. 7,778,595, issued on Aug. 17, 2010, which is a continuation of U.S. patent application Ser. No. 10/947,755, filed on Sep. 23, 2004, now U.S. Pat. No. 7,324,833, issued on Jan. 29, 2008, which is a continuation of U.S. patent application Ser. No. 09/537,812, filed on Mar. 28, 2000, now U.S. Pat. No. 7,187,947, issued on Mar. 6, 2007, the disclosures of which are all hereby incorporated herein by reference in their entirety for all purposes.

FIELD OF THE DISCLOSURE

The present disclosure relates to digitally stored content and, more specifically, to a content delivery system and method.

BACKGROUND

The first commercial radio stations in the United States began operation around 1920. Today, there may be as many as 12,000 radio stations in the United States programming in several distinct formats. When broadcasting their respective signals, these radio stations often use an analog signal, which may be modulated based on frequency or amplitude. Frequency modulated (FM) radio appears to be the dominant entertainment medium while amplitude modulated (AM) radio seems to be a popular outlet for news and information.

Unfortunately, analog radio may be unable to provide the sound quality and consistency that radio listeners desire. As such, several broadcasting related companies have begun to consider a movement to digital radio. Unlike analog radio reception, digital radio reception may be able to provide compact disk (CD) quality sound while remaining virtually immune to interference. Being immune to interference may result in reducing static growls or "multipath" echoes, echoes caused by signal reflections off buildings or topographical features.

Some countries, like Canada and many European countries, may choose to have digital radio operate in a single digital radio band such as the L-band between 1452-1492 megahertz (MHz). This band would allow the reception of both terrestrially and satellite-originated signals. By comparison, FM radio typically operates between 88 and 108 MHz while AM radio typically operates between 0.525 and 1.705 MHz. Neither of these bands allows for easy transmission via satellite.

Canada proposed using the L-Band for digital radio as early as 1992. Several countries throughout the world have since agreed to use the L-Band for digital radio with one notable exception. It appears the United States has chosen not to operate its digital radio within the L-Band. In the United States, the L-Band may already be committed for military uses. Apparently, the United States plans to adopt a system called in-band on-channel, or IBOC, which fits within the AM and FM frequencies.

IBOC technology may offer some advantages over L-Band transmissions. For example, there may be no need for new spectrum allocations. There may be backward and forward compatibility with existing AM and FM systems on both the transmitter and receiver sides, and there may be a low-investment upgrade to digital systems. Unfortunately, a workable IBOC solution is yet to be seen though technology may someday make IBOC digital radio commercially possible.

Even if an IBOC solution becomes commercially available in the United States, IBOC digital radio may suffer from several shortcomings. For example, there may global standardization problems. Though the United States favors IBOC, the European and Canadian communities seem to favor L-Band making the establishment of a global standard difficult.

BRIEF DESCRIPTION OF THE DRAWINGS

A more complete understanding of the present embodiments and advantages thereof may be acquired by referring to the following description taken in conjunction with the accompanying drawings, in which like reference numbers indicate like features, and wherein:

FIG. **1** depicts a general system for wirelessly communicating selective information to an electronic device in accordance with one aspect of the present invention;

FIG. **2** illustrates a block diagram of a method of wirelessly communicating selected information to an electronic device;

FIG. **3** illustrates an electronic device operable to receive selected audio information in accordance with the teachings of the present invention;

FIG. **4** illustrates a graphical user interface (GUI) for displaying selectable audio information according to one aspect of the present invention;

FIG. **5**A illustrates a portable radio system having a mount for an electronic device according to one embodiment of the present invention;

FIG. **5**B illustrates an automobile console having a mount for coupling an electronic device according to one aspect of the present invention;

FIG. **6** illustrates a block diagram of a system for communicating voice mail messages using email according to one embodiment of the present invention;

FIG. **7** illustrates a flow chart for providing voice email messages according to one embodiment of the present invention;

FIG. **8** illustrates a flow diagram of a method for providing selected audio information to an electronic device according to one embodiment of the present invention; and

FIG. **9** illustrates an automobile console having a mount for an electronic device according to one embodiment of the present invention.

DETAILED DESCRIPTION

The conceptual groundwork for the present invention includes wirelessly communicating selective information to an electronic device. According to one aspect, a user may interact with the Internet to select information, such as audio information, and wirelessly communicate the selected information to an electronic device. The electronic device receives the information via a wireless communications network and processes the information accordingly. In a particularized form, a user may select information from an Internet website operable to allow selectivity of audio infor-

mation such as songs, on-line radio stations, on-line broadcasts, streaming audio, or other selectable information. Upon selecting the audio information, information or data associated with the selected audio information is wirelessly communicated to an electronic device. The electronic device may then be used to process the selected audio information. In this manner, a user may receive selective audio information via a wireless electronic device.

In one form, the electronic device may be operable to communicate with an individual's automobile audio system. A user may select audio information utilizing a personal computer with access to a website operable to display selectable audio information. The selected audio information may then be wirelessly communicated to the electronic device associated with an automobile's audio system. Therefore, upon receiving the selected audio information, a user may access and play the received audio information utilizing the electronic device in association with the automobile's audio system.

The present invention is not limited to communicating only audio information. One skilled in the art can appreciate that other types of information, such as video, textual, etc. may be communicated utilizing the systems and methods disclosed herein without departing from the spirit and scope of the present invention. Additionally, it will be understood that information may be formatted in a plurality of ways at different phases of communication without loosing the underlying content of the selected information. For example, an audio file may be formatted, segmented, compressed, modified, etc. for the purpose of providing or communicating the audio invention. Therefore, the term "audio information" or "information" is used in a general sense to relate to audio information in all phases of communication.

FIG. **1** depicts a general system for wirelessly communicating selective information to an electronic device in accordance with one aspect of the present invention. The system, illustrated generally at **100**, includes a digital engine **101** coupled to a communications engine **102**. Communications engine **102** is remotely coupled to an electronic device **103**. Digital engine **101** may be directly or indirectly coupled to storage device **105** operable to store information. Digital engine **101** maintains information or data associated with selected information in a digital format. The information may be stored within storage device **105** or other storage devices operable to maintain data or information associated with the selected information.

Communications engine **102** is communicatively coupled to digital engine **101** and operable to wirelessly communicate the selected information to electronic device **103**. During operation, audio information may be selected by a user utilizing a personal computer or other devices operable to communicate with an information network. Digital engine **101** is operable to maintain information associated with the selected audio information. For example, the information could be several songs or titles configured as an audio file and formatted in a digital format such as an MP3 file, wave file, etc. The maintained information may also be a reference to a network location where an audio file may be stored, a network location where a network broadcast of audio information may be located, etc. or other network locations having information associated with the selected audio information. Therefore, digital engine **101** may maintain a plurality of different types of information or data associated with the selected audio information.

System **100**, utilizing communication engine **102**, may wirelessly communicate data or information associated with the selected audio information to electronic device **103** thereby providing wireless communication of selected information to an electronic device operable to receive wireless communications. In one embodiment, digital engine **101** may be used in association with an Internet website configured to provide access to selectable information. The Internet website operably associated with digital engine **101** allows a user to select information to be wirelessly communicated to electronic device **101** utilizing a network environment. The Internet website may include several different types of information related to audio information.

FIG. **4**, described in greater detail below, illustrates one embodiment of providing an Internet website for displaying selectable audio information. For example, the Internet website may include music and/or artist search engines, playlists, top 10 charts, artists by genre, and other information associated with audio information. A user may select information associated with the audio information and digital engine **101** can maintain the information or data associated with the selected information in a digital format. Communications engine **102** coupled to digital engine **101** may wirelessly communicate data associated with the selected audio information to electronic device **103**. Therefore, a user may access and select audio information via an Internet website and wirelessly communicate the data to an electronic device. As such, system **100** advantageously allows for wireless communication of selected audio information to electronic devices that may be remotely located from a conventional terrestrial communication network.

Electronic device **105** may be configured in a plurality of ways for receiving wireless communication of selected audio information. In one embodiment, electronic device **105** may be operable as a component configured to receive a cellular signal comprising the selected information communicated by the communication engine. For example, a device having a cellular modem may be operable to receive the information at specified intervals. Upon receiving the information the electronic device may process the received information. Electronic devices are described in more detail below and may include a network radio, a modular device, an audio system, a personal digital assistant (PDA), a cellular phone, or other electronic devices operable to receive information wirelessly communicated by communication engine **102**.

Communications engine **102** may be operable to wirelessly communicate selected information to electronic device **103** in a plurality of ways. The present invention advantageously allows for several different embodiments of wirelessly communicating selected audio information to electronic device **103** and is not limited to any specific configuration described below. Several different types or combinations of wireless communication may be realized by the present invention. Communications engine **102** may be operable to wirelessly communicate the selected information from an information network, such as the Internet, to an electronic device operable to receive wireless communications. In one embodiment, communications engine **102** may comprise a conduit to interface information with a wireless communication network. The conduit may configure the information located within the information network into a format operable to be transmitted via wireless communication.

For example, a wireless device may be operable to receive packets of information having a specific size and in a specific format. In such an embodiment, communications engine **102** could format the information into a desirable format for wirelessly communicating the information to electronic device **103**. Several types of wireless communi-

cation may be used by communications engine **102** to communicate the selected information to an electronic device. Communications networks such as GSM, Digital Satellite communication, SB, Radio bands, DRC, Super-DRC or other systems or types of transmission such as TDMA, CDMA, spread spectrum, etc. or frequencies such as between about 1.7 GHz and 2.0 GHz may be realized by the present invention for communicating information or data representing the selected audio information to electronic device **103**.

In one embodiment, the selective information may be communicated using a digital broadcast signal. Digital broadcast includes providing information via a signal such as AM, FM, and the like. Digital information may be included or encoded as a sub-carrier within the broadcast signal and received by electronic device **103**. A digital sub-carrier may include a selective bandwidth of frequencies for a specific radio station (i.e., 6 MHz for FM). The selective information may be wirelessly communicated to electronic device **103** utilizing a communication engine **102** operable to communicate the selective information via a digital FM signal. In this manner, selective information may be communicated within digital FM sub-carriers to an electronic device operable to receive the information. For example, a user may subscribe to communicate the information via an FM sub-carrier and receive the selective data through wireless communication via a specified FM sub-carrier.

In one embodiment, the selected information may be formatted and transmitted to achieve a desirable transmission rate. For example, conventional systems may transmit information at a speed of 10 kilobits per second. Therefore, for 1 megabyte of information to be communicated to an electronic device, a transmission time of approximately 800 seconds may be required. The present invention may allow for a relative increase in transmission speed by removing the requirement that information be communicated asynchronously to an electronic device. For example, conventional wireless communication utilizes a specified frequency to communicate information in two directions (i.e., cellular phones). As such, information is communicated across a channel in an asynchronous manner to provide a continuous audio signal to the recipient.

The present invention advantageously allows for signals to be transmitted to an electronic device in a less than asynchronous manner. For example, if a user selected a song to be wirelessly communicated to an electronic device, system **100** could communicate the information in a less than asynchronous manner allowing the selected information to be transmitted efficiently thereby decreasing the overall download time for the selected audio information. In one embodiment, the selected information may be compressed and transmitted across the same frequency but at different phases thereby allowing plural signals having different phases to be wirelessly communicated to an electronic device. Therefore, the electronic device may be operable to receive multiple phased signals and process the selective information accordingly.

In one embodiment, the information may be wirelessly communicated at a relatively slow transmission rate. For example, a user may schedule when the selected audio information may be used by electronic device **103**. The user may select several different audio tracks or songs to be transmitted to an electronic device associated with the user's vehicle such that the user can listen to the user selected audio information during the drive home at the end of a workday. Therefore, it may be desirable to utilize a slower transfer speed due to the extended amount of time available prior to actual use of the selected audio information. In this manner, communications networks having less or slower transfer rates may be used to wirelessly communicate the selected audio information to the electronic device.

In another embodiment, high-speed wireless communication networks may be used to communicate the selected audio information. For example, a user may want to listen to an Internet broadcast of an Internet radio station. Therefore, high-speed communication may be required to wirelessly communicate or stream the selected audio information to an electronic device. In another embodiment, a hybrid of wireless communication rates may be deployed depending on the requirements of the selected audio information and/or the electronic device. For example, the selected audio information may first be transmitted to the electronic device via high-speed communication until enough information has been wirelessly communicated and buffered into a memory device operably associated with the electronic device. Upon communication of a certain percentage of the selected audio information, slower communication speeds may then be used to communicate additional selected audio information.

Therefore, system **100** may be configured in a plurality of ways to communicate selected information to electronic device **103**. Digital engine **101** may be used to maintain data or information associated with the selected information and communication engine **102**, communicatively coupled to digital engine **101**, may wirelessly communicate selected information to electronic device **103**.

FIG. **2** illustrates a block diagram of a method of wirelessly communicating selected information to an electronic device. The method may be used in association with the system illustrated in FIG. **1** or other systems operable to utilize the method of FIG. **2**.

The method begins generally at step **200**. At step **201**, selectable audio information may be accessed utilizing a network communications device. For example, selectable audio information may be displayed at an Internet website accessible by a personal computer. In another embodiment, the selectable information may be accessed utilizing a wireless communications device such as, a cellular phone, a PDA device, or other devices operable to provide access to the selectable audio information.

Upon accessing the selectable information, the method proceeds to step **202** where a user can identify or select audio information to be wirelessly communicated to an electronic device. For example, a user may select an entire album to be wirelessly communicated to a PDA device.

Upon the user selecting the audio information, the method proceeds to step **203** where the method maintains information associated with the selected information. In one embodiment, the information may be an audio file, such as a wave file, and MP3 file, etc. representative of the selected audio information. In another embodiment, a network location that comprises a file representing the selected information may be maintained. Another example may include a network location of a network broadcast of audio information. Therefore, the method at step **203** may maintain several different types of information associated with the selected audio information.

Upon maintaining information or data associated with the selected information, the method proceeds to step **204** where the method wirelessly communicates information associated with the selected information to an electronic device. For example, if an audio file associated with the selected audio information was maintained, the method would communicate the audio file to the electronic device. In another

embodiment, a link or network address broadcasting the selected audio information may be accessed and, at step **204**, wirelessly communicated to an electronic device. In another embodiment, a combination of different types of audio information may be wirelessly communicated to an electronic device. Upon transmitting the selected audio information, the method proceeds to step **205** where the method ends.

Selected audio information may be communicated in a plurality of ways as described above including communicating via a cellular communications network to an electronic device operable to receive cellularly-communicated signals. For example, the information may be selected from a website operable to display selectable information. Upon selecting the audio information, a data file representing the selected audio information may be wirelessly communicated to an electronic device thereby allowing a user to select audio information via the Internet and wirelessly communicate the information to an electronic device.

In some embodiments, the wireless communication to an electronic device may occur in an off-line environment. For example, a user may go "on-line" to access a website and select information and then go "off-line" or end the browsing session. The wireless communication may then occur while the user is off-line thereby removing the confines of using an active or on-line browsing environment (i.e. Internet radio broadcast, streaming audio, etc.) for accessing selected information. Therefore, the method of FIG. **2** allows for information, such as audio information, to be communicated from a network location such as a web site, to an electronic device "via" wireless communication. The present invention advantageously allows users to access and download information accessible by a network location to an electronic device operable to receive wireless communications thereby reducing the need for land lines, terrestrial communication networks, etc. for communicating selective information.

In one embodiment, the method of FIG. **2** may be deployed in association with an Internet website operable to display selectable links for downloading information. The information may include audio information such as MP3s, streaming audio, streaming. Internet broadcasts, etc. are selectable by a user and operable to be wirelessly communicated to an electronic device. By providing a user with a website of selectable audio information operable to be wireless communicated to an electronic device, a user may customize information communicated to an electronic device. In one embodiment, a user may communicate information to an electronic device that may not be owned by the user. For example the method of FIG. **2** could be modified to allow a user to wirelessly communicate audio information to a plurality of electronic devices that may or may not be owned by the user.

FIG. **3** illustrates an electronic device operable to receive selected audio information in accordance with the teachings of the present invention. Electronic device **300** includes a communication module **301** such as a transceiver coupled to storage medium **303** such as a high speed buffer, programmable memory, or other devices operable to store information. Electronic device **300** may also include processor **302** operably associated with communication module **301** and storage medium **303**. Processor **302** may be operable to process wirelessly communicated selected information and in one embodiment may be integrated as part of communication module **301** of storage medium **303**. In the same manner, as larger scale integration of electronic devices proliferate, communication module **301**, processor **302**, and storage medium **303** may be integrated into one communication component or device operable as electronic device **300**.

Processor **302** may be operable using software that may be stored within storage medium **303**. In one embodiment, software upgrades may be communicated to electronic device **300** via wireless communication allowing for efficient system upgrades for electronic device **300**. Storage medium **303** may include one or several different types of storage devices. For example, storage medium **303** may include programmable gate arrays, ROM devices, RAM devices, EEPROMs, minidisks or other memory devices operable to store information.

During use, electronic device **300** receives wireless communications of selective information. The information may be transmitted via a wireless communications network and received by electronic device **300** via transceiver **301**. Transceiver **301** may be operable to convert the received wireless communication signal into a desirable format and store the received information within storage medium **303**. The received information may then be processed by electronic device **300**.

In one embodiment, electronic device **300** may be operable as an audio player configured to play digital representations of music. For example, electronic device **300** may also include an MP3 player operable to process the received information into an audio signal. Therefore, electronic device **300** may be used to receive wirelessly communicated MP3 audio files and play these files using an MP3 player when desired. In another embodiment, electronic device **300** may be configured as a PDA wherein the PDA includes a web browser operable to wirelessly communicate with the Internet. The PDA device may include a user interface allowing a user to select information to be wirelessly communicated to electronic device **300**.

By providing a website of selectable information, the PDA devices may provide an efficient embodiment for electronic device **300** in that is allows a user to access and select information using a wireless communication network and receive the selected information using the same or different wireless communication network. In yet another embodiment, electronic device **300** may be configured as a component operable to receive selective information via wireless communication and communicate the information to a second electronic device such as an automobile sound system, home stereo, etc.

For example, electronic device **300** may utilize transceiver **301** to receive wirelessly communicated information. Electronic device **300** may then be coupled to an automobile sound system using an interface and communicate the received information to the automobile sound system. In this manner, electronic device **300** may be used to provide the automobile sound system with audio files received via wireless communication.

In another embodiment, electronic device **300** may be operable to communicate the received audio information to an audio system via a localized communications-signaling network. One such network may include utilizing "Bluetooth" communication standard, used to provide communication between electronic devices in a proximal setting. In one embodiment, electronic device **300** may be integrated into an audio component such as a radio receiver. Electronic device **300** integrated into an audio component may be configured to process digital audio files wirelessly communicated to an audio component. In another embodiment, electronic device **300** may be operable to communicate with an analog receiver at a predetermined frequency.

For example, a specific frequency may be selected (i.e., 93.7 MHz) for communicating the wireless received selected information from electronic device **300** to a localized audio system. Electronic device **300** communication of the wirelessly received information allows a conventional receiver to receive the selected audio information. In one embodiment, the conventional receiver may be configured to receive a digital sub-carrier, on-carrier, or other within a specified frequency. Therefore, electronic device **300** may be operable to locally transmit the signal at a specific frequency thereby allowing the conventional receiver to receive the information. In another embodiment, electronic device **300** may be operable to scan plural bandwidths to receive the selective information. For example, transceiver **301** may be operable to receive selective information across several frequencies and process the received information accordingly.

In another embodiment, electronic device **300** may be operable to scan several frequencies to obtain the desirable information. For example, a user may select several Internet broadcasts comprised of streaming audio information. Therefore, the information may be transmitted across several wireless frequencies receivable by electronic device **300**. Electronic device **300** may then be operable to allow a user to scan wirelessly communicated Internet broadcast signals thereby providing a user selected virtual broadcast radio network. In another embodiment, electronic device **300** may include a user interface operable to communicate with an Internet website operable to display selectable audio information. The Internet website may be configured as a user-preferred environment displaying a users selected audio information. Internet broadcast selections, streaming audio selections, etc.

With a display device for displaying a Website having selectable information, electronic device **300** may allow a user to select audio information via a user interface and receive the selected information via wireless communication thereby providing a customizable WebRadio device for the user. In another embodiment, electronic device **300** may be a modular device configured to be coupled to, for example, a portion of a cars interior. For example, electronic device **300** may be mounted to a portion of a car's console thereby providing a removably coupled electronic device operable to wirelessly receive selected audio information. As a removable device, electronic device **300** may also be coupled to a home audio system, a portable radio system or other systems thereby providing a versatile electronic device operable to receive wirelessly communicated selected audio information.

In another embodiment, electronic device **300** may be operable as a PDA and/or a cellular phone that may be mounted to an automobile's console. Electronic device **300** may then integrate with a user's automobile to provide an all-encompassing communications device. For example, electronic device **300** configured as a PDA and cellular phone may allow for communication with a user's email account, voice mail account, the Internet, as well as allowing for the receipt of selected audio information via wireless communication. Electronic device **300** may be operable in a hands-free mode allowing a user to maintain safe driving fundamentals. During use, electronic device **300** may be processing selective audio information for communicating with an automobile audio system and may further be operating to receive incoming cellular calls.

Electronic device **300** may be set-up by the user to pause the music being played and allow the received cellular call to be communicated either via an independent speaker or utilizing the automobiles "audio system." Additionally, electronic device **300** may be operable to adjust the listening level of an automobile's audio system, it may play received voice mail messages, allow a user to view the Internet, etc. In one embodiment, electronic device **300** may be operable as a dual mode electronic device capable of receiving both digital and analog wireless communication signals. In this manner, electronic devices may efficiently utilize available bandwidth for receiving selected information from a communications engine. For example, transceiver **301** may be a wireless communications modem operable to receive digital or analog signals.

FIG. **4** illustrates a graphical user interface (GUI) for displaying selectable audio information according to one aspect of the present invention. The GUI may be operable with a computer system, cellular device, PDA, or other electronic devices or systems operable to display the GUI of FIG. **4**. The GUI, shown generally at **400**, may be displayed using a conventional web browser **402** such as Microsoft® Internet Explorer, a WAP browser, or other browsers operable to display the audio information. Browser **402** includes browser functions, shown collectively at **403**, for navigating a network such as the Internet or an intranet. Homepage **401** may be displayed using browser **402** and may include several functions, features, information, etc. related to audio information. Home page **401** may be developed using several different types of programming (i.e., HTML, XML, Java, etc.) used to developing a network location or website.

The present invention is not limited to any one specific type of software and may be realized in plurality of ways as can be appreciated by those skilled in the art. Homepage **401** may also include login region **410** allowing a user to log into homepage **401** and display a user-preferred environment. For example, a user may want Radio Dial **412** to appear when a user logs into homepage **401**. In another embodiment, a user may want to view a current playlist selected by the user or the status of wirelessly communicated playlist. A user may also provide demographic information allowing advertisers to access the demographic information and provide advertisements based upon the demographic information. For example, an advertiser may want to target Hispanic females in the 21-25 year old age group.

Through providing demographic information to advertisers, when a user logs into homepage **401** selective advertising can be "targeted" for a group of users. Homepage **401** may also include several tabs for efficiently navigating homepage **401**. Library tab **405** may be provided to allow a user to browse available audio information that may be presented by title, genre, artist, decade, culture, etc. Store tab **407** may also be provided for locating items available for purchase such as CDs, PDA devices, MP3 players, wireless communication hardware, interfaces, software or other types of products that may be purchased while on-line. Chat tab **408** may also be provided allowing a user to chat with other users of home page **401**. For example, a guest musical artist may be available to chat with visitors of home page **401** via a chat page associated with chat tab **408**. Home page **401** may also include contest tab **409** for displaying current contests, prizes, and/or winners.

Radio tab **406** may also be provided for displaying audio information. For example, radio tab **406** may display a collective menu **411** of selectable functions or features associated with audio information. Top ten lists may be provided to a user based on several different billboard polls or genres. A search engine may be provided allowing a user to search for a specific type of audio information such as an artist, song title, and genre. Internet radio station, etc. In one

embodiment, a user may input the lyrics to a song within the search engine. As such, the search engine may locate several different songs having the desirable lyrics and allow a user to select the search results. A user may also use a select a device feature that allows a user to select a destination device for communicating selected audio information. For example, a user may want to communicate a playlist to several different devices such as a PDA, a home computer system, a work computer system, etc.

As such, a user can communicate selective information to several devices without having to download the information separately for each device. A send a friend link may also be provided allowing a user to send selective audio information to a friend's electronic device. A user may also join a group comprised of individuals that select a certain genre of music to be communicated to the user's electronic device. For example, a user may want to join a group that plays only 50s swing music. As such, the user could communicate the group's selected songs to the user's electronic device. A user may also utilize an email account provided by homepage **401** allowing a user to correspond with others via email. A user may also access a list of guest DJs that may provide playlists of songs chosen by the guest DJ and selectable by a user.

In one embodiment, a user's radio dial **412** may be provided when a registered user logs into homepage **401**. As such, radio dial **412** may include several functional buttons similar to conventional systems such as a volume control and a station control. However, radio dial **412** surpasses the limitations of conventional systems through providing a programmable radio dial of user customized audio information. Radio dial **412** includes several stations that may be programmed using program interface **413**. The preset stations may include several different types of user customized preset information such as user selected playlists, Internet broadcast stations, top lists, group playlists, artist-selected lists, on-line radio station, conventional radio stations. Internet phone, cellular phone, etc. and other functions, features, or information associated with audio information.

Radio dial **412** may also be displayed as a separate user interface and in some embodiments, does not require a "browsing" environment to view radio dial **412**. For example, an electronic device, such as a PDA, having a display may graphically present radio dial **412** to a user. One example may be using electronic device in association with an automobile audio system. Electronic device may display radio dial **412** and may allow a user to navigate, modify, select, adjust volume, access daytimer, access phone lists, etc. or perform other functions while the electronic device is used in association with an automobile sound system. Therefore, radio dial **412** may be operable as an application for use with several different types of electronic devices (i.e., computer systems, portable computing devices, cellular phones, etc.) operable to display radio dial **412** and in come embodiments may be wirelessly communicated to an electronic device.

In another embodiment, homepage **401** may allow a user to select when to download the information to an electronic device. For example, a user may want to listen to a certain genre of music at a specific time of day thereby allowing a user to select the information. As such, a user may select a different playlist for every day of the week thereby allowing a user to listen to different songs on different days of the week. The user can further identify when the selected playlist should be available for listening. For example, if a user wanted to listen to "playlist #1" on Monday morning during the drive into work between 8:00 am and 9:00 am, the user would enter the time and the day "playlist #1" would be available for listening. In this manner, the playlist may be communicated to the electronic device thereby allowing a user to listen to selective audio information at a desirable time.

FIG. **5**A illustrates a portable radio system having a mount for an electronic device according to one embodiment of the present invention. Portable radio **500** includes a mount **501** operable to receive electronic device **502**. Mount **501** may include a connector operable to provide communications and power to electronic device **502**. During use, electronic device **502** when mounted within portable radio **500** communicates with portable radio to provide remotely received selective audio information. In one embodiment, electronic device **502** may include a user interface allowing a user to access the Internet. Therefore, selective audio information located on the Internet may be accessed by the user and remotely communicated to electronic device **502** coupled to portable radio **500**.

In another embodiment, portable radio **500** may include memory operably located within for storing downloaded information. For example, portable radio **500** may include 32 MB of RAM allowing electronic device **502** to receive selective information and download the selective information to memory located within portable radio **500**. In this manner, the downloaded music may be operable to be played within portable radio **500** while allowing electronic device to be removed from portable radio **500**. Therefore, portable radio **500** including electronic device **502** allows a user to communicate selected audio information to portable radio **500**.

FIG. **5**B illustrates automobile console having a mount for coupling an electronic device according to one aspect of the present invention. Console **510** includes mount **511** operable to receive electronic device **512**. Mount **511** may be located in many different locations within an automobile such as coupled to a sun visor, center console, dashboard, floorboard, etc. Mount **511** allows the user to couple electronic device **512** to the automobile and provide an interface for communication between electronic device **512** and the automobile audio system. Mount **511** may also include a power connection that allows electronic device **512** to use the automobiles power during use. The power connection may also be used in association with a recharging circuit operable to recharge a power supply within the electronic device. During operation, electronic device **512** coupled to mount **511** may receive selected audio information via wireless communication and communicate the selective information to the automobile audio system.

In one embodiment, the automobile may include memory operable associated with the automobile for storing-information. The memory may be used in association with mount **511** and electronic device **512** to store the selected audio information. In this manner, voluminous audio information can be stored within the memory allowing electronic device **512** to receive additional information. In one embodiment, a mount may be provided for a home audio system (not shown) for downloading selected audio information for use with a home audio system. For example, a mount device may be coupled to a home stereo system such that the upon placing an electronic device such as electronic device **500** within the mount, selected audio information may be communicated to the home audio system thereby allowing a home audio system to be used in association with an electronic device.

FIG. **6** illustrates a block diagram of a system for communicating voice mail messages using email according to

one embodiment of the present invention. The system, indicated generally at **600**, includes email server **601** coupled to a voice mail storage device **602**. System **600** further includes a computer system or network terminal **603** such as a computer coupled to network **604**. System **600** further includes mount **605** for mounting electronic device **606** for hardwire communication of information. Device **606** may also communicate with network **604** using a wirelessly communication network operably associated with network **604** and coupled, for example, via tower **607**.

During operation, system **600** communicates voice mail messages to a user utilizing email server **601**. For example, if a user receives a voice mail message, email server **601** would be notified and a voice mail message would be sent to the user's email account in the form of an email message. For example, a voice mail message would be sent to a user's email account within intranet **604** in the form of an audio file as an attachment to the email. Upon receiving the email, a user may click on the audio file representing the voice mail message to hear the message left by a caller.

In one embodiment, a user may be accessing the Internet via a phone line and, as such, be unable to receive notification that a voice mail message has been received. System **600** would receive the voice mail message and send an email comprising the voice mail message to the user email account. In this manner, a user can remain connected to the network and receive voice mail without having to log off or disconnect from the Internet. In one embodiment, a user may receive the voice mail message via a portable electronic device. For example, a user may be using remote device **605** operable to receive wirelessly communicated information. System **600** would receive the voice mail message and forward the voice mail message to a user's portable electronic device **606**. In this manner, a user may be capable of receiving voice emails at remote locations.

In another embodiment, a user may subscribe to use an Internet email account that may be operably associated with system **600**. Utilizing an Internet email account may allow a user the flexibility to check voice email messages from any location in the world. For example, a user may access a "Hotmail" email account while traveling on business in a foreign country. The user, upon gaining access to the "Hotmail" account, would be able to listen to voice mail messages sent to the user via the "Hotmail" email account. Through utilizing an email account to receive voice mail messages, a user may be afforded great flexibility in communicating voice mail messages. For example, a user may be able to forward a voice mail message received in the form of an email to one or a plurality of other email accounts. In this manner, a voice email message may be sent efficiently to other email users.

For example, a user may maintain a distribution list of individuals working on a particular project that may have a need to hear certain voice email messages. In this manner, a user may efficiently disseminate information to other individuals while adding additional textual information to the body of the email allowing a user to comment on the original voice email message. In another embodiment, a user may forward a received voice email message to another account operable to receive forwarded voice email messages. For example, system **600** may be operable to receive an email message having a voice mail message as an attachment. The system would then be operable to forward the voice mail message to specified phone number, separate email account, and/or voice mail account, etc. thereby providing a user flexibility in receiving voice email.

In one embodiment, a user may utilize an email account to establish an answering service for voice mails. For example, a user's telephone number may be operable with an email account to provide an answering service. A user may record a message for a specified phone number or extension and, upon receiving an incoming call; the recorded message may be played back to incoming the call's initiator. System **600** would then forward the received voicemail message via an email account to the user. For example, a user may have an account set up at a residence for receiving voicemail messages via a user-defined email account. The user could then forward all received voice mails from the home account to an email account at a place of work. Therefore, the user may have complete access to received voicemail messages. In the same manner, a user could set up their work phone number to forward a voicemail message to the user's home email account thereby allowing a user to receive a voicemail at a home email account. Therefore, system **600** may be operable in a plurality of ways to provide email messages comprised of voicemail messages received via a voice mail or email account.

FIG. **7** illustrates a flow chart for providing voice email messages according to one embodiment of the present invention. The method begins at step **701** where a voice mail message is left for a user. The message could be at a residence, place of business, etc. The method then proceeds to step **702** where the message may be stored as an audio file within a database operable to store a file comprised of the voice mail message. Upon storing the file, the method proceeds to step **703** where an electronic mail message may be generated. The electronic mail message may be addressed to the recipient of the voice mail message. The method then proceeds to step **704** where the audio file representing the voice mail message is attached to the electronic message.

Upon attaching the audio file, the method then proceeds to step **705** where the email message may be sent to the email address. Upon sending the email message the method proceeds to step **706** where the method determines if the email message should be sent to a wireless electronic device. If the message is not to be sent to a wireless device, the method proceeds to step **720** where the method ends. If the message is to be sent to a wireless electronic device, the method proceeds to step **707** where a signal may be sent to the wireless electronic device and at step **708** an indication is provided to the electronic device indicating that a voicemail message has been received via a user's email account. The method may then proceed to step **709** where the user decides whether or not to listen to the voice email message. If the user decides not to listen to the voice email message, the method may proceed to step **710** where the method ends. If the user decides to listen to the voice email message, the method proceeds to step **711** where a request may be sent by the electronic device requesting the voice email message be forwarded to the user's electronic device.

At step **712**, the voicemail message may be sent to the user's electronic device. Upon forwarding the voicemail message to the user the method may proceed to step **720** where the method ends. As such, FIG. **7** depicts one method of providing an email message comprised of a voice mail message. Certainly, other methods may be deployed as advancements in technology and are made without departing for the spirit and scope of the present invention.

FIG. **8** illustrates a flow diagram of a method for providing selected audio information to an electronic device according to one embodiment of the present invention. The method begins at step **800** where a user accesses a webpage

via the Internet. The webpage may be a home page illustrated in FIG. **4** or other web pages operable to display selectable references to audio information. The method proceeds to step **801** where a user selects desirable audio information. For example, a user may select a single song, a plurality different songs, an entire album, a broadcast station, streaming audio, etc. or other selectable audio information. Upon the user selecting a reference to audio information, the method may proceed to step **802** where a playlist may be created that represents the user's selected audio information.

The playlist may be variable in size and comprised of a plurality of different types of available audio information. Upon creating a playlist, the method may proceed to step **803** where information associated with the playlist is obtained. For example, a list of network or URL locations comprised of the desirable audio information may be obtained. In this manner, desirable audio information may be obtained from many different sources such as URLs, network addresses, hard drives, databases comprised of audio information, etc. The sources may be accessed to obtain the selected audio information.

Upon obtaining data associated with the customized playlist, the method may proceed to step **804** where the user is prompted for a destination for the playlist. For example, a user may want to communicate the selected audio information to a remote electronic device, an automobile audio system, a home stereo system, a home computer, an electronic device coupled to a home network or computer system, etc. or other locations or devices operable to receive the selected audio information. In one embodiment, a user may select a device owned by a friend to accept the selected audio information. For example, a husband may want to send a romantic playlist to his wife on their anniversary. In this situation, the husband would select his wife's electronic device as the receiving device for the selected audio information.

Upon selecting a device, the method proceeds to step **805** where the method determines the destination of the selected audio information. If the information is to be sent to a device via a wire line connection, the method proceeds to step **813** where playlist data is sent to a user via a wire line connection. The method may then proceed to step **814** where the playlist is executed at the device. If the information is to be sent to a device requiring wireless communication, the method proceeds to step **806** where the information is formatted for communicating the information to a wireless electronic device. For example, a wireless PDA device may be selected as a destination device for the selected audio information. The PDA device may include an audio player, such as an MP3 player operable to play or execute MP3 audio files. In such an embodiment, the method could format the information such that the information may be wirelessly communicated and subsequently played by the MP3 player.

Upon formatting the information, the method may then proceed to step **807** where the audio information is wirelessly communicated to the selected device. In some embodiments, the device may be operable to receive a limited amount of information based upon storage capacity of the device (i.e., 16 MB). In such a case, the method may divide the information into component parts and periodically communicate the component parts, such as packets, to the electronic device. Upon communicating the audio information, the method may then proceed to step **808** where the signal may be received by the destination or electronic device.

The method may then proceed to step **809** where the method determines if all of the audio information has been received. For example, if 16 MB or 32 MB of selected audio information was initially transmitted due to capacity limitations of the selected device, the method may query the selected device to determine if capacity is available. If available memory exists, the method may proceed to step **807** where the method may communicate additional audio information based upon the amount of available memory. The method repeats until all of the selected audio information has been transmitted.

Upon communicating the selected information, the method may proceed to step **810** where the playlist may be executed. For example, a user may select a continuous communication of selected audio information (e.g., several hours of music. Internet broadcast, etc.). As such, the method may continuously play or execute the received audio information. In another embodiment, the method may proceed to step **811** where the method may store or buffer the received information until it is desirable to execute the received selected audio information. As such, upon executing the selected audio information, the method may proceed to step **809** where the method may repeat. In one embodiment, a user may elect to download a broadcast of an on-line radio station. For example, a user may want to listen to a radio station located in a remote location wherein conventional radio receivers could not receive the desired broadcast. For example, a person living in Houston, Tex. may not be able to receive a radio broadcast signal from a radio station in Seattle, Wash. utilizing a conventional radio receiver.

In accordance with the teachings of the present invention, a user may select an on-line broadcast or radio station as all or a part of the selected audio information. The user may then receive radio broadcasts without having to use a home computer system or conventional radio receiver.

At step **804**, a user may select a device that does not require remote communication of information. For example, a user may elect to communicate the selected audio information to device, such as a personal computer, PDA device, MP3 player, etc. coupled via a network connection to the Internet or an Intranet. The user may receive the selected playlist at the determined device for eventual playing. In one embodiment, a user may select a plurality of devices as destination devices for receiving downloads of the selected audio information. For example, the user may want to download the information to a home stereo system, a PDA device, and an automobile stereo. As such, the selected information may be communicated to more than one destination device. In addition, the format of the download may match or conform to the selected destination device(s).

The present invention may be configured in a plurality of ways to communicate desirable audio information to users by allowing users to select desirable audio information and transmitting the desirable audio information to a specified destination thereby allowing a user to receive on-demand customized audio information. Moreover, the download may occur in an off-line environment, allowing a user to enjoy the selected audio information accessed on-line without having to be on-line or utilizing a browsing environment. In one embodiment of the present invention, the method of FIG. **8** may be modified to allow a user to select a "user group" for receiving customized audio information. For example, a "user group" may include users that prefer contemporary jazz wherein a user may request a certain song. Therefore, a virtual request line may be designed for

a specific genre of music allowing "members" to transmit audio information to the "group".

In another embodiment of the present invention, the method may be modified to allow a user to select a specific genre to be transmitted to the users device. For example, a user may elect to have random country and western music transmitted to a destination device. The user could efficiently create a radio station format and have the format received at a destination device.

In a further embodiment, a user may select a group of genres to be downloaded to a desirable device. As such, the method may be modified to allow a user to select several different genres to download random music within the specified genres. In another embodiment, a user may elect to download the same music as another individual. For example, a user may want to download the same music as their best friend. Therefore the user could elect to download the same music as their friend or group of friends. In another example, a user may want to listen to the same music that an artist listens to on a specific weekday of evening. For example, a user may want to listen to the same music that Barry White listens to on a Saturday night.

Therefore, the user may select "Barry White's" Saturday night playlist and receive the same playlist Barry White receives on Saturday night. In another embodiment, the method of FIG. **8** may be modified to allow a user to manipulate song post download. For example, a user may want to store, delete, replay, copy, forward, etc. received audio information. Therefore, the method of FIG. **4** may be modified such that a user can manipulate or process the received audio information in a plurality of ways. In one embodiment of the present invention, an on-line radio station may be provided. For example, the radio station may be created for transmitting audio or on-line broadcasts. The on-line broadcasters or hosts may create their own format for broadcast. For example, an on-line radio station may be provided that transmits only children's songs.

Prior to conception of the present invention, conventional radio stations were monetarily limited to be capable of transmitting music such as children's songs to conventional radio receivers. The present invention, by providing a medium for transmitting selectable audio information, enables the existence of on-line broadcasting with little or no overhead cost for a host. A user may select an on-line broadcast for on-line or off-line delivery. In another embodiment, on-line broadcast of audio information representing books or novels may be provided to individuals such as the visually impaired. For example, an on-line broadcast station may provide several hours of audio information broadcast representing books or novels to be broadcast with very little overhead.

FIG. **9** illustrates an automobile console having a mount for an electronic device according to one embodiment of the present invention. Console **900** includes a conventional audio system **901** comprised of a receiver **902** and CD player **903**. Interface **904** may be coupled to audio system **901** via plug **905** and cable **908**, which may be coupled to an auxiliary line into audio system **901**. Interface **904** may also include contact **906** for contacting electronic device **907**. Cable **908** may be a multiple conductive cable for providing power from the automobiles power system via a protection circuit or fuse **909** for powering electronic device **907**. In one embodiment, interface **904** may be operable to recharge electronic device **907** utilizing a power source associated with an automobile.

During operation, electronic device **907** may be mounted within interface **904**. Electronic device **907** may also be powered or recharged via power line **910** and communicate with the systems audio system via interface cable or bus line **911**. Audio information communicated to electronic device **907** may be transferred to audio system **901** such that a user may listen to selected audio information. For example, a user may have previously selected a plurality of audio files to be transmitted to electronic device **907**. Electronic device **907** may communicate the selected audio information to the automobiles audio system that utilizes interface **901** thereby allowing the user to listen to selected audio information. In one embodiment, cable **908** may be custom-installed to audio system **901**. For example, the cable may be coupled to an auxiliary line for the system's radio or may be coupled to CD player line **912**.

In another embodiment, a radio manufacturer may provide interface **904** as a standard interface integrated into the audio system, thereby allowing communication between electronic device **907**, audio system **901** and/or console **900**. Electronic device **907** may include a plurality of different types of devices. For example, electronic device **907** may include a PDA device operable to store selected audio information. The information may be either remotely downloaded using an Internet web browser and wireless communication to the PDA device. In another embodiment, selected audio information may communicated to a PDA device via a hard wire coupled to a computer system interfacing with the Internet. In another embodiment, electronic device **907** may include an audio file player operable to play audio files such as MP3s, etc.

The audio files may be remotely or locally communicated to electronic device **907** and upon coupling to audio system **901**, the audio files may be transmitted to audio system **901** in a form receivable by audio system **901**. Although the disclosed embodiments have been described in detail, it should be understood that various changes, substitutions and alterations can be made to the embodiments without departing from their spirit and scope.

The benefits, advantages, solutions to problems, and any element(s) that may cause any benefit, advantage, or solution to occur or become more pronounced are not to be construed as a critical, required, or essential feature or element of the present invention. Accordingly, the present invention is not intended to be limited to the specific form set forth herein, but on the contrary, it is intended to cover such alternatives, modifications, and equivalents, as can be reasonably included within the spirit and scope of the invention as provided by the claims below.

While the present invention has been described with respect to a limited number of embodiments, those skilled in the art will appreciate numerous modifications and variations therefrom. It is intended that the appended claims cover all such modifications and variations as fall within the true spirit and scope of this present invention.

What is claimed is:

1. A media system, comprising:

a plurality of independent segment files, wherein a given segment file of the plurality of independent segment files has a given format and a different segment of the plurality of independent segment files has a different format, further wherein the given format facilitates an outputting of information in the given segment file at a given rate that is different than a rate associated with the different format;

a playlist that comprises a list, and the list includes a first URL for the given segment file and a different URL for the different segment file;

a network-based communication system operable: to distribute media content to a remotely located requesting device; to receive an HTTP communication from the remotely located requesting device that indicates a desire to access the available media; to send information representing the playlist to the remotely located requesting device; to send information representing the given segment file to the remotely located requesting device; and, to send information representing the different segment file to the remotely located requesting device; and

a plurality of remote devices configured to request media, wherein each of the plurality of remote devices comprises: (1) an internal memory system; (2) a collection of instructions stored in the internal memory system that is operable when executed to utilize information representing the playlist, to request a streaming delivery of the information representing the given segment file, and to request a streaming delivery of the information representing the different segment file; and (3) a buffer configured to output the information representing the given segment file at the given rate and to output information representing the different segment file at the rate, which is different than the given rate.

2. The media system of claim **1**, wherein at least one of the plurality of remote devices is a portable handheld device having a display, and the available media is a video.

3. The media system of claim **1**, wherein the network-based communication system is configured to send the given segment file via a streaming delivery.

4. The media system of claim **1**, wherein the plurality of independent segment files comprise serial component parts of the available media and segmenting the available media into the plurality of independent segment files facilitates the delivery of the available media to the remotely located requesting device via Internet-based communications.

5. The media system of claim **1**, wherein at least one of the plurality of remote devices is a component of a home entertainment system, and the available media is a video.

6. The media system of claim **1**, wherein the plurality of independent segment files comprise serial component parts of the available media and a formatting of the given segment into the given format encodes the given segment to facilitate an outputting of the given segment at the given rate, further wherein the formatting occurs prior to sending information representing the given segment file to the remotely located requesting device.

7. A media system, comprising:

a plurality of independent segment files that represent an available media, wherein a given segment file of the plurality of independent segment files has a given compression format and a different segment file of the plurality of independent segment files has a different compression format, further wherein the given compression format facilitates an outputting of information in the given segment file at a first rate that is different than a second rate associated with the different compression format;

a list including a given address for the given segment file and a different address for the different segment file;

a content delivering system comprising an electronic device operable as a communication device and a plurality of memory devices operable to store information, the content delivering system configured to receive an HTTP communication from a remote requesting device that indicates a desire to access the available media, to send the list in response to receiving the HTTP communication, to receive an HTTP communication that indicates a request for the given segment file, to stream data representing the given segment file, to receive an HTTP communication that indicates a request for the different segment file, and to stream data representing the different segment file; and

the electronic device comprising a housing component at least partially defining an enclosure, a transceiver communicatively coupled to a communications network, and a processor located within the enclosure.

8. The media system of claim **7**, wherein the available media comprises a video, further wherein the transceiver is communicatively coupled to the communications network via a wire line connection, the system further comprising: (1) an engine that divides the available media into the plurality of independent segment files and encodes the plurality of independent segment files into an appropriate format to facilitate a delivery of the available media to a requesting device; and (2) the remote requesting device.

9. The media system of claim **7**, further comprising the remote requesting device, wherein the remote requesting device is a cellular telephone that comprises a display and an application that is configured, when executed at the cellular telephone, to facilitate presentation of a video component of the available media on the display.

10. The media system of claim **7**, further comprising an application stored in a memory, the application configured for execution by a wireless enabled device, wherein the application when executed by the wireless enabled device facilitates the wireless enabled device acting as the remote requesting device.

11. The media system of claim **7**, further comprising:

a digital engine in the content delivering system that is configured to maintain the list; and

a communication engine in the content delivering system that is configured to facilitate a receipt of requests and a communication of information in response to the receipt of requests.

12. The media system of claim **7**, wherein the content delivering system is communicatively coupled to a wireless network and is configured to send the given segment via a streaming delivery that comprises at least one wireless link.

13. The media system of claim **10**, wherein a collection of instructions included in the application are further operable to cause the wireless enabled device to consider an amount of buffer fill within an internal buffer before requesting the different segment file.

14. A media system, comprising:

an electronic device comprising a display, a buffering component, a transceiver, and a memory system, wherein the electronic device is configured to utilize HTTP in connection with receiving a streaming delivery of an available media;

a collection of instructions stored in the memory system and operable when executed to allow the electronic device: (1) to utilize HTTP to request a file comprising a listing of URLs for a plurality of media segment files associated with the available media; (2) to utilize the listing of URLs to request a given one of the plurality of media segment files; (3) to receive information representing the given one of the plurality of media segment files; (4) to utilize the listing of URLs to request another one of the plurality of media segment files, wherein the given one has a given compression format and the other one has a different compression format; and

the buffering component of the electronic device configured: to output information in the given one of the plurality of media segment files at a given rate, and to output information in the another one of the plurality of media segment files at a rate that is different than the given rate.

15. The media system of claim **14**, further comprising:

a housing component for the electronic device that at least partially defines an enclosure in which the memory system and the buffering component are secured, wherein the buffering component comprises a buffer; and

a local area wireless communication module secured within the enclosure.

16. The media system of claim **15**, wherein the buffer facilitates presentation of a video media on the display, further wherein an amount of buffer fill in the buffer is considered in connection with determining which of an additional ones of the plurality of media segment files to request.

17. The media system of claim **14**, wherein the electronic device further comprises an internal rechargeable battery and a non-circular physical interface, wherein the non-circular physical interface includes at least a first contact to allow an external power source to recharge the internal rechargeable battery and a second contact to allow a communication of data.

18. The media system of claim **14**, wherein the electronic device is selected from a group consisting of a cellular telephone device, a computer device, a home media device, and a personal digital assistant device.

19. The media system of claim **14**, wherein the file is written in XML, further wherein the collection of instructions at least partially defines a web browser, further wherein the buffering component comprises a buffer, and further wherein the rate and the given rate are measured in bits per second.

20. The media system of claim **14**, further comprising another collection of instructions stored in the memory system and operable when executed to communicate information representing a graphical interface presented on the display to a different electronic device to allow the different electronic device to present the graphical interface on a display associated with the different electronic device.

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