INTERNET TELEVISION PROGRAM GUIDE SYSTEM

Background of the Invention

This invention relates to the Internet, and more particularly, to techniques for providing television program guide information and services to a user over the Internet.

A large number of television channels are available over cable television systems and satellite television systems. Television viewers have traditionally had to consult preprinted television program listings to determine which programs were scheduled to be broadcast on a particular day. More recently, television-based program guides have been developed that allow television viewers to view television program listings directly on their television sets.

For example, the Prevue® channel is a scrolling television program listings service that a cable system operator may make available to subscribers over a dedicated cable channel. Viewers can tune to the appropriate television channel to view program listings for television programs that are currently being broadcast and are scheduled to be broadcast in

the next few hours. Although the Prevue® channel is a ~~valu~~able service, the viewer is somewhat constrained by the passive nature of the service. For example, the viewer cannot view television listings for the next day or week.

As a result, more advanced television program guide services have been developed that allow the service provider to deliver television program listing data to the user's set-top box. The data is typically delivered over the television cable system infrastructure (e.g., on a given television channel during the vertical blanking interval or over an out-of band channel.) Software in the set-top box allows the viewer to display the television program listings on the viewer's television set.

These program guide services allow the user to manipulate the television listings by searching or sorting through the listings using criteria such as genre, channel, and broadcast time. An example of a such an interactive television program guide is the Prevue Express® guide of Prevue Networks, Inc. of Tulsa, Oklahoma, the assignee of the present invention.

Although passive scrolling guides and interactive set-top box guides are useful sources of television program guide information, millions of users with personal computers have not been able to obtain on-line television program listings. In addition, users have not been able to select from diverse options that allow the user to view promotional video clips, interview segments, audio clips, and other multimedia material related to a given television program.

THIS SHEET HAS BEEN REPLACED

It is therefore an object of the present invention to provide a television program guide system that provides television program listings from a server to a user's multimedia system over an Internet communications link.

It is a further object of the present invention to provide a television program guide system that allows users to click on text or still images to view promotional video clips, audio clips, interview segments, and other multimedia material related to a given television program.

Summary of the Invention

These and other objects of the invention are accomplished in accordance with the principles of the present invention by providing an Internet television program guide system. A computer system having a media library and a data server is used to provide multimedia clips and related television program guide data. The multimedia material and program guide data are provided to a web server. The web server provides this information to the user's multimedia system via an Internet communications link.

The multimedia system has a processing unit for receiving information from the Internet communications link and processing such information accordingly. The multimedia system also has a video unit for receiving television signals. In a first embodiment, the processing unit is based on a personal computer running a standard web browser with plug-ins. The video unit is based on a television. In a second embodiment, the processing unit and video unit of the

multimedia system are provided by an integrated personal computer and television unit. In a third embodiment, the processing unit is in an Internet capable set-top box and the video unit is based on a television.

The web server may be located adjacent to the computer system and the program guide data and multimedia material provided to the multimedia system via the Internet. Alternatively, the web server may be located in a cable system headend. When the web server is located in the cable system headend, program guide data and other multimedia material may be provided to the web server via a satellite link. The program guide data and multimedia material are provided to the multimedia system over an Internet communications link.

Television program guide data and related multimedia information are preferably provided to the user's multimedia system in the form of one or more web pages. Because such an arrangement allows the use of the widely adopted hypertext transfer protocol (http) and emerging web standards, a user with a personal computer can access information using commonly available web browser software. Because program guide information is distributed over the Internet, the user can access this information at remote locations. For example, the user can access the television program guide service while traveling by car, bus, train, or plane, from a hotel room or business meeting, from a personal computer at work, or in any suitable environment in which there is a link to the Internet. In all arrangements (whether the user is accessing the program guide service from their home or from a remote

location), the system benefits from using the established protocols and standards of the Internet.

In addition, because the Internet television program guide is provided as a web site having a number of linked web pages, features can be easily added or deleted from the service by the service provider, without directly affecting the hardware and software of the user.

Using a web site platform also allows a wide range of service options to be provided. In particular, numerous media formats (animation, full motion video, sound, still images, and text) are supported and may be interconnected using various embedded hypertext transfer protocol links.

Further features of the invention, its nature and various advantages will be more apparent from the accompanying drawings and the following detailed description of the preferred embodiments.

Brief Description of the Drawings

FIG. 1 is a system diagram showing a media library and data server interconnected with a web server and various multimedia systems.

FIG. 2 is a generalized diagram of a user's multimedia system.

FIG. 3 is a system diagram similar to that of FIG. 1 showing an arrangement in which the web server is located in a cable system headend.

FIG. 4 is a diagram of a home page for an Internet television program guide.

FIG. 5 is a diagram of a map-based menu for identifying a geographical area of interest.

FIG. 6 is a diagram of a map-based menu for a smaller geographical region than shown in FIG. 5.

FIG. 7 is a web page informing the user that no service is available.

FIG. 8 is a web page offering alternatives to local service.

FIG. 9 is a web page allowing the user to provide information regarding the user's multimedia system to the service provider.

FIG. 10 is a web page presenting various program guide options to the user.

FIG. 11 is a web page containing information on community events.

FIG. 12 is a web page providing the user an opportunity to give feedback to a local cable system operator.

FIG. 13 is a web page containing information pertaining to the local cable operator's system.

FIG. 14 is a web page containing weather information.

FIG. 15 is a web page presenting various program guide options including direct links to related program guide and movie guide television channels.

FIG. 16 is a web page containing television program guide listings organized by time.

FIG. 17 is a web page presenting a menu of channel selections.

FIG. 18 is a web page containing television program guide listings organized by channel.

FIG. 19 is a web page containing icons representing category options.

FIG. 20 is a web page containing television program guide listings organized by category.

FIG. 21 is a search page containing a box for entering search text and various search field options.

FIG. 22 is a television program guide listing page based on the results of a search.

FIG. 23. is a web page presenting program guide options related to promotional clips, interview segments, and pay-per-view and premium services.

FIG. 24 is a web page presenting various image stills that may be selected by the user when it is desired to view related video clips.

FIG. 25 is a web page presenting user options regarding pay-per-view and premium services.

FIG. 26 is a web page containing television program listings for a selected pay-per-view channel.

FIG. 27 is a web page containing television program listings for a selected premium channel.

FIG. 28 is a web page providing information regarding upcoming pay-per-view sporting and special events.

FIG. 29 is a web page containing still images corresponding to available interview segments.

FIG. 30 is a program information web page containing information on a program selected by the user and presenting related options.

FIG. 31 is a web page that allows a user to enter information for ordering a pay-per-view event.

FIG. 32 is a web page that provides a showcase for advertisers.

FIG. 33 is a web page containing detailed advertising information on a selected topic or television program.

FIG. 34 is a site map showing the options that are selected and the links that are traversed in navigating among the television program guide web pages of FIGS. 4-33.

Detailed Description of the Preferred Embodiments

An Internet television program guide system 10 is shown in FIG. 1. Television program information is stored in media library 12 and data server 14. Media library 12 preferably contains an array of compact disc read only memory (CD-ROM) disks, digital video disks (DVDs), or other suitable media for storing multimedia content. Media library 12 contains television program clips and related interviews and reviews. The television program information stored in media library 12 is primarily video-based. Data server 14 maintains various databases of television program information. For example, data server 14 may have a remote media database containing descriptions of videos in media library 12. Data server 14 may also have a database containing information on standard titles, a pay per view database containing information regarding pay-per-view events, and a scheduling information database. Data server 14 may have a cable system operator database containing channel lineups, information on the time zone of the operator, weather data for the operator's region, data on the zip codes in the cable system operator's area, etc. Other databases may be supported by data server 14, as

desired. The television program information in data server 14 is primarily in non-video formats.

Media library 12 and data server 14 are interconnected with transmission server 16 via internal network 18. Media library 12, data server 14, network 18, and transmission server 16 make up computer system 19. Television program information may be stored on data server 14 in a relational database format and may be stored on transmission server 16 in an object-oriented database format. A building process implemented in the C++ programming language can be used to periodically (e.g., once a day) build a temporary data set of television program information (e.g., a seven-day to one-month data set) for storage on transmission server 16. Transmission server 16 also receives information for the Internet television program guide service such as weather data, sports scores, etc., via data input 17.

Television program information and related data may be transferred from transmission server 16 to web server 20 via communications line 22. Communications line 22 may be part of an internal network or may be a standard dedicated communications line. Web server 20 can be connected to the Internet 24 via communications link 26. Communications link 26 is preferably a telephone line or other suitable Internet communications path.

If transmission server 16 and web server 20 are separate devices, as shown in FIG. 1, transmission server 16 can be used as a common data processing facility for other applications which use the type of television program data stored on transmission server

16. If desired, the functions of transmission server 16 and web server 20 can be integrated in a signal machine.

Web server 20 uses a standard protocols such as the TCP/IP (Transmission Control Protocol/ Internet Protocol) and hypertext transfer protocol to make the television program information available over the Internet 24 to users at multimedia systems 28, 30, and 32 via communications links 34, 36, and 38. Communications links 34, 36, and 38 are Internet links formed from telephone lines, radio-frequency (RF) links, cable modem links, satellite dish links, combinations of links such as these, or any other suitable Internet connection paths.

Multimedia system 28 has personal computer 40 and may have television 42. Certain program guide features require that personal computer 40 be able to control television 42 via link 41, which may be, e.g., an infrared communications link. Link 41 allows personal computer 40 to tune television 42 using control signals. Television 42 receives television signals from input 44. The television signals received by input 44 and the other television signal inputs shown in FIGS. 1-3 may be provided by cable television, satellite television, broadcast television, a combination of such sources, or any other suitable source of television programming signals. Internet access for multimedia system 28 is provided via Internet communications link 34.

Multimedia system 30 has an integrated personal computer and television 46, such as the Gateway 2000 Destination® PC-TV hybrid available from

Gateway 2000 Inc. of North Sioux City, South Dakota. Television signals are provided at input 48. Internet access is provided via Internet communications link 36.

Multimedia system 32 has an Internet capable set-top box 50. Set-top box 50 may use the TV OnLine® set-top box application software of World Gate Corporation, which may be implemented on set-top boxes such as the CFT-2200® of General Instrument Corporation of Hatboro, Pennsylvania and the 8600x® of Scientific Atlanta of Atlanta, Georgia. Set-top box 50 receives television signals via input 52. Internet access is provided via Internet communications link 38. Video display signals containing television and Internet information are provided to television 54 by line 56.

During operation of system 10, certain data processing functions, such as user-initiated searches and sorts, are typically performed on web server 20. If desired, such functions can be performed on a suitable data processing component in multimedia systems 28, 30, and 32.

Certain television guide functions require only that multimedia systems 28, 30, and 32 contain web browsing capabilities. Other functions require television tuning and video recording capabilities. FIG. 2 shows a generalized multimedia system arrangement that is capable of supporting controlled television tuning and video recording, if desired. As shown in FIG. 2, multimedia system 58 has a processing unit 60, which preferably contains memory for storing instructions and a microprocessor for executing the instructions. Processing unit 60 accesses the Internet via Internet link 62. Video unit 64, which may be

connected to processing unit 60 by communications line 66, contains recording unit 68, tuner 70, and monitor 72. Television signals are received at input 74.

Tuner 70 is used to select television programs from television signals on input 74 for viewing or recording. Tuner 70 may be controlled under the direction of control signals provided by processing unit 60 over communications link 66. Television signals and Internet information can be viewed using monitor 72. Recording unit 68 allows the user to make videocassette recordings of television programs. Recording unit 68 may also be controlled by control signals from processing unit 60.

The operation of processing unit 60 is determined based on the execution of instructions stored in memory in processing unit 60 and on control inputs received from the user via user interface 76. Suitable user interfaces include handheld infrared remote controls, keyboards, pointing devices, and voice recognition devices.

Multimedia systems such as multimedia system 58 of FIG. 2 may be used in place of multimedia systems 28, 30, and 32. Alternatively, systems such as systems 28, 30, and 32 may be modified to incorporate features like those shown multimedia system 58. For example, if it were desired to provide a multimedia system with circuitry to handle video recording, video recording units (such as recording unit 68) could be provided in systems such as multimedia systems 28, 30, and 32. In addition, in systems such as system 58, certain components may be used more than once (e.g., tuner 70

may be contained within both a television component and a videocassette recorder component in system 58).

Regardless of the specific configuration of the multimedia systems used in system 10, the user of such a multimedia system has the capability to access television program guide information on web server 20. Many of the features of the Internet program guide service are available using multimedia systems with the capabilities of a modern personal computer (desktop or laptop). If it is desired to use certain program guide features that rely upon controlling a tuner or recording unit, the multimedia system should also have the ability to tune to a desired television program from among the various television programs provided at inputs 44, 48, 52, and 74 and have the ability to record that program automatically, under the control of commands from processing unit 60. Additional features may also be implemented on multimedia system 58.

Another configuration that may be used for an Internet television program guide system is shown in FIG. 3. As shown in FIG. 3, Internet television program guide system has media library 80 and data server 82. Media library 80 contains television program clips, interviews, and reviews. The television program information stored in media library 80 is primarily video. Data server 82 contains databases of television program information. For example, data server 82 may have a database containing descriptions of videos in media library 80. Data server 82 may also have a databases containing information on program titles, pay-per-view events, and television program schedules. Data server 82 may have a cable system

operator database containing channel lineups, information on the time zone of the operator, weather data for the operator's region, data on the zip codes in the cable system operator's area, etc. Other databases may also be supported by data server 82. The television program information in data server 82 is mainly in formats other than video.

Media library 80 and data server 82 are interconnected with transmission server 84 via internal network 83. Media library 80, data server 82, and internal network 83 make up computer system 87. Television program information may be stored on data server 82 in a relational database format and may be stored on transmission server 84 in an object-oriented database format. A building process implemented in the C++ programming language may be used to periodically (e.g., once a day) build a temporary data set of television program information (e.g., a seven-day to one-month data set) for storage on transmission server 84. Transmission server 84 also receives information for the Internet television program guide service such as weather data, sports scores, etc., via data input 85.

A web server 86 is provided in each cable system headend 88. Cable system headend 88 has additional components (not shown) for distributing cable television signals to customers in the service area surrounding headend 88. Providing web server 86 in a location that is relatively close to users allows television program information to be provided to the users efficiently.

Television program information (including video clips and associated television program data) is transmitted from transmission server 84 to each cable system headend 88 via satellite uplink 90 and satellite downlink 92. Each web server 86 uses the Internet TCP/IP protocol to make the television program information available to users at multimedia systems 94, 96, and 98 via respective communications links 100, 102, and 104. Communications links 100, 102, and 104 are Internet links formed from telephone lines, radio-frequency (RF) links, cable modem links, satellite dish downlinks, combinations of links such as these, or any other suitable Internet connection paths. Although illustrated as direct links between multimedia systems 94, 96, and 98 and web server 86, communications links 100, 102, and 104 may be Internet paths that pass through extensive portions of the Internet.

Multimedia system 94 has personal computer 106 and may have television 108. Television 108 receives television signals from input 110. Access to web server 86 is provided via Internet communications link 100.

Multimedia system 96 has an integrated personal computer and television 112, such as the Gateway 2000 Destination PC-TV hybrid. Television signals are provided at input 114. Access to web server 86 is provided via Internet communications link 102.

Multimedia system 98 has an Internet capable set-top box 116, such as the TV OnLine® set-top box. Set-top box 116 receives television signals via input 118. Access to web server 86 is provided via Internet

communications link 104. Video display signals containing television and Internet information are provided to television 120 by line 122.

The system hardware shown in FIGS. 1-3 for providing television program guide Internet services is illustrative and other suitable hardware arrangements may be used, if desired. Regardless of the particular hardware system that is used, however, the present invention preferably involves providing television program guide services and features to users over the Internet in the form of multiple web pages that use the standard hypertext transfer protocol (http). In the system of FIG. 1, web pages and associated program guide features (such as searching, etc.) are provided using web server 20. In the system of FIG. 3, web pages and associated features are provided using web server 86.

Because television program guide services are provided using web pages, the program guide services may be accessed using standard web browsers operating on the appropriate processing unit in the user's multimedia system. For example, in multimedia system 58 of FIG. 2, a web browser may be implemented using processing unit 60. Suitable web browsers include the Internet Explorer® web browser of Microsoft Corporation of Redmond, Washington and the Netscape Navigator® web browser of Netscape Communications Corporation of Mountain View, California. Such web browsers support the viewing of various types of multimedia content, such as video stills (JPEG or GIF files) and video and audio clips (AVI, MOV, and MPG files). If desired, certain of these multimedia support functions may be

provided as web browser plug-ins (i.e., special software modules designed to enhance the features of a web browser application). A suitable video player plug-in for MOV files is the Quicktime® application of Apple Computer, Inc. of Cupertino, California. AVI and MPG (or MPEG -- Motion Picture Expert Group) files may be played using the ActiveMovie® application of Microsoft Corporation.

An illustrative welcome page 124 for the television program guide service of the present invention is shown in FIG. 4. (A site map is shown in FIG. 34.) Web browser function keys 126 help the user at multimedia system 58 to navigate through web pages of material such as welcome page 124. Users may also navigate by clicking on an image or an element of highlighted text with cursor 142, which may be controlled by a pointing device such as a mouse or trackball. Other arrangements for selecting links may be used if supported by the user interface 76 that is provided in multimedia system 58. Web browser function keys 126 include back and forward keys that allow the user to navigate backward and forward along a browsing trail. Web browser function keys 126 are not shown in the other FIGS., but are shown in FIG. 4 to illustrate the types of function keys that are available with a standard web browser.

Welcome page 124 may contain identifying logos 128 (which may be, for example, United States trademarks). Identifying logos 128 allow a user to quickly associate a service provider, such as the assignee of the present invention, Prevue Networks, Inc. of Tulsa, Oklahoma, with the Internet television

program guide service. If desired, welcome page 124 can contain summary instructions 130 that inform the user of some of the features available with the service. Other web pages (not shown) may contain links that point to welcome page 124.

Advertisements 132 and 134 allow a service provider to generate revenues from parties who wish to advertise products using Internet television program guide system 10 (FIG. 1) or 78 (FIG. 3). Advertisements 132 and 134 may be video stills, may be animated, or may include full-motion video. Audio material can also be associated with advertisements 132 and 134. For example, supplemental audio information can be provided when a user clicks on advertisement 132 or 134. If desired, advertisements 132 and 134 may be linked to web sites provided by the advertising parties. The advertisements 132 and 134 that are displayed may periodically (e.g., once every few seconds) cycle through different advertisements for different advertisers.

An important aspect of the Internet television program guide service provided by system 10 (FIG. 1) and system 78 (FIG. 3) relates to on-line television program listings and information on upcoming movies and special events. The user may be presented with a number of choices regarding the type of on-line information that is available. For example, the user may be presented with the opportunity to select between go local option 136, go national option 138, and go satellite option 140. Additional features of the service may be accessed after the user has selected one of these options.

If the user desires to select go local option 136, the user may be prompted to enter a zip code for the local area of interest in box 144. If service is available, the program guide system links the user to an appropriate the local system operator's web site based on the zip code information. If desired, the user can select a local area by entering information such as a cable system operator's name, the name of a city, international country and city information, etc. Another way in which the user may select a local service area of interest is using a map-based graphical user interface. As shown in FIG. 5, the user is presented with United States map 146. The user selects a state of interest using cursor 142. If necessary, additional maps containing greater levels of detail are provided, each allowing the user to make further geographical selections. Ultimately, the user is presented with a local map (e.g., a map that allows the user to select from several available cable system operators). In map 148 of FIG. 6, the user can select between three available cable system operator regions: region 1, region 2, and region 3.

If no local service is available, the user may be provided with a web page such as no service page 150 of FIG. 7, in which the user is informed that local service is not presently available in the area selected by the user. No service page 150 may provide the user with an opportunity to submit the user's e-mail address, cable provider information, local zip code information, and comments. Information provided by the user can be used by the operator of the television

program guide system to solicit participation from non-participating local cable operators.

If no local service is available, the user may also be provided with pick again page 152, as shown in FIG. 8. Pick again page 152 provides the user with another opportunity to select go national option 138 or go satellite option 140. In addition, pick again page 152 provides the user with select a city option 154, which is associated with a less restrictive set of program information than go local option 136 (FIG. 4). With select a city option 154, the user may select a desired city using arrow key 156 (or alternatively, could type the name of the city directly into box 158). After entering the desired city, the city information is submitted to the system by clicking on submit button 160. Because select a city option 154 is less localized than go local option 136, choosing select a city option 154 makes it more likely that there will be a set of program listings available for the user.

If service is available for the user in either the city selected in city option 154 or the localized geographic area selected in go local option 136, the user is presented with registration page 162, as shown in FIG. 9. Registration page 162 may contain instructions prompting the user to enter an e-mail address and information concerning the user's computer equipment. As with many of the other web pages provided in connection with the Internet television program guide service of systems 10 (FIG. 1) and 78 (FIG. 3), registration page 162 contains an identifying logo 164 and advertisements 166 and 168.

Upon completing registration page 162, the user is presented with local cable site page 170 of FIG. 10, which is customized to reflect the local geographic area or city selected by the user. Local cable site page 170 may contain a welcome message 172 that is customized to reflect the name of the local cable system operator.

A number of options 174 may be presented as hypertext links to associated web pages. An image 175 is displayed that changes as the user places cursor 142 on top of each option 174. For example, the image 175 of FIG. 10 is presented when the user positions cursor 142 over program guide option 190. Different images are displayed as cursor 142 passes over each option 174. The images 175 to be displayed are stored as bitmap images in processing unit 60 of multimedia system 58 (FIG. 2). This technique of presenting context-sensitive images to illustrate the current position of the cursor over hypertext link options is preferably used throughout the Internet television program guide service.

Various web pages may be displayed depending on which option 174 is selected by the user. For example, selecting community events option 176 presents the user with community events page 178 (FIG. 11), which contains information on local upcoming community events. If desired, the listed community events may be specific to the type of service to which the user subscribes (e.g., cable or satellite).

Selecting cable feedback option 180 presents the user with cable feedback page 182 (FIG. 12), which

allows the user to submit an e-mail address and comments to the local cable system operator.

Selecting cable operator option 184 takes the user to cable operator page 186 (FIG. 13), which contains information related to the local cable system. For example, by clicking on icon 187, the user may be provided with a weekly report prepared by the cable system operator.

If the user wishes to customize the program guide service, the user may click on customize option 185 (FIG. 10). Selecting customize option 185 presents the user with a customization web page containing guide features that the user can customize, such as channel line-ups and genre-specific display colors (e.g., pink for sports program listings and orange for movie program listings). The customization web page may also contain user-selectable options that control how the user receives reminder messages when a desired program is about to start on the user's television. The user can direct the system to provide a pop-up reminder on the television screen, to send the user an e-mail reminder, or to remind the user via a predetermined paging number, etc. Customize option 185 may be provided in any suitable portion of the program guide service, such as on a program guide listings page (FIG. 16).

Another option 174 that is available on local cable site page 170 (FIG. 10) is local weather option 186. Selecting local weather option 186 takes the user to local weather page 188 (FIG. 14). If desired, a map-based menu (such as shown in FIGS. 5 and 6) or other user input arrangement can be used to provide the

user with the opportunity to select additional cities for which weather information is desired.

Program guide option 190 allows the user to access television program listings that can be organized by time, channel, and category and can be searched. Selecting program guide option 190 takes the user to program guide menu page 194 (FIG. 15). Movie guide option 192 allows the user to access channel listings for premium and pay-per-view channels, interviews, and various promotional media. Selecting movie guide option 192 takes the user to movie guide menu page 196 (FIG. 23).

The user may reach program guide menu page 194 (FIG. 15) from go national option 138 (FIGS. 4 and 8) or go satellite option 140 (FIGS. 4 and 8). If the user selected go local option 136 (FIG. 4) and successfully completed registration page 162 (FIG. 9), the user may reach program guide menu page 194 (FIG. 15) by selecting program guide option 190 on local cable site page 170 (FIG. 10). The user may also reach program guide menu page 194 (FIG. 15) via select a city option 154. Each of these paths to program guide menu page 194 requires that slightly different user selections be made.

Go local option 136 (FIG. 4) requires that a user specify a particular local region (or cable system operator) of interest to reach local cable site page 170 (FIG. 10). To reach program guide menu page 194 (FIG. 15) from local cable site page 170, the user selects program guide option 190.

Go national option 138 (FIGS. 4 and 8) requires that a user select a desired time zone (e.g.,

eastern, central, mountain, or pacific). To reach program guide menu page 194 from welcome page 124 (FIG. 4) or pick again page 152 (FIG. 8), the user selects program guide option 284.

Go satellite option 140 (FIGS. 4 and 8) requires that the user select a desired satellite provider 286. To reach program guide menu page 194 from welcome page 124 (FIG. 4) or pick again page 152 (FIG. 8), the user selects program guide option 288.

Select a city option 154 (FIG. 8) requires that the user enter information specifying a particular city. When the user submits the city information by clicking on submit button 160, the user is taken to registration page 162 (FIG. 9). The user reaches program guide menu page 194 from local cable site page 170 (FIG. 10) after completing the form on registration page 162.

Regardless of which option is used to reach program guide menu page 194 (FIG. 15), information is preferably retained by the system 10 or 78 that indicates which selections have been made by the user. Retaining this information allows subsequently displayed program listings and other information to be automatically customized to reflect the user's selections.

As shown in FIG. 15, program guide menu page 194 may be constructed from two smaller web pages: top web page 198 and a bottom web page 200. Top web page 198 contains graphics and text-based options 202 that are common to many different system operators. Bottom web page 200 may contain system specific promotional materials, such as pay-per-view video promotion 204.

Dividing program guide menu page 194 in this way allows system resources to be used more efficiently than would otherwise be possible, because the common material in top web page 198 can be used for more than one local cable system.

If desired, television channel options 206 and 208 may be provided that allow the user to easily access related television channel program services. When the user selects options 206 or 208, processing unit 60 (FIG. 2) sends control commands to video unit 68 that direct tuner 70 of video unit 64 to tune to a television channel on which the desired program service is being broadcast.

For example, if the user wishes to tune video unit 64 to the Prevue® channel, the user may click on program guide television channel option 206. When program guide television channel option 206 is selected, processing unit 60 directs video unit 64 to select the appropriate television signal from television signal input 74 so that the Prevue® channel is displayed on monitor 72. The Prevue® channel is an example of a type of program guide service that displays a scrolling list of television program titles with a concurrent display of promotional videos and advertisements.

If the user wishes to tune video unit 64 to the Sneak Prevue® channel, the user may click on movie guide television channel option 208. When movie guide television channel option 208 is selected, processing unit 60 directs video unit 64 to select the appropriate television signal from television signal input 74 so that the Sneak Prevue® channel is displayed on monitor

72. The Sneak Prevue® channel is an example of a type of movie guide service that displays promotional videos of upcoming pay-per-view events and premium channel offerings.

Television channel options 206 and 208 allow user to jump directly from an Internet-based television program guide service to related program guides services provided on conventional television channels. Facilitating this type of direct link is beneficial for the user, because it allows the user to avoid the cumbersome steps of leaving the Internet-based service and manually tuning video unit 64 to the appropriate channel while attempting to remember the correct channel number of the desired television service.

Options 202 allow the user to choose how to display various program listings for the user's preselected region of interest (national, satellite, or local). Typical options 202 include by time option 210, by channel option 212, by category option 214, and search option 216.

If by time option 210 is selected, the user is presented with by time page 218, as shown in FIG. 16. By time page 218 contains program listings 220 that are organized in channel order from top to bottom and by broadcast time from left to right. In by time page 218, the programs in program listings 220 may be listed beginning with programs that are currently being broadcast. For example, if the current time is between 1:30 PM and 2:00 PM, program listings 220 may begin with programs that start at 1:30 PM. Alternatively, the programs in program listings 220 may be listed based on a predetermined time slot (e.g., morning,

afternoon, or prime time). If desired, the closest time slot to the current time may be displayed. Program listings 220 typically contain information for about two hours of programing.

Cursors 222 and 224 are used to navigate to earlier or later time periods, respectively. Web browser cursors 226 and 228 allow the user to scroll through the program listings. The user may also navigate the program listings with time navigation buttons 230. For example, if the user would like to view program listings that begin in the morning, the user clicks on the morning navigation button 230. If the user would like to view program listings for programs currently being broadcast, the user may click on the current navigation button 230. Program listings for different days in the month may be viewed by selecting the appropriate day from calendar buttons 232.

The user can chose between various available view options by selecting the appropriate time, channel, category, or search button from among view buttons 234. View buttons 234 take the user to the same web pages that are presented when the corresponding options 202 of FIG. 15 are selected. For example, by channel option 212 and channel view button 234 are both linked to by channel page 242 (FIG. 17).

Another component of by time page 218 and various other web pages provided by the present system is program information box 236. The contents of program information box 236 changes dynamically, depending on which program title in program listings 220 is selected. For example, the user has clicked on

the entry "Primal Fear" in program listings 220 of FIG. 16. As a result, the contents of program information box 236 reflect this selection. Program information box 236 typically contains the program title (e.g., Primal Fear), the running time of the program (e.g., 2:09), a brief description of the program (e.g., A hot shot ...), and a description of the program type or genre (e.g., drama movie). The program description may contain information on the actors in the program, the director, etc. Program information box 236 typically provides a rating of the program, such as a star rating (e.g., three stars) or the Motion Picture Association of America (MPAA) rating for movies or the television rating for television programs. If the user desires to view additional information relating to the selected program, the user may click on closer look icon 238 (or alternatively, on any portion of box 236), which takes the user to program information page 240 (FIG. 30).

If desired, when programs are selected by a user that are currently being broadcast, direct tune button 231 may be displayed. When direct tune button 231 is clicked on by the user, processing unit 60 directs video unit 64 to select the appropriate television signal from television signal input 74 to display the selected program on monitor 72.

By channel page 242 of FIG. 17 is presented when the user selects by channel option 212 from program guide menu page 194 (FIG. 15) or when the user clicks on a channel view button, such as channel view button 234 of by time page 218 (FIG. 16). By channel page 242 contains channel list 244. Channel list 244

may be arranged in channel number order and may contain associated icons 246 for certain channels. A user can click on each individual channel 248 in channel list 244 to obtain a list of program information based on the selected channel. A user can also click on a graphic or text link to a listed network's web site to be hyperlinked to that site.

When a channel 248 is selected, the user is presented with channel program list page 250, as shown in FIG. 18. The selected channel in the example of FIG. 18 is channel 2. In channel program list page 250, program listings 252 for the selected channel may be arranged in time order, beginning with the current time. If programs in program listings 252 extend into the next day, the programs may be separated by date separation bar 254. Title bar 256 contains information identifying the currently selected channel.

By category page 258 of FIG. 19 is presented when the user selects by category option 214 from program guide menu page 194 (FIG. 15) or when the user clicks on a category view button, such as category view button 234 of by time page 218 (FIG. 16). By category page 258 contains category list 260, which may be presented in the form of category icons 262. A user can click an individual category icon 262 in category list 260 to obtain a list of program information based on the selected category.

When a category is selected, the user is presented with category program list page 264, as shown in FIG. 20. In category program list page 264, program listings 266 may be arranged in time and channel order, beginning with the current time and date. Program

listings 266 contain the channel information for each program adjacent to the program title. If a user wishes to view program information for a given channel, the user may click on one of the displayed channels. The user is then presented with a program list that is restricted to programs appearing on the selected channel.

If desired, the program list that is displayed in category program list page 264 may be limited to programs appearing in the next 24 hour period. The user may view information for later days by clicking on the appropriate day in calendar buttons 270.

Search page 272 of FIG. 21 is presented when the user selects search option 216 from program guide menu page 194 (FIG. 15) or when the user clicks on a search view button, such as search view button 234 in by time page 218 (FIG. 16). Search field options 274 allow the user to select a search field, such as title, actor, category, description, rating. A search text string is entered in search text box 276.

After search text has been entered in search text box 276 and one of search field options 274 has been selected, the requested search is performed (e.g., by web server 20 (FIG. 1) or web server 86 (FIG. 3)) and the user is provided with search results page 278 of FIG. 22. Search results page 278 contains program listings 280 that satisfy the search criteria specified using search page 272 (FIG. 21). For example, the program listings 280 in FIG. 22 resulted from a search for the text string "Gibson" in the actor search field, as shown by search criteria bar 282.

The user may reach movie guide menu page 196 (~~FIG~~. 23) from go national option 138 (FIGS. 4 and 8) or go satellite option 140 (FIGS. 4 and 8). If the user selects go local option 136 (FIG. 4) and successfully completes registration page 162 (FIG. 9), the user may reach movie guide menu page 196 (FIG. 23) by selecting movie guide option 192 on local cable site page 170 (FIG. 10). Each of these paths to movie guide menu page 196 requires that slightly different user selections be made.

Go local option 136 (FIG. 4) requires that a user specify a particular local region (or cable system operator) of interest to reach local cable site page 170 (FIG. 10). To reach movie guide menu page 196 (FIG. 23) from local cable site page 170, the user selects movie guide option 192.

Go national option 138 (FIGS. 4 and 8) requires that a user select a desired time zone (e.g., eastern, central, mountain, or pacific). To reach movie guide menu page 196 from welcome page 124 (FIG. 4) or pick again page 152 (FIG. 8), the user selects movie guide option 290.

Go satellite option 140 (FIGS. 4 and 8) requires that the user select a desired satellite provider 286. To reach movie guide menu page 196 from welcome page 124 (FIG. 4) or pick again page 152 (FIG. 8), the user selects movie guide option 292.

Regardless of which option is used to reach movie guide menu page 196, information is preferably retained by the system 10 or 78 that indicates which selections have been made by the user. Retaining this information allows subsequently displayed program

listings and other information to be automatically customized to reflect the user's selections.

As shown in FIG. 23, movie guide menu page 196 contains hot picks option 294, movie cruiser option 296, main event option 298, and interview option 300. When the user selects one of these options by clicking on the associated icon, the user is presented with a corresponding web page for that feature.

If the user selects hot picks option 294, the user is provided with hot picks page 302, as shown in FIG. 24. Hot picks page 302 contains images 304, 306, 308, and 310 of popular programs for which promotional materials are available. Images 304 and 308 typically contain program titles. Images 306 and 310 typically contain actor stills. The programs for which images 304, 306, 308, and 310 are displayed may be automatically selected in accordance with their upcoming frequency on the pay-per-view services. The upcoming frequency may be calculated based on the number of expected occurrences of a given program in a predetermined period of time (e.g., seven days). The predetermined period may be commenced starting with the current date and time, thereby allowing for a seamless crossing of the monthly barrier. The information used to determine which program images are displayed is preferably customized based on the selections (local, national, satellite, etc.) previously made by the user.

When the user clicks on one of images 304, 306, 308, or 310, the user is taken to program information page 240 (FIG. 30), which allows the user to obtain additional information, such as video clips and interview segments on the selected program. When a

user clicks on pay-per-view link 312 or pay-per-view link 314, the user is taken to pay-per view page 316 (FIG. 26), which provides the user with pay-per-view program listings for the selected program.

When the user selects movie cruiser option 296, the user is presented with movie cruiser page 318, as shown in FIG. 25. Movie cruiser page 318 lists the pay-per-view and premium channels that are available to the user (based on previous selections). In particular, movie cruiser page 318 contains pay-per-view channel options 320 and premium channel options 322.

If the user selects one of pay-per-view options 320, the user is taken to pay-per-view page 316, as shown in FIG. 26. Pay-per-view page 316 contains program listings 324 for pay-per-view events. Multiple pay-per-view programs may be simultaneously listed in a grid format or may be listed as shown in FIG. 26 for a selected pay-per-view channel (i.e., channel 35). As with several other pages, page 316 contains program information box 325, which contains program information when a program from program listings 324 has been selected by the user. Clicking on box 325 (or a closer look icon in box 325) takes the user to program information page 240 (FIG. 30).

If the user selects one of premium channel options 322 on page 318 (FIG. 25), the user is taken to premium services page 326, as shown in FIG. 27. Premium services page 326 contains program listings 328 for premium events. Multiple premium service programs may be simultaneously listed in a grid format or a single program may be listed as shown in FIG. 27 for a

selected premium service (i.e., the Disney® channel). Program information box 330 provides program information for a program that has been selected by the user. In the example of FIG. 27, the user has clicked on "Pete's Dragon." Clicking on program information box 330 (or a closer look icon in box 330) takes the user to program information page 240 (FIG. 30), where the user can view additional information on the selected program (i.e., information on the movie Pete's Dragon).

When the user selects main event option 298 from movie guide menu page 196 (FIG. 23), the user is presented with main event page 332, as shown in FIG. 28. Main event page 332 lists premium or pay-per-view sports events and other special events. By clicking on an event (e.g., event 334), the user may be presented with an associated program information page (such as page 240 of FIG. 30), provided that additional information on the event is available. Alternatively, the user may be directly presented with pay-per-view order page 336 (FIG. 31).

When the user selects interview option 300 from movie guide menu page 196 (FIG. 23), the user is presented with interview page 338, as shown in FIG. 29. Interview page 338 contains still images 340 of various subjects. As with other pages in the Internet program guide service, the subjects presented on interview page 338 are customized to reflect the user's selected type of service (e.g., the user's selection of a particular cable system operator or the user's selection of national service or a particular satellite service). Accordingly, images 340 relate to interviews for the

movies and other programs currently available to the user. The determination of which interview images 340 are to be made available on interview page 338 may be based on a calculation of the most frequently scheduled upcoming programs in a predetermined time period (e.g., in the upcoming week). If desired, interviews corresponding to programs not currently available to the user may also be provided. The user may select a given interview by clicking on one of images 340. The user is then taken to program information page 240 (FIG. 30).

As shown in FIG. 30, program information page 240 contains detailed information on a selected program (e.g., the movie Birdcage). Program information page 240 preferably contains image 342, which may initially be presented as a still image of the program title (e.g., from a JPEG or GIF file). When a user clicks on image 342, an associated video clip is presented. Program information page 240 also contains title 344, actor information 346, and program description 348. Additional information may include content information 350 and genre information 352. If desired, information may be provided on the director, year of release, and other relevant items. Additional actor information may be supplied (e.g., in the form of biographical information and related video clips accessed by clicking on actors 346).

Interview icon 354, commentary icon 356, and promotional clip icon 358 represent available services. The user can view video clips of interviews on the selected program (i.e., the movie Birdcage) by clicking on the appropriate file-type option associated with a

given service. For example, file options 360, 362, and 364 are associated with an interview service (represented by interview icon 354). Clicking on file option 360 allows the user to view interview video clips using a protocol appropriate for an MOV file (e.g., using the QuickTime application). Clicking on file option 362 or 364 allows the user to view interview video clip using a protocol appropriate for an AVI or MPG (MPEG) file (e.g., using the ActiveMovie application). Commentary icon 356 and promotional clip icon 358 have associated file options (e.g., MOV, AVI, and MPG options) that allow the user to view commentary or promotional video clips for the selected program.

Program information page 240 contains information tied to the program selected by the user on previous pages. The user may reach program information page 240 by various paths. For example, the user may select a program from program listings 220 in by time page 218 (FIG. 16) by clicking on the desired program title. The user may also select a pay-per-view or premium program from pay-per-view page 316 (FIG. 26) or premium services page 326 (FIG. 27) by clicking on the appropriate listing. When the user reaches program information page 240, program information is provided for the selected program. Icons and other indicators are used to identify which services are available for the selected program. For example, if no commentary video clips are available for a given program, then the file options below commentary icon 356 may be omitted. Similarly, if no video still is available for a movie, image 342 can be omitted.

Program information page 240 contains program listings 366, which provide program title, channel, and time and date information for the selected program. In the example shown in FIG. 30, the movie Birdcage is appearing on channel 35 (a pay-per-view channel) on three days in the next weekly period. When the user clicks on a pay-per-view entry in program listings 366, the user is taken to order page 336 (FIG. 31).

As shown in FIG. 31, order page 336 contains instructions 368 on how to order a pay-per-view event. Order page 336 also contains telephone number query box 370 and personal identification number box 372. The user may place an order for a pay-per-view event by clicking on place order button 374. Information entered by the user into boxes 370 and 372 is used to verify the user's identity and account status. Once the user's information has been verified, the selected pay-per-view event may be delivered to the user's multimedia system.

The way in which pay-per-view event orders are processed depends on the particular hardware used to deliver services to the user. Order and account verification information is generally electronically submitted to the headend cable system operator or a third party order fulfillment processor linked to the headend system. Equipment in the headend processes the order automatically and arranges for the delivery of the pay-per-view event to the user. Typically, the headend equipment directs equipment (such as a set-top box or similar integrated component) in the user's multimedia system to display the ordered event.

In system 78 of FIG. 3, web server 86 at cable system headend 88 may be used to receive and process pay-per-view orders submitted using order page 336. After processing the order, web server 86 can direct conventional pay-per-view equipment at headend 88 to authorize the display of the ordered pay-per-view event using set-top box 116.

Similar techniques for delivering pay-per-view events may be used with other hardware arrangements such as those shown in FIGS. 1-3. If desired, after web server 86 has processed the user's pay-per-view order, web server 86 can communicate authorization information to processing unit 60 (FIG. 2) in the user's multimedia system 58 (FIG. 2). Processing unit 60 (FIG. 2) can direct video unit 64 (FIG. 2) to decode and display the pay-per view event from among the received television signals 74 (FIG. 2) based on the authorization information.

Order page 336 can be provided with user-selectable options for recording programs and for reminding the user when selected programs are about to be broadcast. For example, order page 336 may contain a clickable record button. Selecting the record option by clicking on the record button directs multimedia system 58 (FIG. 2) to record the selected program (by controlling recording unit 68 of video unit 64 with processing unit 60) when the selected program is being aired. Similarly, order page 336 may contain a clickable reminder button. Selecting the reminder option by clicking on this button directs multimedia system 58 to remind the user of the upcoming selected program (e.g., 10 minutes before the scheduled

broadcast time) by automatically tuning to the desired channel, by displaying a reminder message, or by issuing an audible reminder. Reminder messages may also be generated by web server 20 or 86 and transmitted to multimedia system 58 by e-mail.

If desired, these selectable recording and reminder features can be incorporated into other pages, such as program information page 240, one of the pages containing television program listings, or a page presented to the user after clicking on place order button 374.

When a user clicks on an advertisement (typically an image) in one of the web pages associated with the program guide service, the user may be taken directly to a more detailed advertisement page. Alternatively, the user may be taken to advertiser showcase page 376, as shown in FIG. 32. Advertiser showcase page 376 contains clickable images, such as images 378, 380, and 382, which are linked to more detailed advertising pages. Advertiser showcase page 376 also may contain a advertiser logo image, such as image 390. Text bar 392 contains clickable text fields that duplicate the selections available by clicking on images.

The advertiser logo image in advertiser showcase page 376 may be linked to the web site of the advertiser. For example, image 390 may be linked to a web site for UPN, so that if the user clicks on image 390, the user will be taken to the UPN web site.

If the user clicks on an image such as images 378, 380, or 382 in advertiser showcase page 376, the user is presented with advertisement page 394, as shown

in FIG. 33. Advertisement page 394 contains detailed information related to the subject matter of the image that was selected from advertiser showcase page 376 (FIG. 32). In the example of FIG. 33, additional information is provided on the program "The Sentinel," because this program was selected in advertising showcase page 376 by clicking on image 382. If desired, advertisement page 394 can contain appropriate links to further advertisement pages or to the advertiser's home page.

FIG. 34 is a site map of the television program guide service. The service can be accessed from service provider home page 396. Selecting the television program guide service from home page 396 takes the user to welcome page 124. If the user selects the go local option and no service is available, no service page 150 and pick again page 152 are presented. If the user selects the go local option and service is available, the user is taken to registration page 162. If maps 146 (FIG. 5) and 148 (FIG. 6) are used to define the local area of interest, the maps may be provided in path 398 between welcome page 124 and registration page 162.

Selecting an advertisement by clicking on its image may typically be done on any page containing an advertisement. In the example of FIG. 34, selecting an advertisement on registration page 162 takes the user to advertiser showcase page 376. Selecting an image on advertiser showcase page 376 takes the user to advertisement page 394.

Completing the registration form on registration page 162 allows the user to proceed to

local cable site page 170. From local cable site page 170, the user can view community events page 178 by selecting the community events option. By selecting the cable feedback option, the cable operator option, or the local weather option, the user can access cable feedback page 182, cable operator page 186, or local weather page 188.

If the user selects the go national option on welcome page 124, the user is taken to program guide menu page 194 or movie guide menu page 196, depending on whether the user selected the program guide or movie guide option. Similarly, if the user selects the go satellite option on welcome page 124, the user is taken to program guide menu page 194 or movie guide menu page 196, depending on whether the user selected the program guide or movie guide option. The user can also reach program guide menu page 194 or movie guide menu page 196 from pick again page 152 or local cable site page 170. If the user reaches program guide menu page 194 from either pick again page 152 or local cable site page 170, the local area of interest to the user is retained by the system, so that subsequently displayed program guide listings can be customized to the user's local area.

When the user is at program guide menu page 194, selecting the program guide channel option tunes the system directly to program guide television channel 400. Similarly, selecting the movie guide channel option tunes the system to movie guide television channel 402. Selecting the time option from program guide menu page 194 takes the user to by time page 218. If a program is selected that is currently being

broadcast and is therefore available for the user to view, a direct tune option may be displayed on by time page 218 or any page containing program listings. Selecting the direct tune option tunes the user's television unit directly to selected television channel 404.

Selecting the channel option from program guide menu page 194 takes the user to by channel page 242. When the user selects a desired channel, channel program list page 250 is displayed. Selecting the category option from program guide menu page 194 takes the user to by category page 258. When the user selects a desired category, category program list page 264 is displayed.

When the user at program guide menu page 194 selects the search option, search page 272 is presented. Search page 272 allows the user to enter search terms and to initiate a search of a program database. After the search is performed, search results page 278 is displayed.

Selecting the movie guide option from welcome page 124, pick again page 152, or local cable site page 170 presents the user with movie guide menu page 196. If the user selects the interview option, the user is presented with interview page 338. When the user selects an interview from interview page 338, the user is taken to program information page 240 to view the interview. If the user selects the hot picks option from movie guide menu page 196, the user is presented with hot picks page 302. When the user selects a hot pick from the displayed images on hot picks page 302, the user is taken to program information page 240 to

view a promotional video clip for the hot pick. If the user selects the main event option from movie guide menu page 196, the user is presented with main event page 332. When the user selects a given event from main events page 332, the user is taken to program information page 240 to view information on that event. Alternatively, the user may be taken to order page 316 to place an order for the event.

Selecting the movie cruiser option from movie guide menu page 196 presents the user with movie cruiser page 318. The user can view pay-per-view page 316 by selecting the pay-per-view option. The user can view premium services page 326 by selecting the premium option. Programs may be selected by the user from either pay-per-view page 316 or premium services page 326. In either case, the user is taken to program information page 240 to view additional information on the selected program.

Program information page 240 allows the user to view multimedia material on a given program, interview, event, etc. The content of program information page 240 depends on the path taken to reach program information page 240 and the options selected by the user. Program information page 240 contains options that allow the user to select a program to view. When the user makes such a program selection, the user is presented with order page 336.

The foregoing is merely illustrative of the principles of this invention and various modifications can be made by those skilled in the art without departing from the scope and spirit of the invention.

What is Claimed is:

1. An Internet television program guide system for providing web pages of information to a user at a multimedia system over an Internet communications link, comprising:

a computer system for providing television program listings; and

a web server for receiving the television program listings from the computer system, wherein the web server provides the program listings to the multimedia system over the Internet communications link when the user accesses the television program listings with the multimedia system.

2. The system defined in claim 1 wherein the computer system further comprises means for providing multimedia material associated with the television program listings to the web server.

3. The system defined in claim 2 wherein the means for providing multimedia material comprises means for providing promotional video clips.

4. The system defined in claim 2 wherein the means for providing multimedia material comprises means for providing interview video segments.

5. The system defined in claim 1 further comprising means for providing a go national option which the user selects to receive information based on national television listings.

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED

6. The system defined in claim 1 further comprising means for providing a go satellite option which the user selects to receive information based on television listings for satellite coverage.

7. The system defined in claim 1 further comprising means for providing a go local option which the user selects to receive information based on local television listings.

8. The system defined in claim 7 further comprising means for selecting a locality for the local television listings.

9. The system defined in claim 8 wherein the means for selecting a locality comprises means for accepting a zip code from which the locality is determined.

10. The system defined in claim 8 wherein the means for selecting a locality comprises means for selecting a local region from a map.

11. The system defined in claim 8 further comprising means for presenting a pick again web page when television program listings are not available for the selected locality.

12. The system defined in claim 1 further comprising means for presenting web pages containing advertising images that the user selects.

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED

13. The system defined in claim 1 further comprising means for presenting a web page having a record option for using the multimedia system to record a television program selected from the television program listings.

14. The system defined in claim 1 further comprising:

means for providing a program guide option; and

means for presenting a program guide menu web page when the user selects the program guide option.

15. The system defined in claim 1 further comprising:

means for providing a movie guide option; and

means for presenting a movie guide menu web page when the user selects the movie guide option.

16. The system defined in claim 1 further comprising:

means for providing a guide television channel option; and

means for tuning the multimedia system to a guide television channel when the user selects the guide option.

17. The system defined in claim 1 further comprising:

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED

means for providing a direct tune option when a selected program is currently being broadcast; and

means for tuning the multimedia system to the television channel for the selected program when the user selects the direct tune option.

18. The system defined in claim 1 further comprising means for providing a selectable option to arrange the television program listings by time.

19. The system defined in claim 1 further comprising means for providing a selectable option to arrange the television program listings by channel.

20. The system defined in claim 1 further comprising means for providing a selectable option to arrange the television program listings by category.

21. The system defined in claim 1 further comprising means for searching the television program listings.

22. The system defined in claim 21 further comprising means for searching the television program listings by title.

23. The system defined in claim 21 further comprising means for searching the television program listings by actor.

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED

24. The system defined in claim 21 further comprising means for searching the television program listings by category.

25. The system defined in claim 21 further comprising means for searching the television program listings by description.

26. The system defined in claim 21 further comprising means for searching the television program listings by rating.

27. The system defined in claim 1 further comprising means for displaying interview segments selected by the user.

28. The system defined in claim 27 further comprising means for providing an interview web page containing selectable interview images for interview segments that are available.

29. The system defined in claim 1 further comprising means for displaying promotional media clips selected by the user.

30. The system defined in claim 29 further comprising means for providing a hot picks web page containing selectable hot picks images for promotional media clips that are available.

31. The system defined in claim 1 further comprising means for providing a movie cruiser web page

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED

containing selectable pay-per-view channels and premium channels.

32. The system define in claim 31 further comprising means for providing a pay-per-view web page containing program listings for upcoming pay-per-view events for a pay-per-view channel selected by the user.

33. The system defined in claim 31 further comprising means for providing a premium services web page containing program listings for upcoming premium programs for a premium channel selected by the user.

34. The system defined in claim 1 further comprising means for providing an order web page.

35. The system defined in claim 1 further comprising means for providing a customization web page.

36. The system defined in claim 1 further comprising means for providing a program information web page.

37. The system defined in claim 36 wherein the program information web page is customized to reflect information for a television program selected by the user.

38. The system defined in claim 1 wherein the computer system comprises a media library.

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED

39. The system defined in claim 1 further comprising a satellite transmission link between the computer system and the server.

40. The system defined in claim 1 wherein:

the Internet communications link comprises a telephone line; and

the web server provides the web pages to the multimedia system over the telephone line.

41. A method for providing web pages of information to a user at a multimedia system over an Internet communications link using an Internet television program guide system having a computer system and a web server, the method comprising the steps of:

providing television program listings with the computer system;

receiving the television program listings from the computer system with the web server; and

providing the television program listings to the multimedia system over the Internet communications link with the web server, so that the user can access the television program listings.

42. The method defined in claim 41 further comprising the step of providing multimedia material associated with the television program listings to the web server with the computer system.

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED

43. The method defined in claim 42 wherein the step of providing multimedia material further comprises the step of providing promotional video clips to the web server with the computer system.

44. The method defined in claim 42 wherein the step of providing multimedia material further comprises the step of providing interview video segments to the web server with the computer system.

45. The method defined in claim 41 further comprising the step of providing a go national option which the user selects to receive information based on national television listings.

46. The method defined in claim 41 further comprising the step of providing a go satellite option which the user selects to receive information based on television listings for satellite coverage.

47. The method defined in claim 41 further comprising the step of providing a go local option which the user selects to receive information based on local television listings.

48. The method defined in claim 47 further comprising the step of selecting a locality for the local television listings.

49. The method defined in claim 48 wherein the step of selecting a locality comprises the step of

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED

accepting a zip code from which the locality is determined.

50. The method defined in claim 48 wherein the step of selecting a locality comprises the step of selecting a local region from a map.

51. The method defined in claim 48 further comprising the step of presenting a pick again web page when television program listings are not available for the selected locality.

52. The method defined in claim 1 further comprising the step of presenting web pages containing advertising images that the user selects.

53. The method defined in claim 52 further comprising the step of presenting a web page having a record option for using the multimedia system to record a television program selected from the television program listings.

54. The method defined in claim 41 further comprising the steps of:

providing a program guide option; and

presenting a program guide menu web page when the user selects the program guide option.

55. The method defined in claim 41 further comprising the steps of:

providing a movie guide option; and

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED

presenting a movie guide menu web page when the user selects the movie guide option.

56. The method defined in claim 41 further comprising the steps of:

providing a guide television channel option; and

tuning the multimedia system to a guide television channel when the user selects the guide option.

57. The method defined in claim 41 further comprising the steps of:

providing a direct tune option when a selected program is currently being broadcast; and

tuning the multimedia system to the television channel for the selected program when the user selects the direct tune option.

58. The method defined in claim 41 further comprising the step of providing a selectable option to arrange the television program listings by time.

59. The method defined in claim 41 further comprising the step of providing a selectable option to arrange the television program listings by channel.

60. The method defined in claim 41 further comprising the step of providing a selectable option to arrange the television program listings by category.

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED

61. The method defined in claim 41 further comprising the step of searching the television program listings.

62. The method defined in claim 61 further comprising the step of searching the television program listings by title.

63. The method defined in claim 61 further comprising the step of searching the television program listings by actor.

64. The method defined in claim 61 further comprising the step of searching the television program listings by category.

65. The method defined in claim 61 further comprising the step of searching the television program listings by description.

66. The method defined in claim 61 further comprising the step of searching the television program listings by rating.

67. The method defined in claim 41 further comprising the step of displaying interview segments selected by the user.

68. The method defined in claim 67 further comprising the step of providing an interview web page containing selectable interview images for interview segments that are available.

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED

69. The method defined in claim 41 further comprising the step of displaying promotional media clips selected by the user.

70. The method defined in claim 69 further comprising the step of providing a hot picks web page containing selectable hot picks images for promotional media clips that are available.

71. The method defined in claim 41 further comprising the step of providing a movie cruiser web page containing selectable pay-per-view channels and premium channels.

72. The method define in claim 71 further comprising the step of providing a pay-per-view web page containing program listings for upcoming pay-per-view events for a pay-per-view channel selected by the user.

73. The method defined in claim 71 further comprising the step of providing a premium services web page containing program listings for upcoming premium programs for a premium channel selected by the user.

74. The method defined in claim 41 further comprising the step of providing an order web page.

75. The method defined in claim 41 further comprising the step of providing a customization web page.

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED

76. The method defined in claim 41 further comprising the step of providing a program information web page.

77. The method defined in claim 76 wherein the program information web page is customized to reflect information for a television program selected by the user.

78. The method defined in claim 41 further comprises the step of providing the television program listings to the web server with a media library.

79. The method defined in claim 41 further comprising the step of providing the television program listings to the web server with a satellite transmission link between the computer system and the web server.

80. The method defined in claim 41 wherein the Internet communications link comprises a telephone line, the method further comprising the step of providing web pages to the multimedia system over the telephone line.

This Sheet Has Been Replaced

THIS SHEET HAS BEEN REPLACED