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(54) **AGGREGATION OF MULTIPLE MEDIA TYPES OF USER CONSUMPTION HABITS AND DEVICE PREFERENCES**

(71) Applicant: **Intel Corporation**, Santa Clara, CA (US)

(72) Inventors: **Brian David Johnson**, Portland, OR (US); **Marcelino Ford-Livene**, Pomona, CA (US); **Brendan Traw**, Portland, OR (US)

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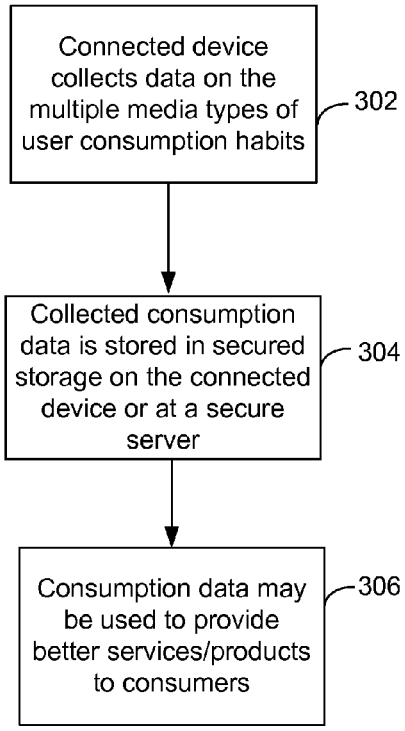
(57) **ABSTRACT**

A system and method for the aggregation of multiple media types of user consumption habits and device preferences are described. In embodiments, a connected device is adapted to receive multiple inputs supporting different types of media, aggregating the multiple media types and displaying one or more of the media types on a single display device. Another embodiment of the invention provides for a way of collecting data about user-specific adjustments to or usages of the various electronic devices and/or applications connected to the connected device. Other embodiments are described and claimed.



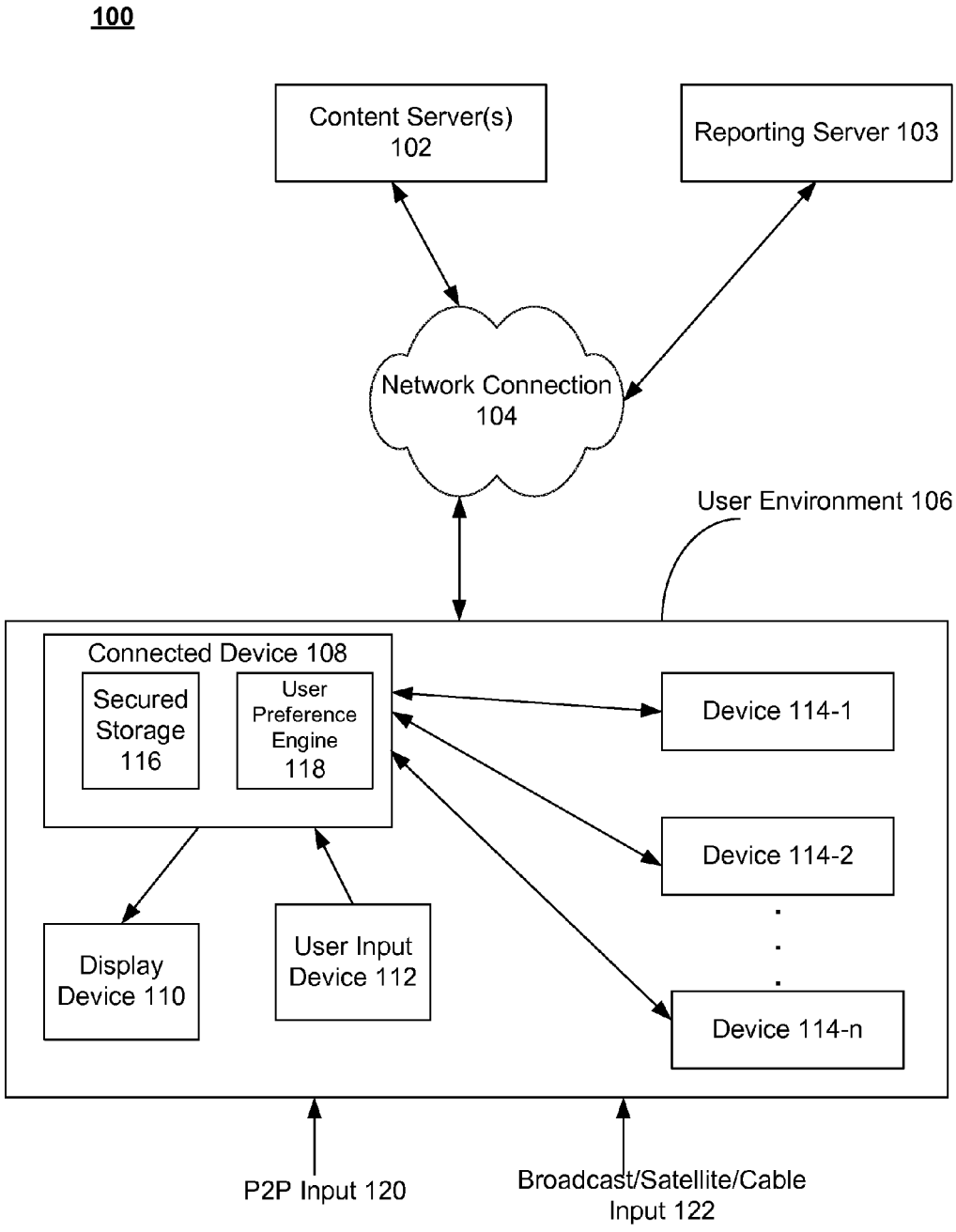

100
Content Server(s) 102
Reporting Server 103
Network Connection 104
User Environment 106
Connected Device 108
Secured Storage 116
User Preference Engine 118
Device 114-1
Device 114-2
Device 114-n
Display Device 110
User Input Device 112
P2P Input 120
Broadcast/Satellite/Cable Input 122

FIG. 1

200

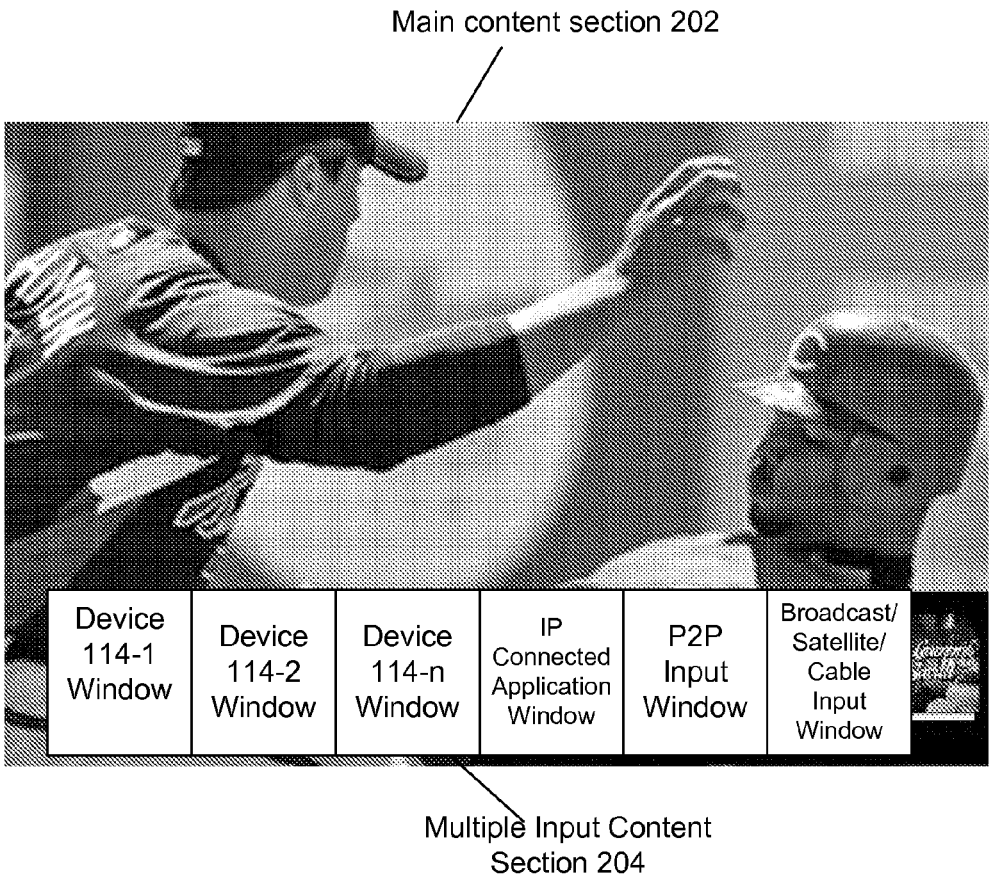

Main content section 202
Device 114-1 Window
Device 114-2 Window
Device 114-n Window
IP Connected Application Window
P2P Input Window
Broadcast/ Satellite/ Cable Input Window
Multiple Input Content Section 204

FIG. 2

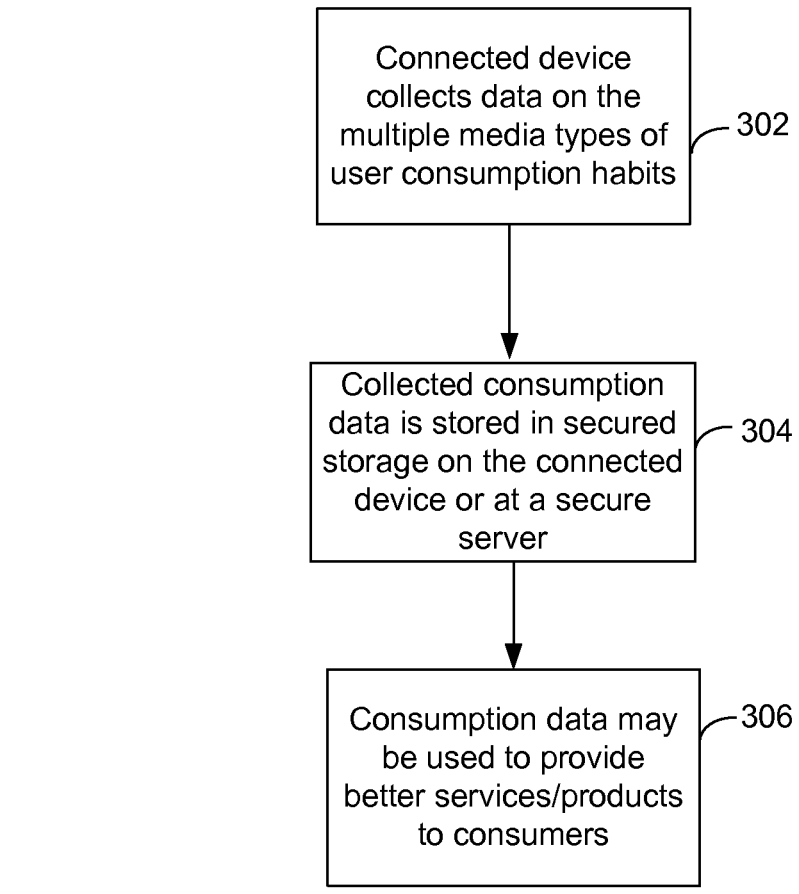

300
Connected device collects data on the multiple media types of user consumption habits
302
Collected consumption data is stored in secured storage on the connected device or at a secure server
304
Consumption data may be used to provide better services/products to consumers
306

FIG. 3

400

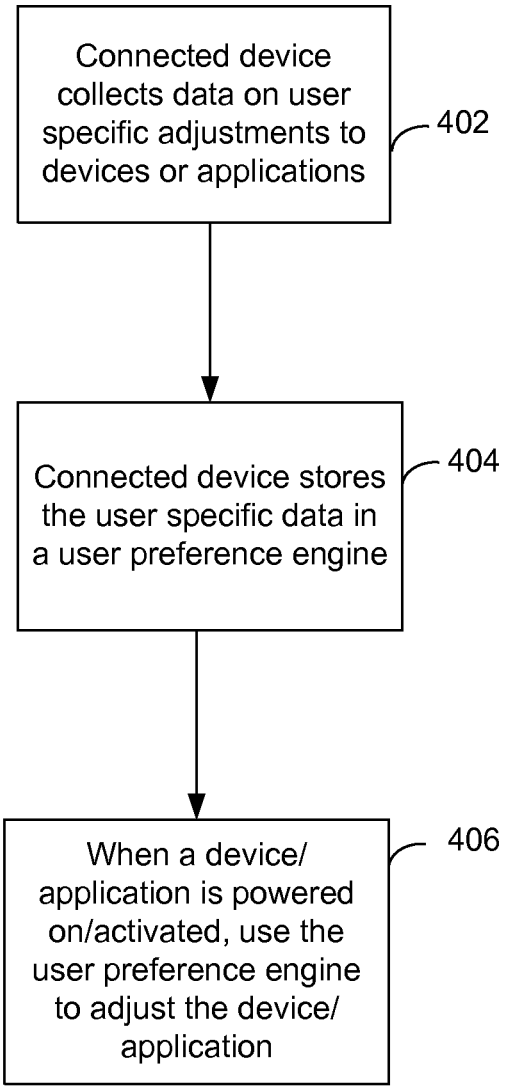

Connected device collects data on user specific adjustments to devices or applications
402
Connected device stores the user specific data in a user preference engine
404
When a device/ application is powered on/activated, use the user preference engine to adjust the device/ application
406

FIG. 4

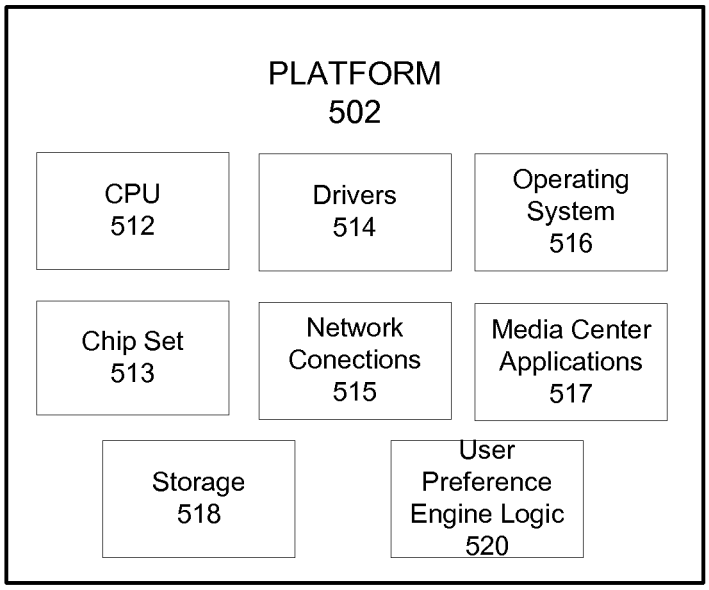

PLATFORM
502
CPU
512
Drivers
514
Operating System
516
Chip Set
513
Network Conections
515
Media Center Applications
517
Storage
518
User Preference Engine Logic
520

FIG. 5

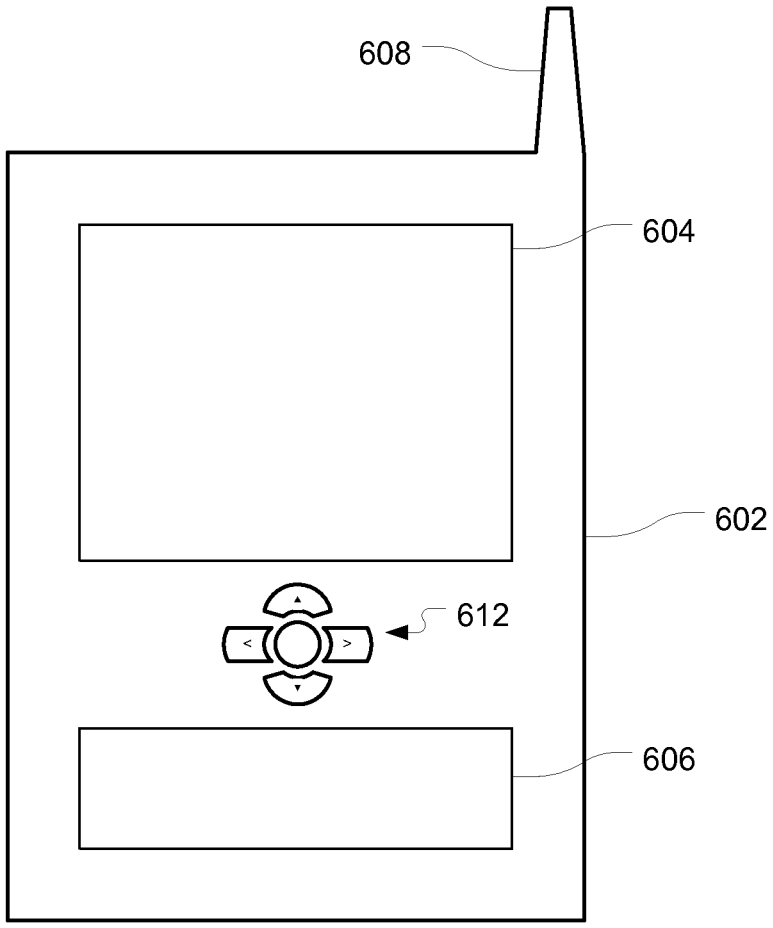


FIG. 6

AGGREGATION OF MULTIPLE MEDIA TYPES OF USER CONSUMPTION HABITS AND DEVICE PREFERENCES

BACKGROUND

[0001] Today's homes may have one or more electronic devices that receive, process and/or store content, such as personal computers (PCs), televisions, digital video disk (DVD) players, video cassette recorder (VCR) players, compact disk (CD) players, set-top boxes (STBs), stereo receivers, audio/video receivers (AVRs), media centers, personal video recorders (PVRs), gaming devices, digital camcorders, digital cameras, blackberries, cellular phones, personal digital assistants (PDAs), and so forth. These all may be networked together in such a way to provide a user with a means for entertainment via a connected device and a single display device.

[0002] The aggregation of multiple media types of user consumption via the connected device opens up a new landscape of consumption habits for consumers. Often there is a necessity of advertising and other business models to help pay for the content and experiences consumers have become accustomed to on television, for example. While content service providers, device manufacturers, advertisers, and so forth, could benefit from the knowledge of the user consumption habits, user privacy remains a concern.

[0003] As mentioned above, many of today's homes have multiple electronic devices networked together to provide a means of entertainment via the connected device and single display device. It is typical for the different members of a family to share the multiple networked devices. Here, user preferences involving device specific settings are constantly being adjusted by the different members of the family.

BRIEF DESCRIPTION OF THE DRAWINGS

[0004] FIG. **1** illustrates one embodiment of a system.

[0005] FIG. **2** illustrates one embodiment of a user interface.

[0006] FIG. **3** illustrates one embodiment of a logic flow.

[0007] FIG. **4** illustrates one embodiment of a logic flow.

[0008] FIG. **5** illustrates one embodiment of a system.

[0009] FIG. **6** illustrates one embodiment of a device.

DETAILED DESCRIPTION

[0010] Various embodiments of the invention may be generally directed to the aggregation of multiple media types of user consumption habits and device preferences. In embodiments, a connected device is adapted to receive multiple inputs supporting different types of media, aggregating the multiple media types and displaying one or more of the media types on a single display device. The multiple inputs may represent various types of connections including wired, wireless, or a combination of both. More specifically, the multiple inputs may represent Internet Protocol (IP) input connections, person-to-person (P2P) input connections, cable/satellite/broadcast input connections, inputs from various electronic devices (e.g., televisions, DVD players, VCR players, CD or music players, STBs, stereo receivers, AVRs, media centers, PVRs, gaming devices, digital camcorders, digital cameras, blackberries, cellular phones, PDAs, laptops, flash devices, etc.), applications being processed by various electronic devices, and so forth.

[0011] An embodiment of the invention provides for the aggregation of multiple media types of user consumption via a connected device. Here, user media consumption habits are monitored by the connected device and stored as a media consumption report. The media consumption report may then be securely stored in a secured storage to ensure the privacy of individual users. Content service providers, device manufacturers, advertisers, and so forth, which could benefit from the knowledge of user consumption habits, may now have access to this information to better products and services provided to the consumer.

[0012] Another embodiment of the invention provides for a way of collecting data about user-specific adjustments to the various electronic devices and/or applications connected to the connected device. In embodiments, the collection of data is both anonymous and secure. The various electronic devices and/or applications may include electronic program guide (EPG) usage; device level controls (e.g., volume, channel favorites, display settings, etc.); device or client side specific program usage (e.g., DVD, CD, flash memory, etc.); IP, Coax or broadband delivered applications and services (social networking technology, VOD, recommendations, searches, etc.); information coming from devices via HDMI-CEC or any network; and so forth. Embodiments may use the user-specific adjustment data to automatically make adjustments to one or more devices connected to the connected device. Here, user-specific adjustments to the volume of the television when it is powered on or activated by the user may be accomplished via a user preference engine, for example. In embodiments, the user preference engine may use the collected adjustment data to monitor the behaviors of a specific user and to optimize consumer information and entertainment recommendations/searches.

[0013] A further embodiment of the invention provides for a user interface that includes one or more input-specific windows or sections that are overlayed on the main content section. The input-specific windows may represent data that is currently being processed by one or more of the electronic devices and/or applications connected to the connected device. Other embodiments may be described and claimed.

[0014] Various embodiments may comprise one or more elements. An element may comprise any structure arranged to perform certain operations. Each element may be implemented as hardware, software, or any combination thereof, as desired for a given set of design parameters or performance constraints. Although an embodiment may be described with a limited number of elements in a certain topology by way of example, the embodiment may include more or less elements in alternate topologies as desired for a given implementation. It is worthy to note that any reference to "one embodiment" or "an embodiment" means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment. The appearances of the phrase "in one embodiment" in various places in the specification are not necessarily all referring to the same embodiment.

[0015] FIG. **1** illustrates an embodiment of a system **100**. Referring to FIG. **1**, system **100** may comprise content server(s) **102**, a reporting server **103**, a network connection **104** and a user environment **106**. User environment **106** may include a connected device **108**, a display device **110**, a user input device **112** and devices **114** (**114-1** through **114-*n***, where n is any positive integer). Connected device **108** may include a secured storage **116** and a user preference engine

118. A P2P input **120** and broadcast/satellite/cable inputs **122** are connected to device **108**. Each of these elements is described next in more detail.

[0016] At a high level and in various embodiments, a content service provider (e.g., a television service provider) may host content server(s) **102** and reporting server **103**. Content server **102** may store, but is not limited to, information about each of it users or subscribers and available content for each of its subscribers to download on demand. In such an embodiment, the distribution of the content is controlled because the content service provider hosts the content server where subscriber information is stored, the content service provider knows which content is included in a particular subscription with the content service provider and knows of subscriber-defined controls (e.g., parental controls) set up by the subscriber. Therefore, the content service provider, prior to allowing requested content to be distributed to the subscriber, can determine whether the subscriber has access rights to the requested content and whether the subscriber-defined controls allow for the content to be viewed.

[0017] In embodiments, reporting server **103** may be used to securely store the media consumer reports for subscribers of the content service provider. Reporting server **103** may also be used to track the consumption of advertising content inserted in the consumption data. This may facilitate in the appropriate billing of an advertising company, for example, when it is determined that the inserted advertising content was likely to have been viewed or consumed by a subscriber. Note that although the functionality of servers **102** and **103** is described herein as being separated into two components, this is not meant to limit the invention. In fact, this functionality may be combined into one component or separated into three or more components.

[0018] Servers **102** and **203** may communicate with user environment **106** (as well as other user environments not shown in FIG. **1**) via network connection **104**. Network connection **104** may be a high speed Internet connection or any other type of connection suited for the particular application. Other types of connections may be added or substituted as new connections are developed.

[0019] When an individual becomes a subscriber of a content service provider (or any company, including but not limited to, a telecommunications company or cable company, for example), the individual generally provides identifying or personal information to the content service provider for billing purposes and so forth. Yet, embodiments of the invention allow the personal identity of the subscriber to remain anonymous within system **100**. For example, in embodiments, elements or components in system **100** each have a unique internet protocol (IP) address and use this IP address to identify and communicate with each other via network connection **104**. Generally, the linkage of an IP address to the subscriber's personal information (e.g., name, home address, etc.) is not publicly available information. Thus, through the use of IP addresses in system **100** to communicate, embodiments of the invention may maintain an anonymous nature. For example, subscribers of the content service provider may be identified in system **100** only via a unique IP address. Subscriber profiles stored in content server **102** and/or reporting server **103** may be identified by the unique IP address. Thus, when a media consumption report is generated and forwarded to reporting server **103**, it may all be accomplished anonymously. Accordingly, in embodiments, information relating to the subscriber's profile and consumed content is used anonymously in system **100**.

[0020] In embodiments, user environment **106** may include a connected device **108**. Connected device **108** may be owned, borrowed or licensed by its respective user. Connected device **108** is connected to network connection **104** and may communicate with servers **102** and **103** via its unique IP address, for example. As described above, connected device **108** may be identified by servers **102** and **103** via its unique IP address (and not by personal information of any user or subscriber).

[0021] In embodiments, connected device **108** is adapted to receive multiple inputs supporting different types of media, aggregating the multiple media types and displaying one or more of the media types on a single display device (e.g., display device **110**). The multiple inputs may represent various types of connections including wired, wireless, or a combination of both. More specifically, the multiple inputs may represent Internet Protocol (IP) input connections (e.g., network connection **104**), a person-to-person (P2P) input connection **120**, broadcast/satellite/cable input connections **122** and inputs from various electronic devices **114**. Example electronic devices may include, but are not limited to, televisions, DVD players, VCR players, CD or music players, STBs, stereo receivers, AVRs, media centers, PVRs, gaming devices, digital camcorders, digital cameras, blackberries, cellular phones, PDAs, laptops, flash devices, and so forth.

[0022] In embodiments, connected device **108** may represent a device that includes personal video recorder (PVR) functionality. PVR functionality records television data (i.e., requested content) in digital format (e.g., MPEG-1 or MPEG-2 formats) and stores the data in a hard drive or on a server, for example. The data may also be stored in a distributed manner such as on one or more connected devices throughout a home or office environment.

[0023] An embodiment of the invention provides for the aggregation of multiple media types of user consumption via connected device **108**. Here, user media consumption habits via the multiple inputs are collected by connected device **108** and saved as a media consumption report. The media consumption report may then be securely stored in secured storage **116** to ensure the privacy of individual users. In embodiments, the media consumption reports may be encrypted prior to being stored in secured storage **116**. In embodiments, the media consumption reports may be stored in the hard disk drive (HDD) or in flash memory. The media consumption reports may also be stored at reporting server **103**. As described above, content service providers, device manufacturers, advertisers, and so forth, may access the media consumption reports to better products and services provided to the consumer.

[0024] In embodiments, the multiple media content may be any type of content or data. Examples of media content may generally include any data or signals representing information meant for a user, such as voice information, video information, audio information, image information, textual information, numerical information, alphanumeric symbols, graphics, and so forth. The embodiments are not limited in this context.

[0025] As mentioned above, many of today's homes have multiple electronic devices networked together to provide a means of entertainment via a connected device (such as

connected device **108**) and a single display device (such as display device **110**). It is typical for the different members of a family to share the multiple networked devices. Here, user preferences involving device specific settings are constantly being adjusted by the different members of the family. An embodiment of the invention provides for a way of collecting data about user-specific adjustments to the various electronic devices **114** and/or applications connected to connected device **108**. The user-specific adjustment data may be used by user preference engine **118** to automatically make adjustments to one or more devices connected to connected device **108**. The various user-specific adjustments may include electronic program guide (EPG) usage; device level controls (e.g., volume, channel favorites, display settings, etc.); device or client side specific program or application usage (e.g., DVD, CD, flash memory, etc.); IP, Coax or broadband delivered applications and services (social networking technology, VOD, recommendations, searches, etc.); information coming from devices via HDMI-CEC or any network; and so forth.

[0026] In embodiments, a specific user is identified by connected device **108** or user preference engine **118**. The user may identify himself or herself to connected device **108** via a typical login and password combination. The user may also be identified by connected device **108** via various biometric data devices, including but not limited to, fingerprint scan devices, retina scan devices, voice identification devices, and so forth.

[0027] Once a specific user is identified, connected device **108** may collect user-specific adjustment data to one or more of the various electronic devices **114** and/or applications connected to connected device **108**. The adjustment data may be stored in user preference engine **118**, for example. In embodiments, engine **118** stores the adjustment data in a secure and anonymous manner. The adjustment data may be provided to connected device **108** by devices **114** and/or applications. A user interface (such as the one described below with reference to FIG. **2**) may be accessed by the user to make adjustments to electronic devices **114** and/or applications via connected device **108**.

[0028] Once adjustment data is collected for an identified user, user preference engine **118** may use the data to automatically make applicable adjustments to one or more devices **114** and/or applications to suit the identified user's preferences. For example, assume that device **114-1** is a television and the identified user always turns the volume to level 6 in the morning hours and up to level **9** in the evening hours. Here, user preference engine **118** may collect that information and store it in user preference engine **118**. The next time the television is powered on or activated by the identified user, user preference engine **118** may automatically adjust the volume of the television to level 6 or 9 depending on the time of day. In embodiments, user preference engine **118** may use the collected user-specific adjustment data to monitor the behaviors of a specific user and to optimize consumer information and entertainment recommendations/searches. These examples are provided for illustrations purposes only and are not meant to limit the invention.

[0029] Referring back to FIG. **1**, user environment **106** may also include display device **110** and user input device **112**. Display device **110** may be a monitor, projector, a conventional analog television receiver, or any other kind of perceivable video display. The audio portion of the output of the connected devices may be routed through an amplifier, such as an audio/video (A/V) receiver or a sound processing engine, to headphones, speakers or any other type of sound generation device. User input device **112** may be any type of input device suited for a user to communicate with connected device **108**.

[0030] In various embodiments, system **100** may be implemented as a wireless system, a wired system, or a combination of both. When implemented as a wireless system, system **100** may include components and interfaces suitable for communicating over a wireless shared media, such as one or more antennas, transmitters, receivers, transceivers, amplifiers, filters, control logic, and so forth. An example of wireless shared media may include portions of a wireless spectrum, such as the RF spectrum and so forth. When implemented as a wired system, system **100** may include components and interfaces suitable for communicating over wired communications media, such as input/output (I/O) adapters, physical connectors to connect the I/O adapter with a corresponding wired communications medium, a network interface card (NIC), disc controller, video controller, audio controller, and so forth. Examples of wired communications media may include a wire, cable, metal leads, printed circuit board (PCB), backplane, switch fabric, semiconductor material, twisted-pair wire, co-axial cable, fiber optics, and so forth.

[0031] A further embodiment of the invention provides for a user interface that includes one or more input-specific windows or sections that are overlayed on a main content section. The input-specific windows may represent data that is currently being processed by one or more of the electronic devices and/or applications connected to connected device **108**.

[0032] Referring to FIG. **2**, one embodiment of a user interface **200** is shown. User interface **200** may comprise a main content section **202** and a multiple input content section **204**. In an embodiment, multiple input content section **204** is divided into multiple windows, where each window may represent data that is currently being processed by one of electronic devices **114** and/or applications connected to device **108** (e.g., P2P input **120**, broadcast/satellite/cable inputs **122**, and so forth).

[0033] User interface **200** may be displayed on display device **110**, for example. Although multiple input content section **204** is illustrated as having six sections or windows, this is not meant to limit the invention. Section **204** may include any number of windows. Each of these sections is described next in more detail.

[0034] In embodiments, main content section **202** displays the primary content that is being watched by a user. The main content may be broadcasted, received via cable or satellite feeds, pre-recorded and stored on a digital recording device (such as a personal video recorder (PVR)), streamed or downloaded via the Internet via an IP connection, stored on a home local area network (LAN), received via various types of video interconnects (e.g., Video Graphics Array (VGA), High-Definition Multimedia Interface (HDMI), component video, composite video, etc.), and so forth. In embodiments, the content being displayed in section **202** cannot be altered by the user. The content displayed in section **202** may include shows or programs, graphics, video games, books, video shorts, video previews, news clips,

news highlights, and so forth. Related voice, audio, music, etc., may also be presented with the displayed content in section **202**.

[0035] In embodiments, content displayed in multiple input content section **204** may be dynamic in the sense that the first window might display the content being processed by device **114-1** at a given time and display the content being processed by device **114-3** at another time, for example. In embodiments, content displayed in any window of section **204** may be any content or information or graphics (e.g., audio, video or graphics signal) that is overlayed or blended with another content or information or graphics (e.g., audio, video or graphics signal). In embodiments, the content may be streamed or downloaded to connected device **108** from the Internet via an IP connection (for example, via content server **102** and network connection **104** from FIG. **1**), via a P2P connection (such as input **120**), via broadcast/satellite/cable (such as input **122**), and so forth. In other embodiments, the content may be content received via any USB device connection (such as from devices **114**). This contact may be content that is dynamic or constantly updated via an IP delivered site, system or service or via a USB device, for example. User interface **200** may be displayed on a display device (such as display device **110**). A television may be an example display device.

[0036] Referring again to FIG. **2**, user interface **200** illustrates one display format where section **204** is smaller in size than main content section **202** and positioned on the lower area of user interface **200**. Embodiments of the invention are not limited to the display format illustrated in FIG. **2**. In fact, embodiments of the invention allow the user to customize the content displayed in section **204** and to customize the position and size of section **204** in user interface **200**. Here, the user may download a program element to a connected device (such as connected device **108** from FIG. **1**) from an IP delivered site or service or from a USB device (for example) that allows the user to customize section **204** to reflect user preferences. The customization of section **204** may include the number of windows, the content displayed in each of the windows, and the size and location of section **204** on user interface **200**. In embodiments, the user may elect to watch what is being displayed in one of the windows of section **204**. Here, the window may be expanded to include all of user interface **200**.

[0037] In embodiments, the user may use connected device **108** to overlay or blend the multiple input content with main content on the single display device without altering the main content. In embodiments, the main content may be decoded and then re-encoded with the multiple input content. In embodiments, the overlay or blending of the multiple input content and main content may be a hardware-enabled overlay or blend via a microprocessor, chipset, graphics card, etc. In other embodiments, the overlay or blending of the multiple input content and main content may be a software-enabled overlay or blend via a specific application, operating system, etc. In yet other embodiments, the overlay or blending may be via a combination of hardware and/or software components. In addition, there may be some overlay or blending in the pipes themselves or via another method while the content is in route to the screen. This may be implemented with wireless connection technology, wired connection technology, or a combination of both. The user may customize or configure user interface **200** directly on connected device **108** or via a user input device such as a remote control or PC, for example.

[0038] As stated above, a user interface (such as user interface **200**) may be accessed by the user to make adjustments to electronic devices **114** and/or applications via connected device **108**. Here, for example, a volume bar may be displayed in the window for device **114-1**. The user may adjust the volume of device **114-1** indirectly by adjusting the volume bar in the window. The volume adjustment is processed by connected device **108** and sent to device **114-1**, where the volume of device **114-1** is adjusted accordingly. The types of adjustments to devices **114** and/or applications via connected device **108** may include all adjustments provided by the devices themselves.

[0039] Operations for the embodiments described herein may be further described with reference to the following figures and accompanying examples. Some of the figures may include a logic flow. Although such figures presented herein may include a particular logic flow, it can be appreciated that the logic flow merely provides an example of how the general functionality as described herein can be implemented. Further, the given logic flow does not necessarily have to be executed in the order presented unless otherwise indicated. In addition, the given logic flow may be implemented by a hardware element, a software element executed by a processor, or any combination thereof. The embodiments, however, are not limited to the elements or in the context shown or described in the figures.

[0040] FIG. **3** illustrates one embodiment of a logic flow **300**. As shown in logic flow **300**, a connected device (such as connected device **108** from FIG. **1**) collects data on user consumption habits of multiple media types (block **302**). The collected consumption data is stored in a secured storage (such as secured storage **116** of FIG. **1**) or at a secure server (such as reporting server **103** of FIG. **1**) (block **304**). The consumption data may be used to provide better services and/or products to consumers (block **306**).

[0041] FIG. **4** illustrates one embodiment of a logic flow **400**. Referring to FIG. **4**, the connected device collects data on user specific adjustments to devices or applications run on the devices (block **402**). The connected device stores the adjustment data in a user preference engine (such as engine **118** of FIG. **1**) (block **404**). When a device/application is powered on or activated by the specific or identified user, the user preference engine is used to automatically make applicable adjustments to the device/application (block **406**).

[0042] FIG. **5** illustrates an embodiment of a platform **502** (e.g., connected device **108** from FIG. **1**). In one embodiment, platform **502** may comprise or may be implemented as a media platform **502** such as the Viiv™ media platform made by Intel® Corporation. In one embodiment, platform **502** may interact with the content servers and/or reporting server (such as servers **102** and **103** via network connection **104** from FIG. **1**).

[0043] In one embodiment, platform **502** may comprise a CPU **512**, a chip set **513**, one or more drivers **514**, one or more network connections **515**, an operating system **516**, and/or one or more media center applications **517** comprising one or more software applications, for example. Platform **502** also may comprise storage **518** and user preference engine logic **520**.

[0044] In one embodiment, CPU **512** may comprise one or more processors such as dual-core processors. Examples of dual-core processors include the Pentium® D processor and

the Pentium® processor Extreme Edition both made by Intel® Corporation, which may be referred to as the Intel Core Duo® processors, for example.

[0045] In one embodiment, chip set **513** may comprise any one of or all of the Intel® **945** Express Chipset family, the Intel® 955X Express Chipset, Intel® 975X Express Chipset family, plus ICH7-DH or ICH7-MDH controller hubs, which all are made by Intel® Corporation.

[0046] In one embodiment, drivers **514** may comprise the Quick Resume Technology Drivers made by Intel® to enable users to instantly turn on and off platform **502** like a television with the touch of a button after initial boot-up, when enabled, for example. In addition, chip set **513** may comprise hardware and/or software support for 5.1 surround sound audio and/or high definition 7.1 surround sound audio, for example. Drivers **514** may include a graphics driver for integrated graphics platforms. In one embodiment, the graphics driver may comprise a peripheral component interconnect (PCI) Express graphics card.

[0047] In one embodiment, network connections **515** may comprise the PRO/1000 PM or PRO/100 VE/VM network connection, both made by Intel® Corporation.

[0048] In one embodiment, operating system **516** may comprise the Windows® XP Media Center made by Microsoft® Corporation. In other embodiments, operating system **516** may comprise Linux®, as well as other types of operating systems. In one embodiment, one or more media center applications **517** may comprise a media shell to enable users to interact with a remote control device from a distance of about 10-feet away from platform **502** or a display device, for example. In one embodiment, the media shell may be referred to as a "10-feet user interface," for example. In addition, one or more media center applications **517** may comprise the Quick Resume Technology made by Intel®, which allows instant on/off functionality and may allow platform **502** to stream content to media adaptors when the platform is turned "off"

[0049] In one embodiment, storage **518** may comprise the Matrix Storage technology made by Intel® to increase the storage performance enhanced protection for valuable digital media when multiple hard drives are included. In one embodiment, user preference engine logic **520** is used to enable the functionality of the invention as described herein. The embodiments, however, are not limited to the elements or in the context shown or described in FIG. **5**.

[0050] Platform **510** may establish one or more logical or physical channels to communicate information. The information may include media information and control information. Media information may refer to any data representing content meant for a user. Control information may refer to any data representing commands, instructions or control words meant for an automated system. For example, control information may be used to route media information through a system, or instruct a node to process the media information in a predetermined manner. The embodiments, however, are not limited to the elements or in the context shown or described in FIG. **5**.

[0051] FIG. **6** illustrates one embodiment of a device **600** in which functionality of the present invention as described herein may be implemented. In one embodiment, for example, device **600** may comprise a communication system. In various embodiments, device **600** may comprise a processing system, computing system, mobile computing system, mobile computing device, mobile wireless device, computer, computer platform, computer system, computer sub-system, server, workstation, terminal, personal computer (PC), laptop computer, ultra-laptop computer, portable computer, handheld computer, personal digital assistant (PDA), cellular telephone, combination cellular telephone/PDA, smart phone, pager, one-way pager, two-way pager, messaging device, blackberry, and so forth. The embodiments are not limited in this context.

[0052] In one embodiment, device **600** may be implemented as part of a wired communication system, a wireless communication system, or a combination of both. In one embodiment, for example, device **600** may be implemented as a mobile computing device having wireless capabilities. A mobile computing device may refer to any device having a processing system and a mobile power source or supply, such as one or more batteries, for example.

[0053] Examples of a mobile computing device may include a laptop computer, ultra-laptop computer, portable computer, handheld computer, palmtop computer, personal digital assistant (PDA), cellular telephone, combination cellular telephone/PDA, smart phone, pager, one-way pager, two-way pager, messaging device, data communication device, and so forth.

[0054] In one embodiment, for example, a mobile computing device may be implemented as a smart phone capable of executing computer applications, as well as voice communications and/or data communications. Although some embodiments may be described with a mobile computing device implemented as a smart phone by way of example, it may be appreciated that other embodiments may be implemented using other wireless mobile computing devices as well. The embodiments are not limited in this context.

[0055] As shown in FIG. **6**, device **600** may comprise a housing **602**, a display **604**, an input/output (I/O) device **606**, and an antenna **608**. Device **600** also may comprise a five-way navigation button **612**. I/O device **606** may comprise a suitable keyboard, a microphone, and/or a speaker, for example. Display **604** may comprise any suitable display unit for displaying information appropriate for a mobile computing device. I/O device **606** may comprise any suitable I/O device for entering information into a mobile computing device. Examples for I/O device **606** may include an alphanumeric keyboard, a numeric keypad, a touch pad, input keys, buttons, switches, rocker switches, voice recognition device and software, and so forth. Information also may be entered into device **600** by way of microphone. Such information may be digitized by a voice recognition device. The embodiments are not limited in this context.

[0056] Various embodiments may be implemented using hardware elements, software elements, or a combination of both. Examples of hardware elements may include processors, microprocessors, circuits, circuit elements (e.g., transistors, resistors, capacitors, inductors, and so forth), integrated circuits, application specific integrated circuits (ASIC), programmable logic devices (PLD), digital signal processors (DSP), field programmable gate array (FPGA), logic gates, registers, semiconductor device, chips, microchips, chip sets, and so forth. Examples of software may include software components, programs, applications, computer programs, application programs, system programs, machine programs, operating system software, middleware, firmware, software modules, routines, subroutines, functions, methods, procedures, software interfaces, application program interfaces (API), instruction sets, computing code,

computer code, code segments, computer code segments, words, values, symbols, or any combination thereof. Determining whether an embodiment is implemented using hardware elements and/or software elements may vary in accordance with any number of factors, such as desired computational rate, power levels, heat tolerances, processing cycle budget, input data rates, output data rates, memory resources, data bus speeds and other design or performance constraints.

[0057] Some embodiments may be described using the expression "coupled" and "connected" along with their derivatives. These terms are not intended as synonyms for each other. For example, some embodiments may be described using the terms "connected" and/or "coupled" to indicate that two or more elements are in direct physical or electrical contact with each other. The term "coupled," however, may also mean that two or more elements are not in direct contact with each other, but yet still co-operate or interact with each other.

[0058] Some embodiments may be implemented, for example, using a machine or tangible computer-readable medium or article which may store an instruction or a set of instructions that, if executed by a machine, may cause the machine to perform a method and/or operations in accordance with the embodiments. Such a machine may include, for example, any suitable processing platform, computing platform, computing device, processing device, computing system, processing system, computer, processor, or the like, and may be implemented using any suitable combination of hardware and/or software. The machine-readable medium or article may include, for example, any suitable type of memory unit, memory device, memory article, memory medium, storage device, storage article, storage medium and/or storage unit, for example, memory, removable or non-removable media, erasable or non-erasable media, writeable or re-writeable media, digital or analog media, hard disk, floppy disk, Compact Disk Read Only Memory (CD-ROM), Compact Disk Recordable (CD-R), Compact Disk Rewriteable (CD-RW), optical disk, magnetic media, magneto-optical media, removable memory cards or disks, various types of Digital Versatile Disk (DVD), a tape, a cassette, or the like. The instructions may include any suitable type of code, such as source code, compiled code, interpreted code, executable code, static code, dynamic code, encrypted code, and the like, implemented using any suitable high-level, low-level, object-oriented, visual, compiled and/or interpreted programming language.

[0059] Unless specifically stated otherwise, it may be appreciated that terms such as "processing," "computing," "calculating," "determining," or the like, refer to the action and/or processes of a computer or computing system, or similar electronic computing device, that manipulates and/or transforms data represented as physical quantities (e.g., electronic) within the computing system's registers and/or memories into other data similarly represented as physical quantities within the computing system's memories, registers or other such information storage, transmission or display devices. The embodiments are not limited in this context.

[0060] Numerous specific details have been set forth herein to provide a thorough understanding of the embodiments. It will be understood by those skilled in the art, however, that the embodiments may be practiced without these specific details. In other instances, well-known operations, components and circuits have not been described in detail so as not to obscure the embodiments. It can be appreciated that the specific structural and functional details disclosed herein may be representative and do not necessarily limit the scope of the embodiments.

[0061] Although the subject matter has been described in language specific to structural features and/or methodological acts, it is to be understood that the subject matter defined in the appended claims is not necessarily limited to the specific features or acts described above. Rather, the specific features and acts described above are disclosed as example forms of implementing the claims.

1-21. (canceled)

22. An apparatus that is capable, in operation of the apparatus, of communicating via at least one Internet network connection, with at least one server, the apparatus also being capable, in the operation of the apparatus, of being used in association with a television display and at least one gaming device, the apparatus comprising:

an electronic media-processing platform comprising at least one multi-core processor and storage, the platform being capable of being used in association, at least in part, with media processing-related applications;

wherein execution, at least in part, of the media processing-related applications results, at least in part, in the platform being capable of processing, at least in part, when the platform is in the operation:

at least one gaming-related media content stream to be provided, at least in part, via the at least one Internet network connection; and

at least one broadcast media content stream to be delivered, at least in part, via Internet Protocol;

the at least one gaming-related media content stream being capable of being associated, at least in part, with video game media content data that is to be output, at least in part, by the platform for display, at least in part, in at least one section of the television display;

the at least one broadcast media content stream being capable of being associated, at least in part, with broadcast media content data that is to be output, at least in part, by the platform for display, at least in part, in at least one other section of the television display;

the platform being capable of receiving, at least in part, when the platform is in the operation, input data from the at least one gaming device that is capable of being used in association, at least in part, with the broadcast media content data;

the platform being capable of being used, at least in part, in association with a microphone for use in voice recognition and voice communication;

the at least one server being capable of storing, at least in part, subscriber information and parental control information, the subscriber information being associated, at least in part, with subscribers of at least one media content service that is capable of being provided, at least in part, via the at least one server to the platform, the parental control information being capable of being used to determine, at least in part, whether certain media content associated, at least in part, with the at least one media content service is to be allowed for viewing by a user associated with a given subscriber;

the subscriber information comprising profile and media content consumption information associated with the user.

23. The apparatus of claim **22**, wherein:
the platform also comprises an High Definition Multimedia Interface (HDMI) input that when the platform is in the operation is capable of receiving cable and/or satellite broadcast media content.

24. The apparatus of claim **22**, wherein:
the platform is also capable of receiving, when the platform is in the operation, other input data from at least one cellular phone.

25. The apparatus of claim **22**, wherein:
the at least one other section is smaller-sized relative to the at least one section.

26. The apparatus of claim **22**, wherein:
the at least one other section is to overlay, at least in part, the at least one section.

27. At least one computer-readable medium storing instructions that are capable of being executed, at least in part, by an electronic media-processing platform, the electronic media-processing platform being capable, in operation of the electronic media-processing platform, of communicating via at least one Internet network connection with at least one server, the electronic media-processing platform also being capable, in the operation of the electronic media-processing platform, of being used in association with a television display, media processing-related applications, and at least one gaming device, the electronic media-processing platform comprising at least one multi-core processor and storage, the instructions when executed, at least in part, by the electronic media-processing platform resulting in the platform being capable of performance of operations comprising:

processing, at least in part, by the electronic media-processing platform, of:

at least one gaming-related media content stream provided, at least in part, via the at least one Internet network connection; and

at least one broadcast media content stream delivered, at least in part, via Internet Protocol;

the at least one gaming-related media content stream and the at least one broadcast media stream being capable of being associated, at least in part, with the media processing-related applications;

the at least one gaming-related media content stream also being capable of being associated, at least in part, with video game media content data that is to be output, at least in part, by the platform for display, at least in part, in at least one section of the television display;

the at least one broadcast media content stream also being capable of being associated, at least in part, with broadcast media content data that is to be output, at least in part, by the platform for display, at least in part, in at least one other section of the television display;

the operations also comprising receiving, at least in part, input data from the at least one gaming device that is capable of being used in association, at least in part, with the broadcast media content data;

the platform being capable of being used, at least in part, in association with a microphone for use in voice recognition and voice communication;

the at least one server being capable of storing, at least in part, subscriber information and parental control information, the subscriber information being associated, at least in part, with subscribers of at least one media content service that is capable of being provided, at least in part, via the at least one server to the platform, the parental control information being capable of being used to determine, at least in part, whether certain media content associated, at least in part, with the at least one media content service is to be allowed for viewing by a user associated with a given subscriber;

the subscriber information comprising profile and media content consumption information associated with the user.

28. The at least one computer-readable medium of claim **27**, wherein:
the platform also comprises an High Definition Multimedia Interface (HDMI) input that when the platform is in the operation is capable of receiving cable and/or satellite broadcast media content.

29. The at least one computer-readable medium of claim **27**, wherein:
the platform is also capable of receiving, when the platform is in the operation, other input data from at least one cellular phone.

30. The at least one computer-readable medium of claim **27**, wherein:
the at least one other section is smaller-sized relative to the at least one section.

31. The at least one computer-readable medium of claim **27**, wherein:
the at least one other section is to overlay, at least in part, the at least one section.

32. A method implemented, at least in part, using an electronic media-processing platform, the electronic media-processing platform being capable, in operation of the electronic media-processing platform, of communicating via at least one Internet network connection with at least one server, the electronic media-processing platform also being capable, in the operation of the electronic media-processing platform, of being used in association with a television display, media processing-related applications, and at least one gaming device, the electronic media-processing platform comprising at least one multi-core processor and storage, the method comprising:

processing, at least in part, by the electronic media-processing platform, of:

at least one gaming-related media content stream provided, at least in part, via the at least one Internet network connection; and

at least one broadcast media content stream delivered, at least in part, via Internet Protocol;

the at least one gaming-related media content stream and the at least one broadcast media stream being capable of being associated, at least in part, with the media processing-related applications;

the at least one gaming-related media content stream also being capable of being associated, at least in part, with video game media content data that is to be output, at least in part, by the platform for display, at least in part, in at least one section of the television display;

the at least one broadcast media content stream also being capable of being associated, at least in part, with broadcast media content data that is to be output, at least in part, by the platform for display, at least in part, in at least one other section of the television display;

the method also comprising receiving, at least in part, input data from the at least one gaming device that is

capable of being used in association, at least in part, with the broadcast media content data;

the platform being capable of being used, at least in part, in association with a microphone for use in voice recognition and voice communication;

the at least one server being capable of storing, at least in part, subscriber information and parental control information, the subscriber information being associated, at least in part, with subscribers of at least one media content service that is capable of being provided, at least in part, via the at least one server to the platform, the parental control information being capable of being used to determine, at least in part, whether certain media content associated, at least in part, with the at least one media content service is to be allowed for viewing by a user associated with a given subscriber;

the subscriber information comprising profile and media content consumption information associated with the user.

33. The method of claim **32**, wherein:

the platform also comprises an High Definition Multimedia Interface (HDMI) input that when the platform is in the operation is capable of receiving cable and/or satellite broadcast media content.

34. The method of claim **32**, wherein:

the platform is also capable of receiving, when the platform is in the operation, other input data from at least one cellular phone.

35. The method of claim **32**, wherein:

the at least one other section is smaller-sized relative to the at least one section.

36. The method of claim **32**, wherein:

the at least one other section is to overlay, at least in part, the at least one section.

37. At least one server that is capable of communicating, at least in part, via at least one Internet network connection with an electronic media-processing platform, the electronic media-processing platform being capable, in operation of the platform, of being used in association with a television display and at least one gaming device, the at least one server comprising:

storage capable of storing, at least in part, subscriber information and parental control information, the subscriber information being associated, at least in part, with subscribers of at least one media content service that is capable of being provided, at least in part, via the at least one server to the platform, the parental control information being capable of being used to determine, at least in part, whether certain media content associated, at least in part, with the at least one media content service is to be allowed for viewing by a user associated with a given subscriber;

the subscriber information comprising profile and media content consumption information associated with the user;

wherein:

the electronic media-processing platform comprises at least one multi-core processor and platform storage;

the platform is capable of being used in association, at least in part, with media processing-related applications;

execution, at least in part, of the media processing-related applications results, at least in part, in the platform being capable of processing, at least in part, when the platform is in the operation:

at least one gaming-related media content stream to be provided, at least in part, via the at least one Internet network connection; and

at least one broadcast media content stream to be delivered, at least in part, via Internet Protocol;

the at least one gaming-related media content stream is capable of being associated, at least in part, with video game media content data that is to be output, at least in part, by the platform for display, at least in part, in at least one section of the television display;

the at least one broadcast media content stream is capable of being associated, at least in part, with broadcast media content data that is to be output, at least in part, by the platform for display, at least in part, in at least one other section of the television display;

the platform is capable of receiving, at least in part, when the platform is in the operation, input data from the at least one gaming device that is capable of being used in association, at least in part, with the broadcast media content data; and

the platform is capable of being used, at least in part, in association with a microphone for use in voice recognition and voice communication.

38. The at least one server of claim **37**, wherein:

the platform also comprises an High Definition Multimedia Interface (HDMI) input that when the platform is in the operation is capable of receiving cable and/or satellite broadcast media content.

39. The at least one server of claim **37**, wherein:

the platform is also capable of receiving, when the platform is in the operation, other input data from at least one cellular phone.

40. The at least one server of claim **37**, wherein:

the at least one other section is smaller-sized relative to the at least one section.

41. The at least one server of claim **37**, wherein:

the at least one other section is to overlay, at least in part, the at least one section.

42. At least one computer-readable medium storing instructions that are capable of being executed, at least in part, by at least one server, the at least one server being capable of communicating, at least in part, via at least one Internet network connection with an electronic media-processing platform, the electronic media-processing platform being capable, in operation of the platform, of being used in association with a television display and at least one gaming device, the instructions when executed, at least in part, by the at least one server resulting in the at least one server being capable of performing operations comprising:

storing, at least in part, in storage of the at least one server, subscriber information and parental control information, the subscriber information being associated, at least in part, with subscribers of at least one media content service that is capable of being provided, at least in part, via the at least one server to the platform, the parental control information being capable of being used to determine, at least in part, whether certain media content associated, at least in part, with the at least one media content service is to be allowed for viewing by a user associated with a given subscriber;

the subscriber information comprising profile and media content consumption information associated with the user;

wherein:

the electronic media-processing platform comprises at least one multi-core processor and platform storage;

the platform is capable of being used in association, at least in part, with media processing-related applications;

execution, at least in part, of the media processing-related applications results, at least in part, in the platform being capable of processing, at least in part, when the platform is in the operation:

at least one gaming-related media content stream to be provided, at least in part, via the at least one Internet network connection; and

at least one broadcast media content stream to be delivered, at least in part, via Internet Protocol;

the at least one gaming-related media content stream is capable of being associated, at least in part, with video game media content data that is to be output, at least in part, by the platform for display, at least in part, in at least one section of the television display;

the at least one broadcast media content stream is capable of being associated, at least in part, with broadcast media content data that is to be output, at least in part, by the platform for display, at least in part, in at least one other section of the television display;

the platform is capable of receiving, at least in part, when the platform is in the operation, input data from the at least one gaming device that is capable of being used in association, at least in part, with the broadcast media content data; and

the platform is capable of being used, at least in part, in association with a microphone for use in voice recognition and voice communication.

43. The at least one computer-readable medium of claim **42**, wherein:

the platform also comprises an High Definition Multimedia Interface (HDMI) input that when the platform is in the operation is capable of receiving cable and/or satellite broadcast media content.

44. The at least one computer-readable medium of claim **42**, wherein:

the platform is also capable of receiving, when the platform is in the operation, other input data from at least one cellular phone.

45. The at least one computer-readable medium of claim **42**, wherein:

the at least one other section is smaller-sized relative to the at least one section.

46. The at least one computer-readable medium of claim **42**, wherein:

the at least one other section is to overlay, at least in part, the at least one section.

47. A method implemented, at least in part, using at least one server, the at least one server being capable of communicating, at least in part, via at least one Internet network connection with an electronic media-processing platform, the electronic media-processing platform being capable, in operation of the platform, of being used in association with a television display and at least one gaming device, the method comprising:

storing, at least in part, in storage of the at least one server, subscriber information and parental control information, the subscriber information being associated, at least in part, with subscribers of at least one media content service that is capable of being provided, at least in part, via the at least one server to the platform, the parental control information being capable of being used to determine, at least in part, whether certain media content associated, at least in part, with the at least one media content service is to be allowed for viewing by a user associated with a given subscriber;

the subscriber information comprising profile and media content consumption information associated with the user;

wherein:

the electronic media-processing platform comprises at least one multi-core processor and platform storage;

the platform is capable of being used in association, at least in part, with media processing-related applications;

execution, at least in part, of the media processing-related applications results, at least in part, in the platform being capable of processing, at least in part, when the platform is in the operation:

at least one gaming-related media content stream to be provided, at least in part, via the at least one Internet network connection; and

at least one broadcast media content stream to be delivered, at least in part, via Internet Protocol;

the at least one gaming-related media content stream is capable of being associated, at least in part, with video game media content data that is to be output, at least in part, by the platform for display, at least in part, in at least one section of the television display;

the at least one broadcast media content stream is capable of being associated, at least in part, with broadcast media content data that is to be output, at least in part, by the platform for display, at least in part, in at least one other section of the television display;

the platform is capable of receiving, at least in part, when the platform is in the operation, input data from the at least one gaming device that is capable of being used in association, at least in part, with the broadcast media content data; and

the platform is capable of being used, at least in part, in association with a microphone for use in voice recognition and voice communication.

48. The method of claim **47**, wherein:

the platform also comprises an High Definition Multimedia Interface (HDMI) input that when the platform is in the operation is capable of receiving cable and/or satellite broadcast media content.

49. The method of claim **47**, wherein:

the platform is also capable of receiving, when the platform is in the operation, other input data from at least one cellular phone.

50. The method of claim **47**, wherein:

the at least one other section is smaller-sized relative to the at least one section.

51. The method of claim **47**, wherein:

the at least one other section is to overlay, at least in part, the at least one section.

* * * * *