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(54) GLOBAL A/V TELECOMMUNICATIONS I.A.D. APPLIANCE, SYSTEMS AND SERVERS

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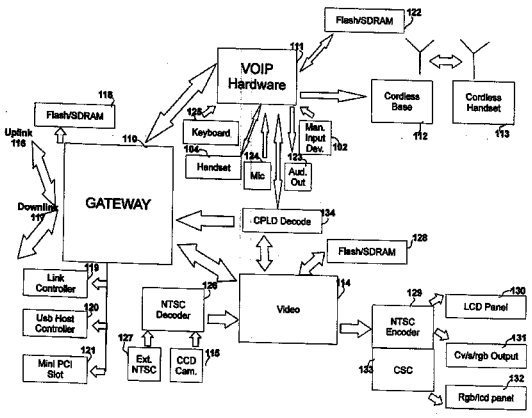
(57) **ABSTRACT**

An information appliance includes a network connection, a telecommunications processor connected to the network connection and a video processor connected to the network connection. When information appliance sends a media request through the network connection to a server such that media is sent to the information appliance in response to said media request. On-demand audio-visual programming is provided on a two-way communication device by receiving a request for audio-visual programming from the two-way communication device at a server, connecting the two-way communication device to a content provider and providing audio-visual programming to the two-way communication device. A method of providing advertisements on an A/V telecommunication device includes collecting demographic data with the A/V telecommunication device. The demographic data is provided to a host server. The hose server accumulates and provides the demographic data to a content provider. The A/V telecommunication device then receives media content, where the media content is selected by the content provider in response to the demographic data. A method for incentive based promotion on an A/V telecommunication device includes delivering promotional content to an A/V telecommunication device. User input is requested over the A/V telecommunication device and a response to the input is delivered to the A/V telecommunication device. A method of providing promotional content to an AW telecommunication device is performed by generating media content and providing media content to the A/V telecommunication device. A method of commerce using an A/V telecommunication device is performed by requesting a transaction using the A/V telecommunication device. The transaction request is received by a host server and communicated to a provider. The provider then delivers according to the transaction to a user of the A/V telecommunication device. An information appliance including a network connection, a telecommunications processor connected to the network connection and a video processor connected to the network connection. The information appliance collects data regarding a user of the information appliance. An A/V telecommunication device including a network connection, a telecommunications processor connected to the network connection, and a video processor connected to the network connection may include an integrated interactive promotion. An A/V telecommunication device including a network connection, a telecommunications processor connected to the network connection, and a video processor connected to the network connection may include an integrated incentive promotion manager connected to said telecommunication processor. A method for providing advertising content in A/V messaging for an A/V telecommunication device including a network connection, a telecommunications processor connected to the network connection, and a video processor connected to the network connection may be performed by receiving a call initiation from a caller and recognizing a "no-answer" condition. A content provider sends advertising content to said caller. A message from the caller is then recorded.



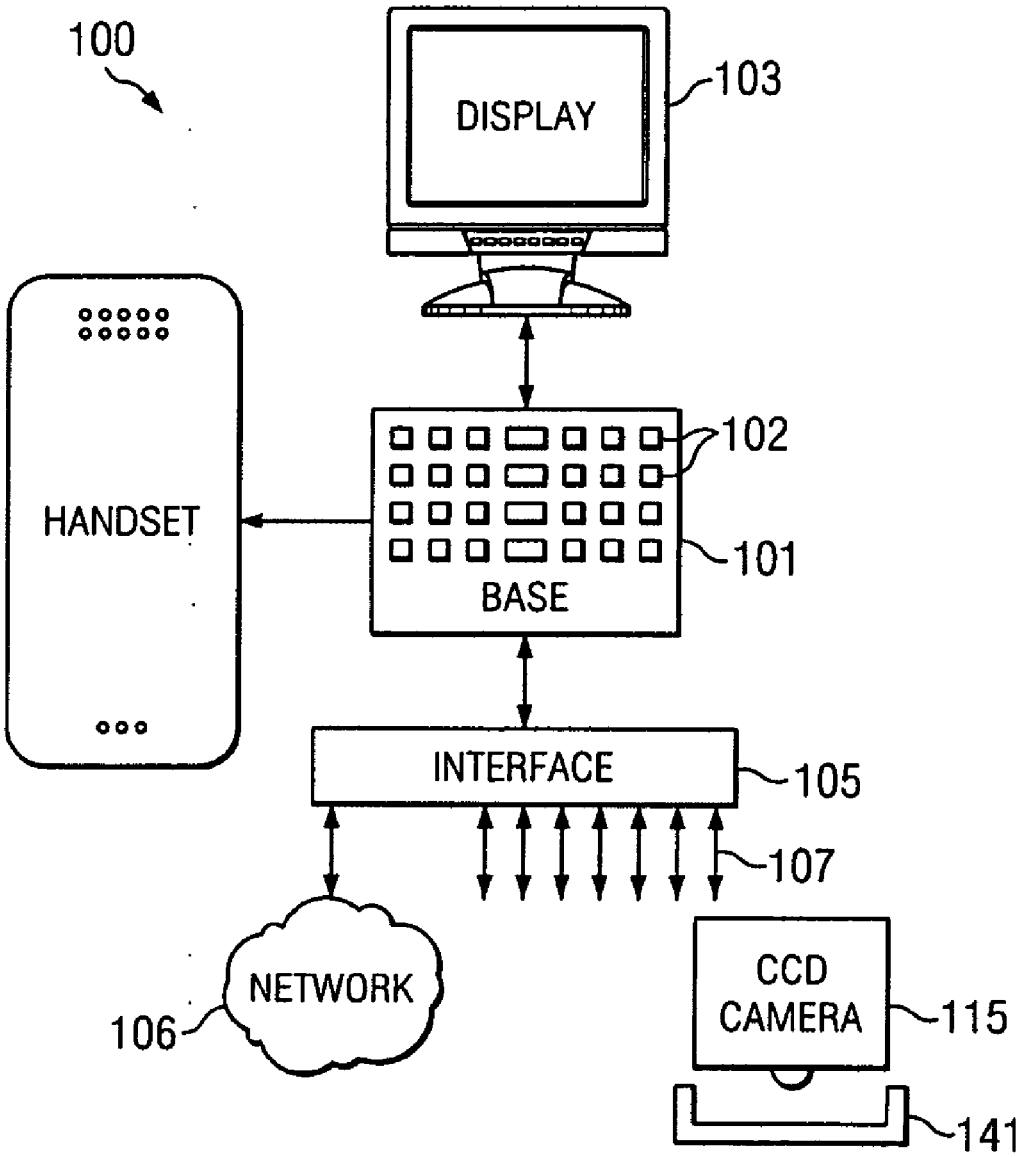

100
DISPLAY
103
HANDSET
102
101
BASE
INTERFACE
105
107
NETWORK
106
CCD
CAMERA
115
141

Figure 1

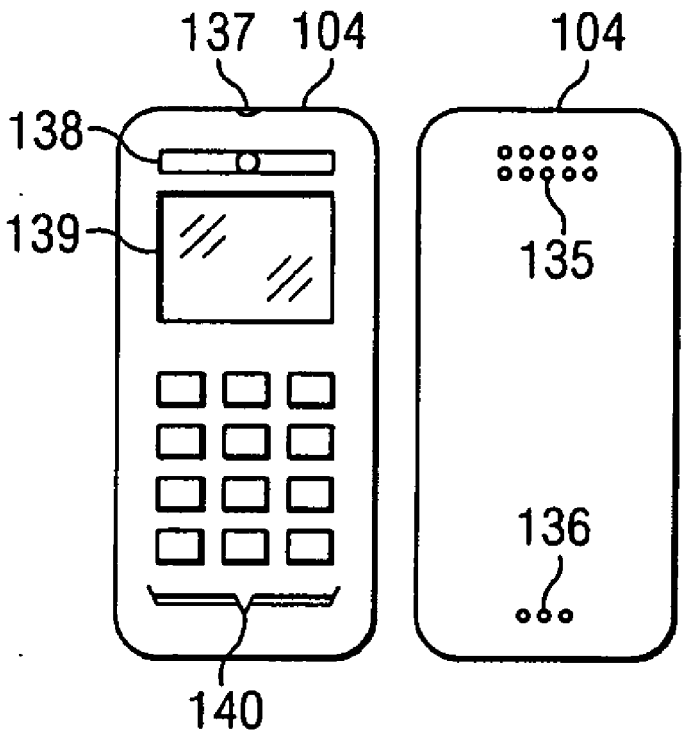


Figure 1a

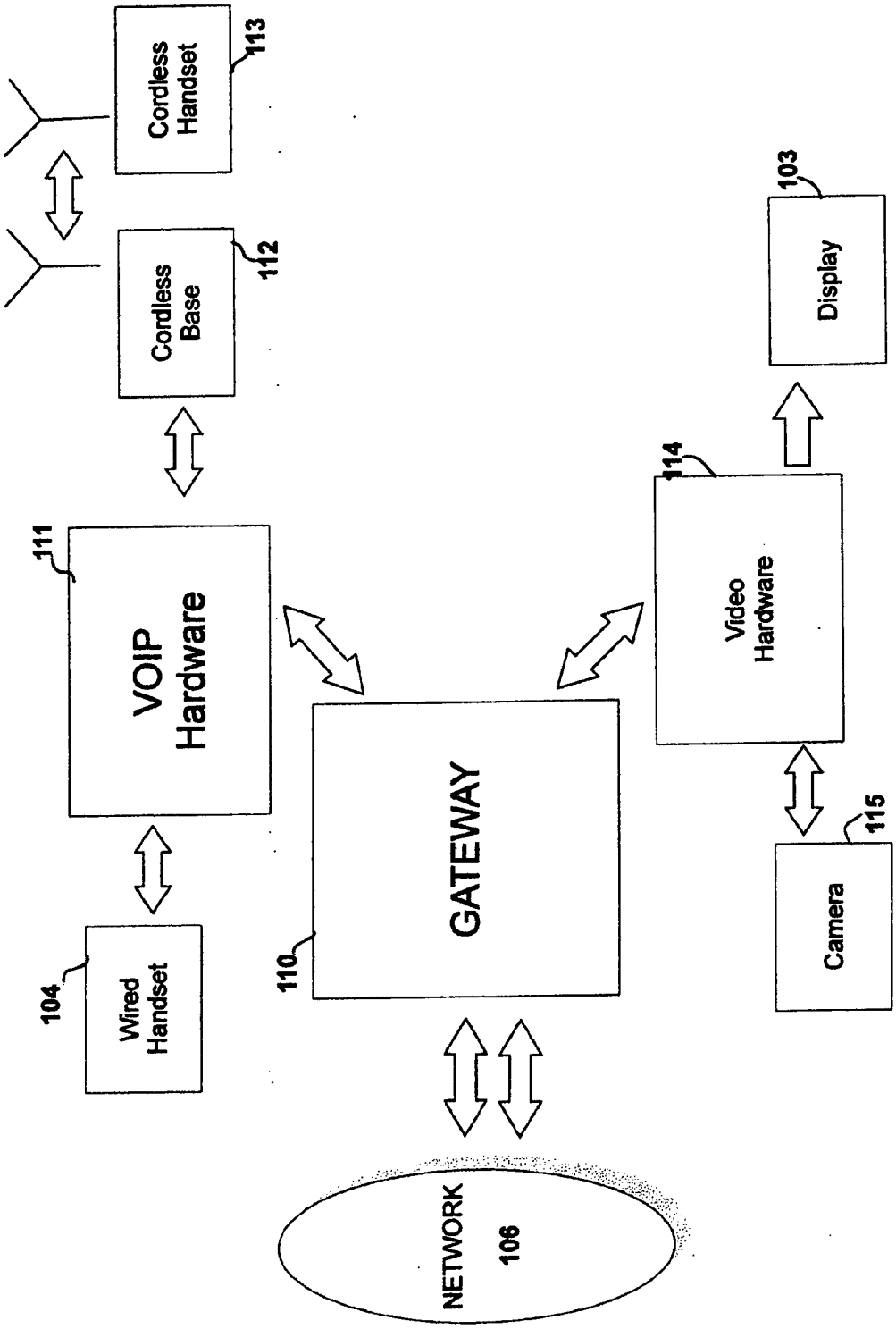

Cordless Handset
113
Cordless Base
112
Display
103
VOIP Hardware
111
Video Hardware
114
GATEWAY
110
Wired Handset
104
Camera
115
NETWORK
106

Figure 2

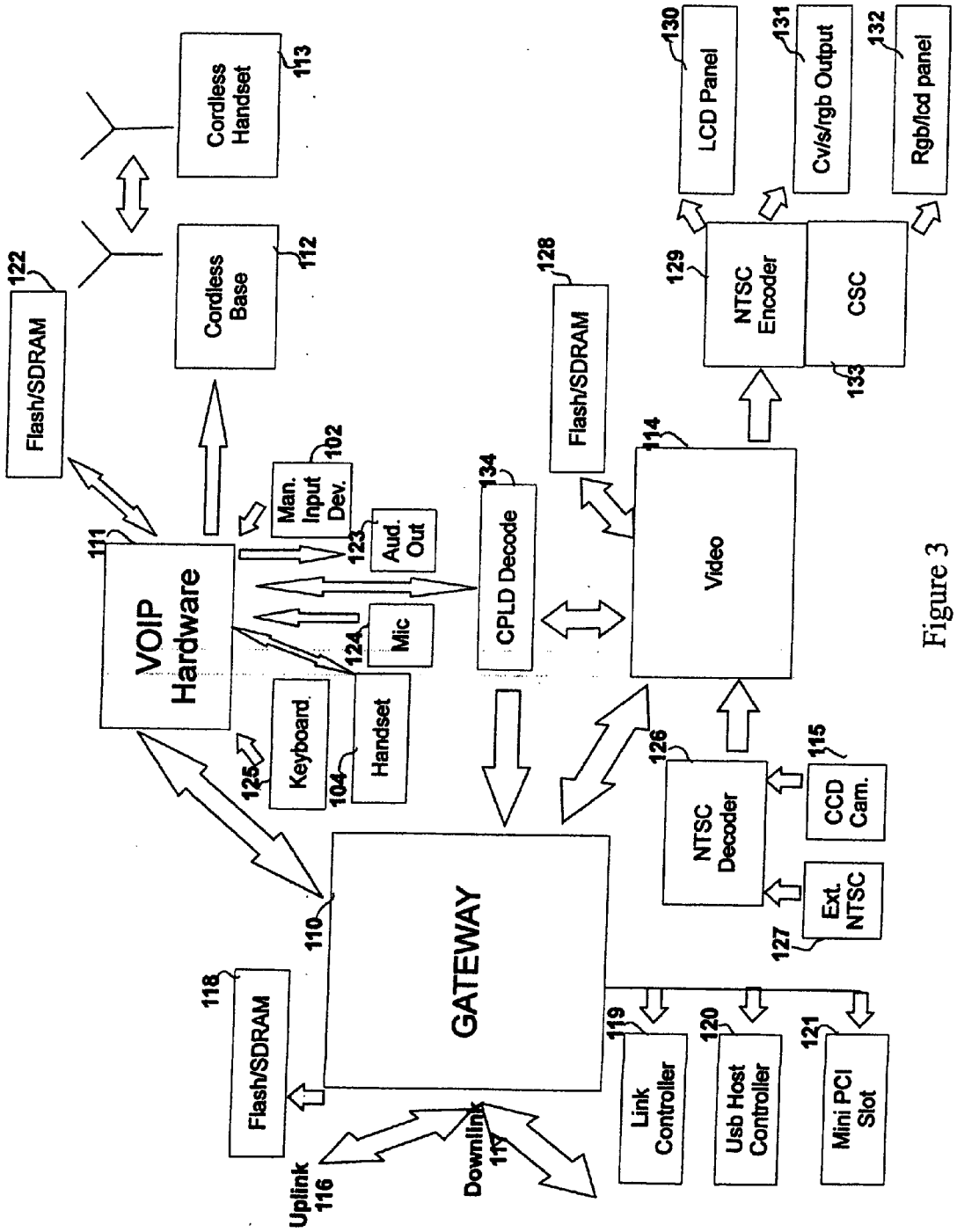

Cordless Handset
113
Cordless Base
112
Flash/SDRAM
122
VOIP Hardware
111
Man. Input Dev.
102
Aud. Out
123
Mic
124
Keyboard
125
Handset
104
CPLD Decode
134
Flash/SDRAM
128
Video
114
LCD Panel
130
Cv/s/rgb Output
131
Rgb/lcd panel
132
NTSC Encoder
129
CSC
133
NTSC Decoder
126
CCD Cam.
115
Ext. NTSC
127
GATEWAY
110
Flash/SDRAM
118
Link Controller
119
Usb Host Controller
120
Mini PCI Slot
121
Uplink
116
Downlink

Figure 3

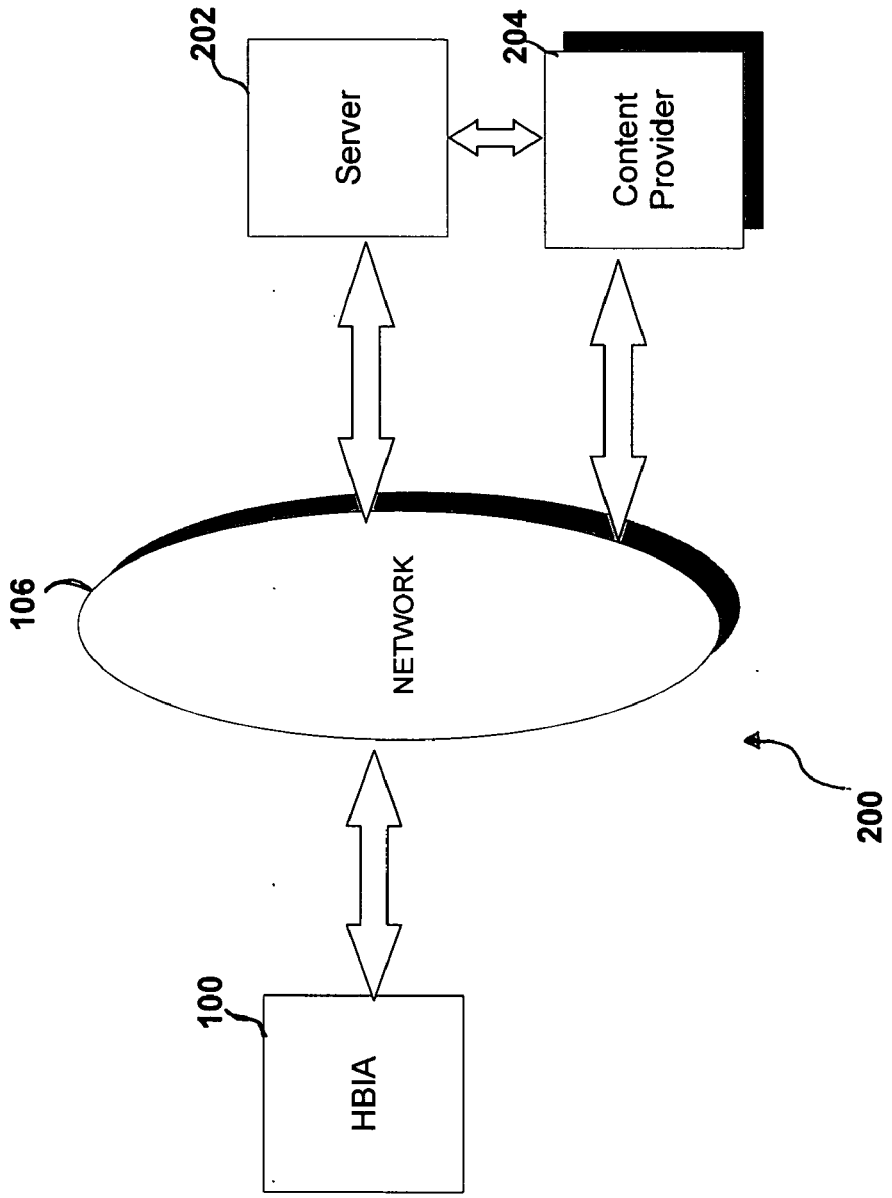


Figure 4

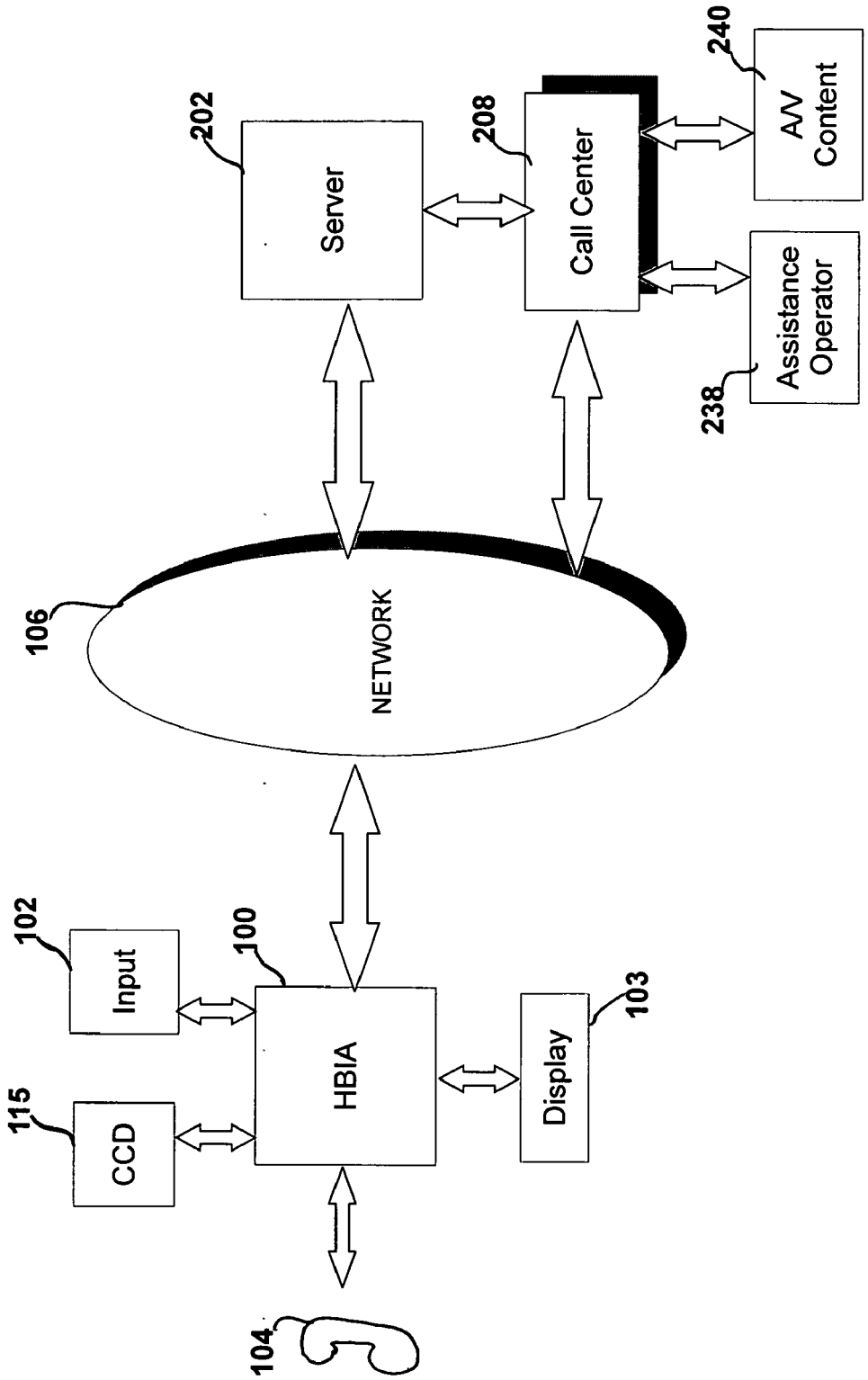

240
A/V Content
202
208
Server
Call Center
Assistance Operator
238
106
NETWORK
102
Input
100
HBIA
Display
103
115
CCD
104

Figure 5

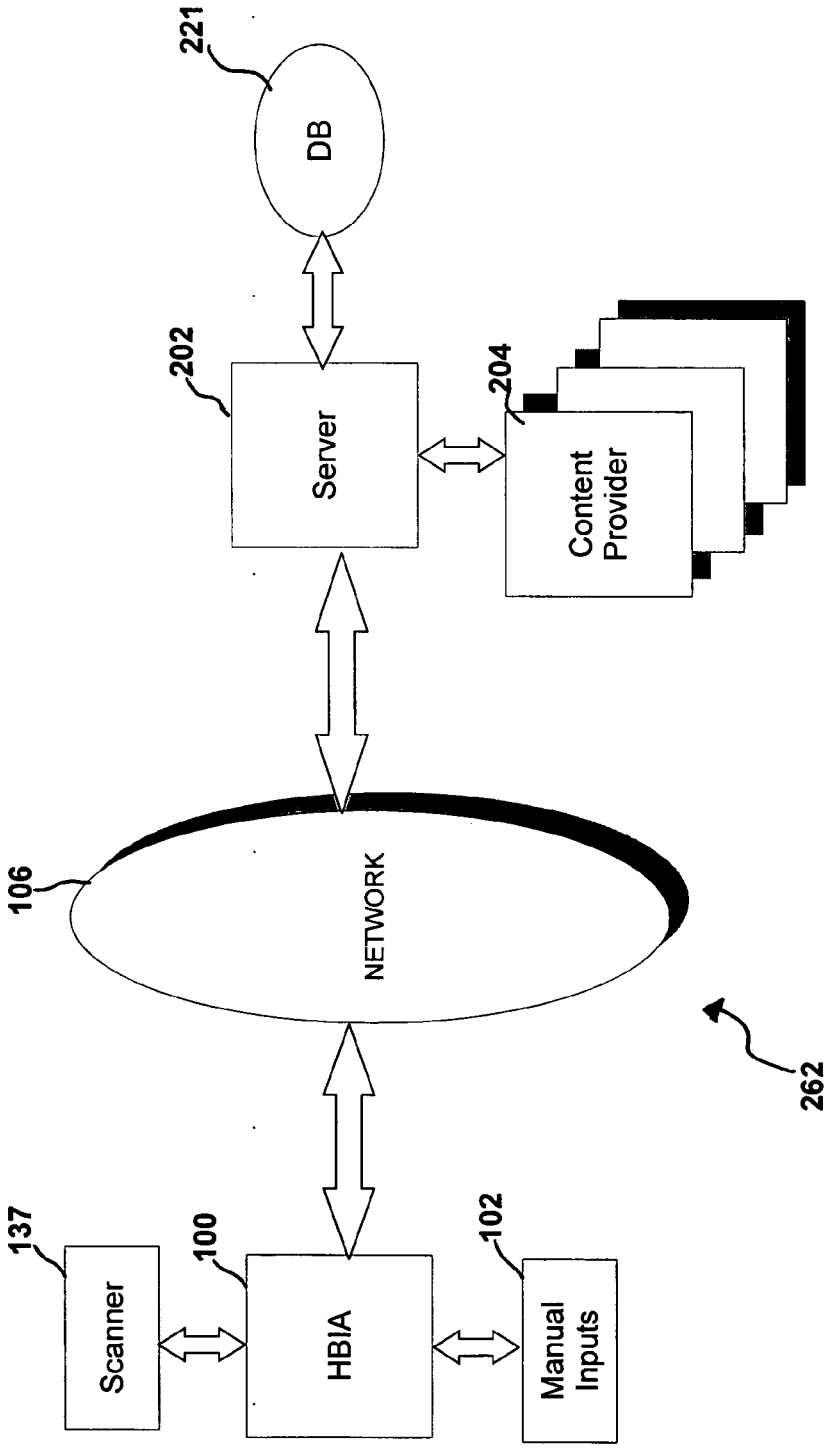

221
DB
202
Server
204
Content Provider
106
NETWORK
262
137
Scanner
100
HBIA
102
Manual Inputs

Figure 6

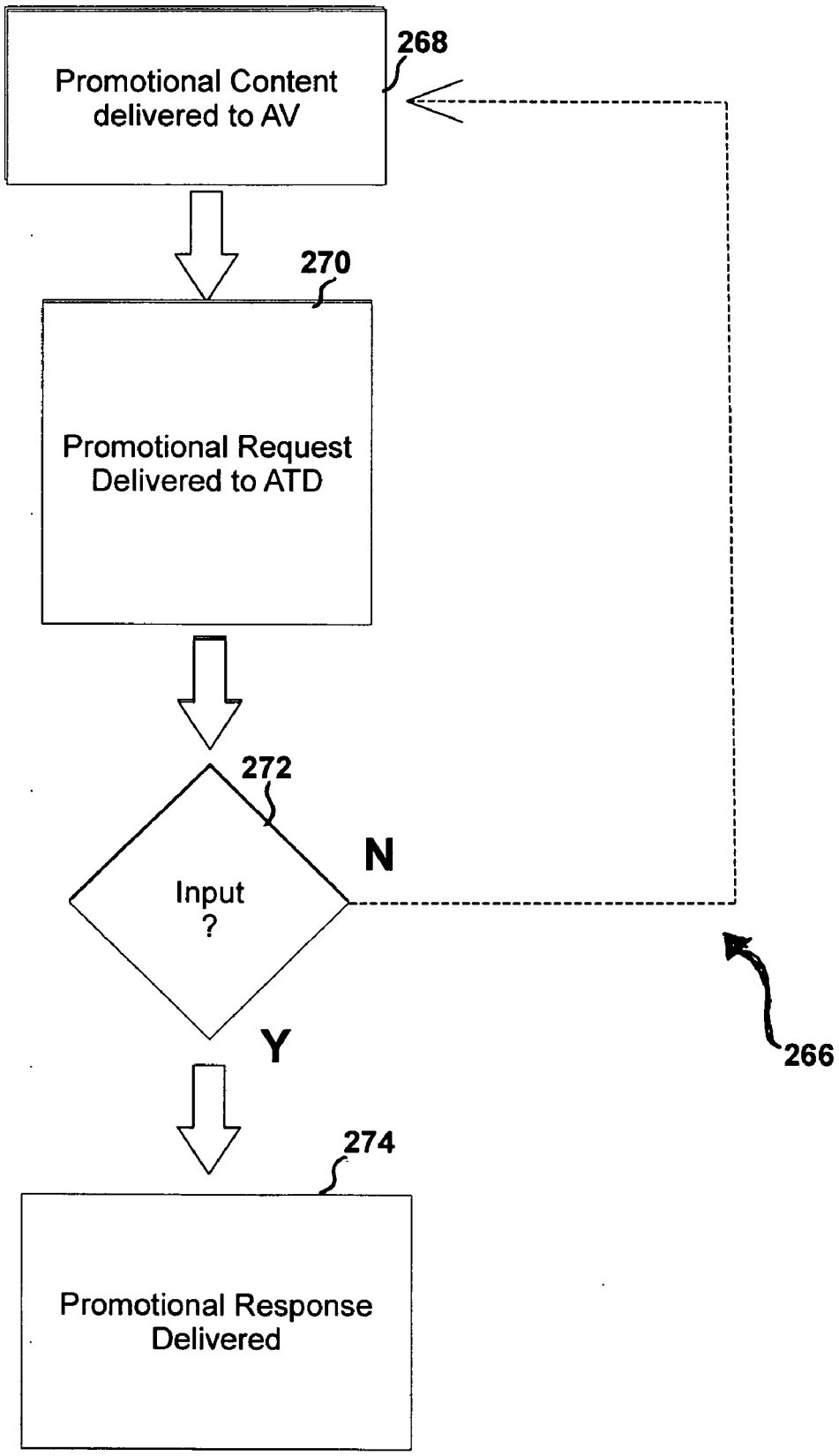

Promotional Content delivered to AV
268
270
Promotional Request Delivered to ATD
272
Input ?
N
Y
266
274
Promotional Response Delivered

Figure 7

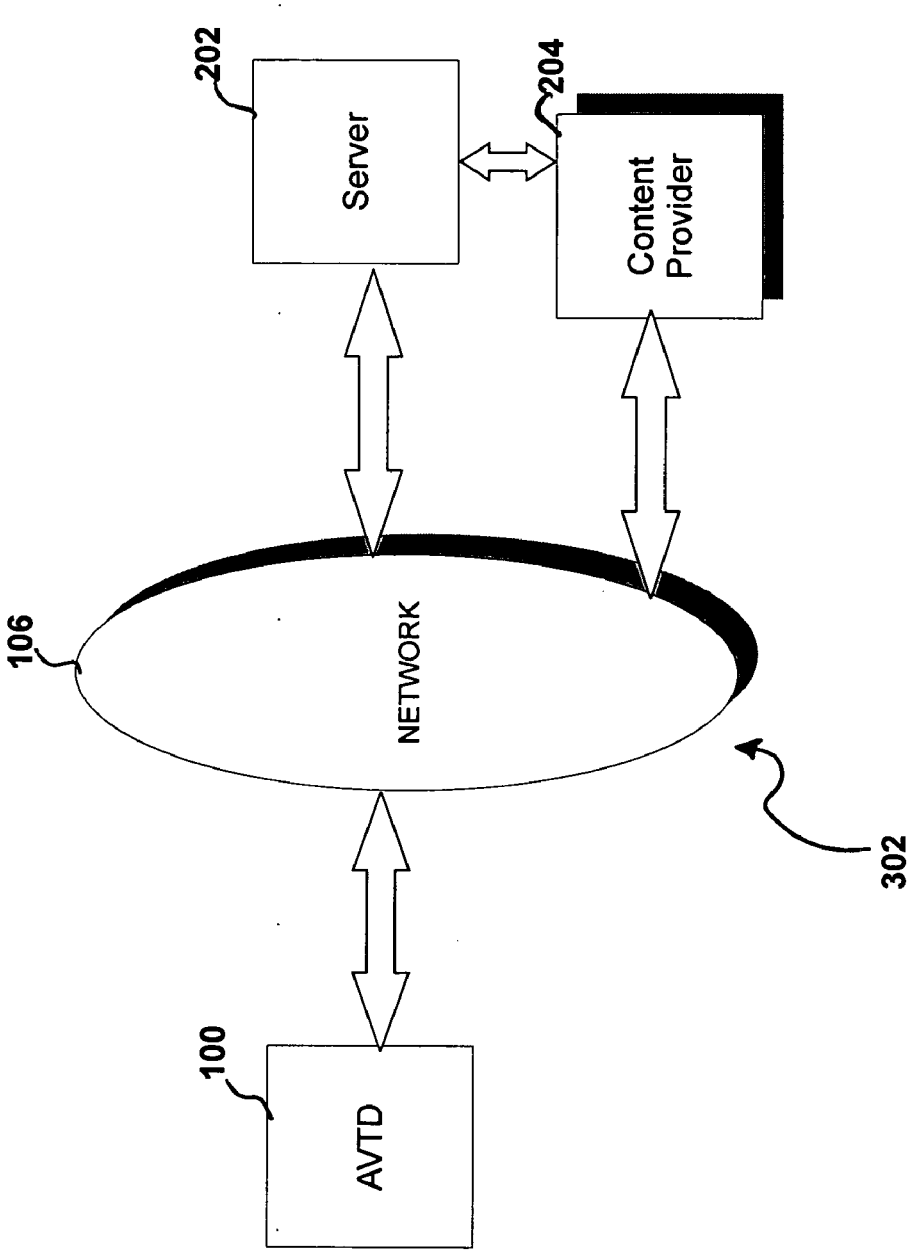


Figure 8

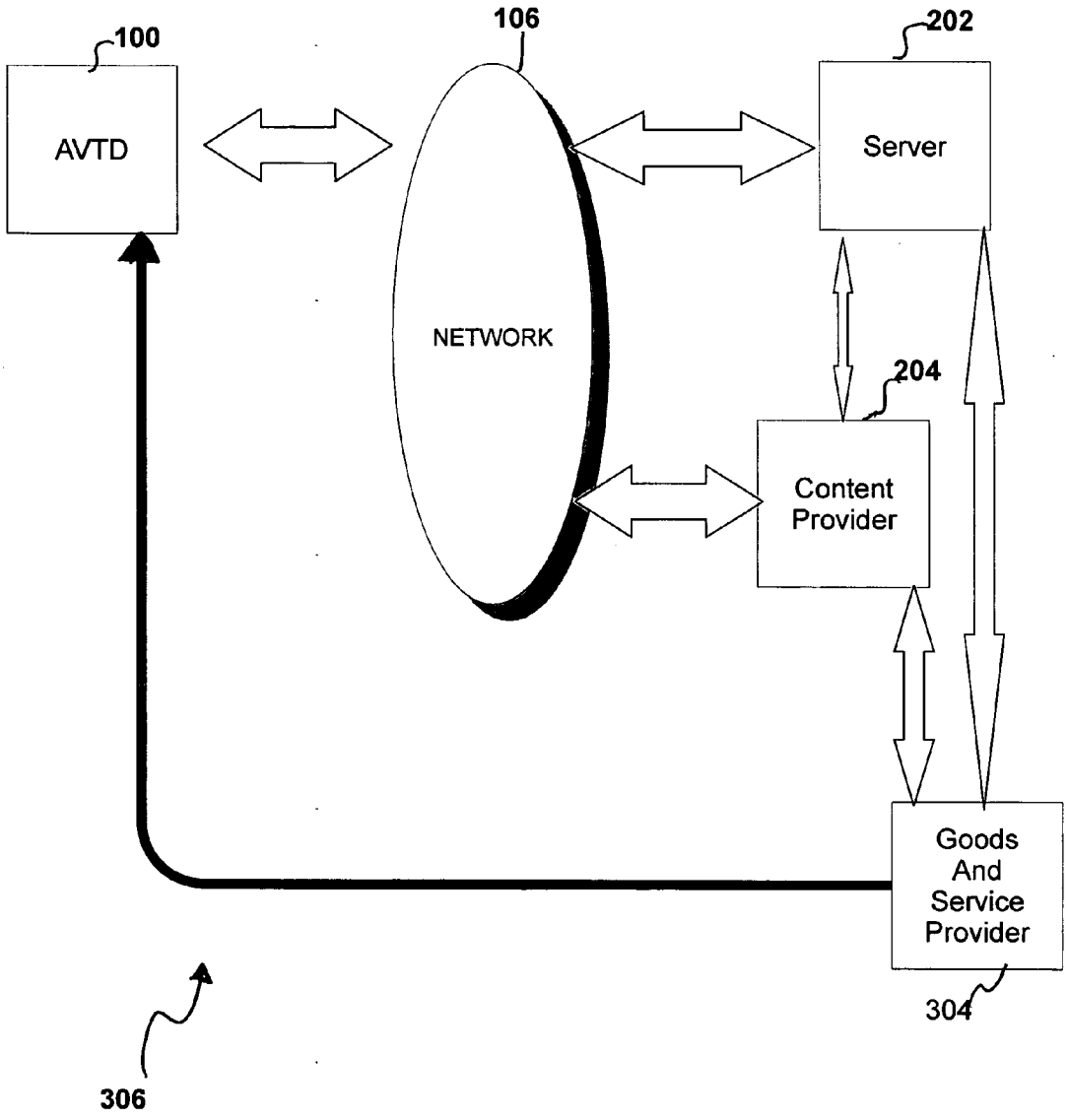

100
AVTD
106
NETWORK
202
Server
204
Content Provider
Goods And Service Provider
304
306

Figure 9

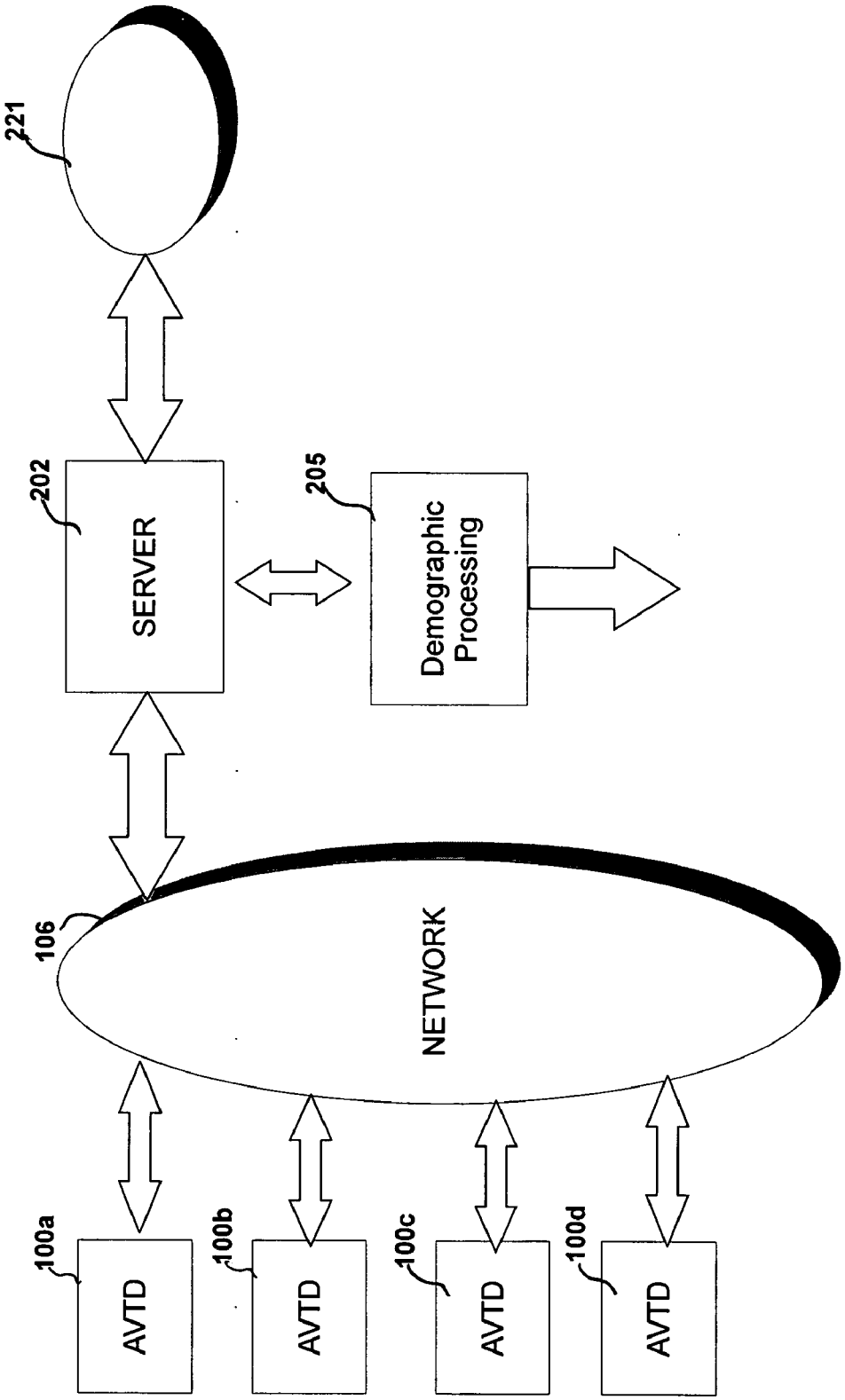

221
202
SERVER
205
Demographic Processing
106
NETWORK
100a
AVTD
100b
AVTD
100c
AVTD
100d
AVTD

Figure 10

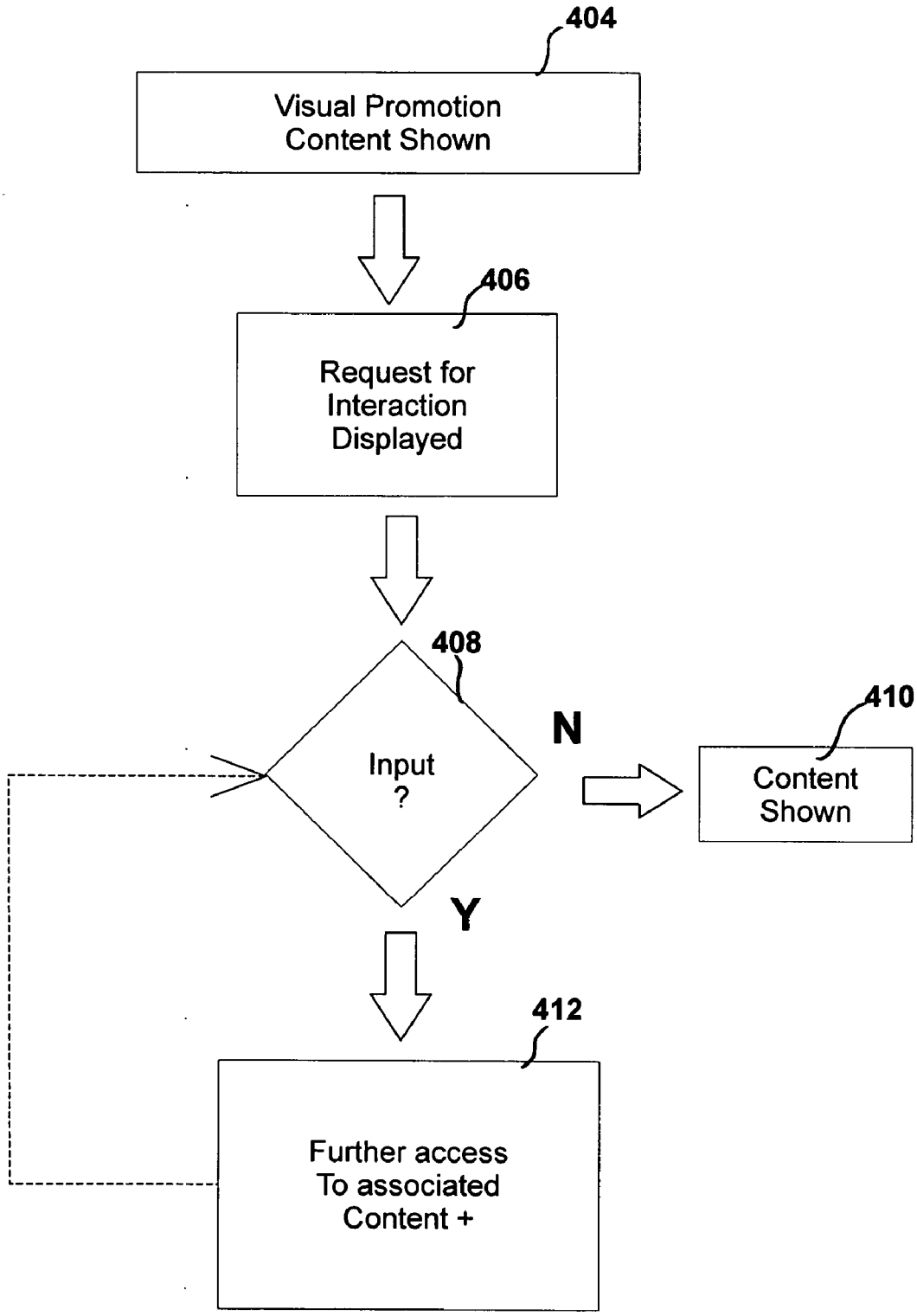

404
Visual Promotion Content Shown
406
Request for Interaction Displayed
408
Input ?
N
410
Content Shown
Y
412
Further access To associated Content +

Figure 11

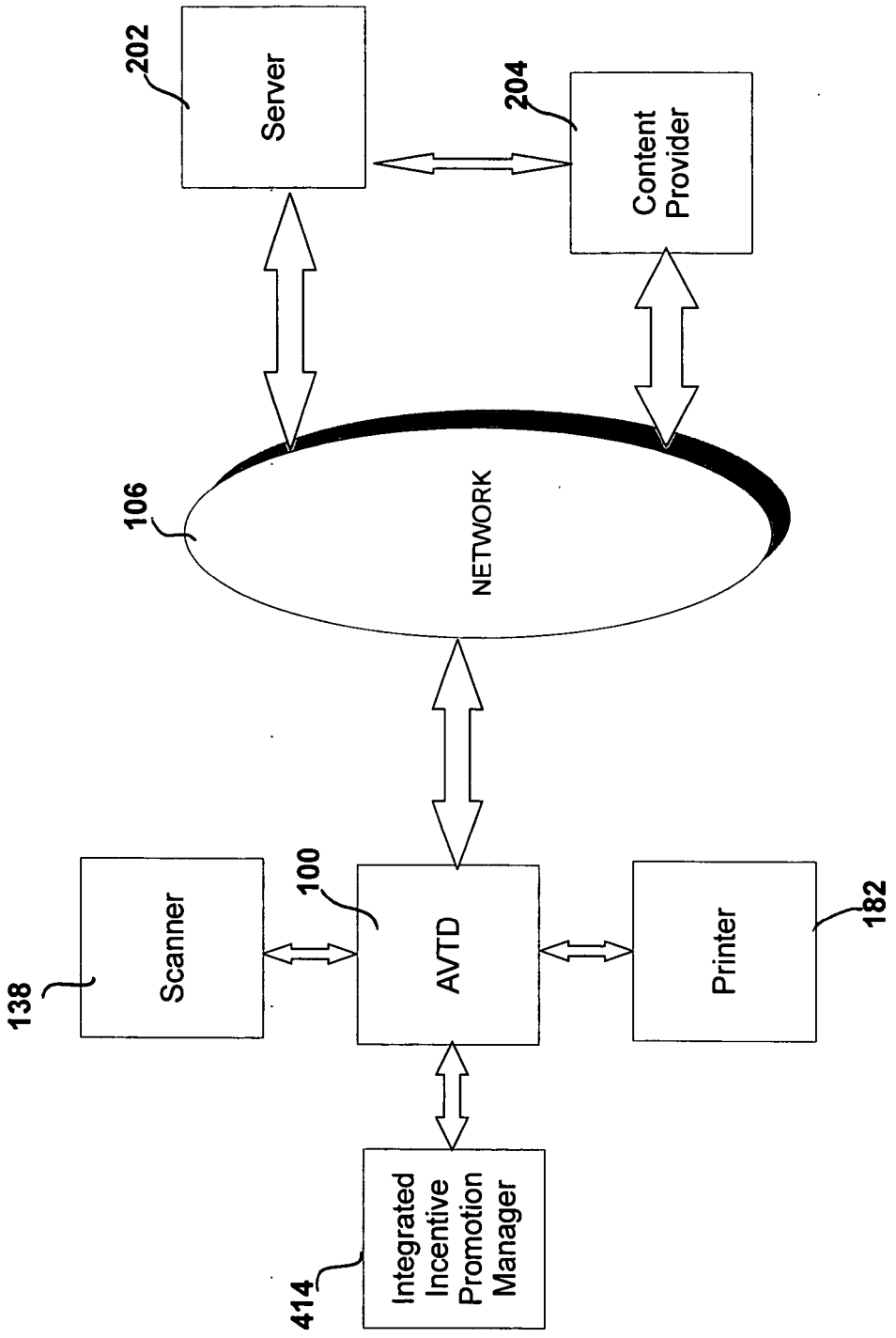

202
Server
204
Content Provider
106
NETWORK
100
AVTD
138
Scanner
182
Printer
414
Integrated Incentive Promotion Manager

Figure 12

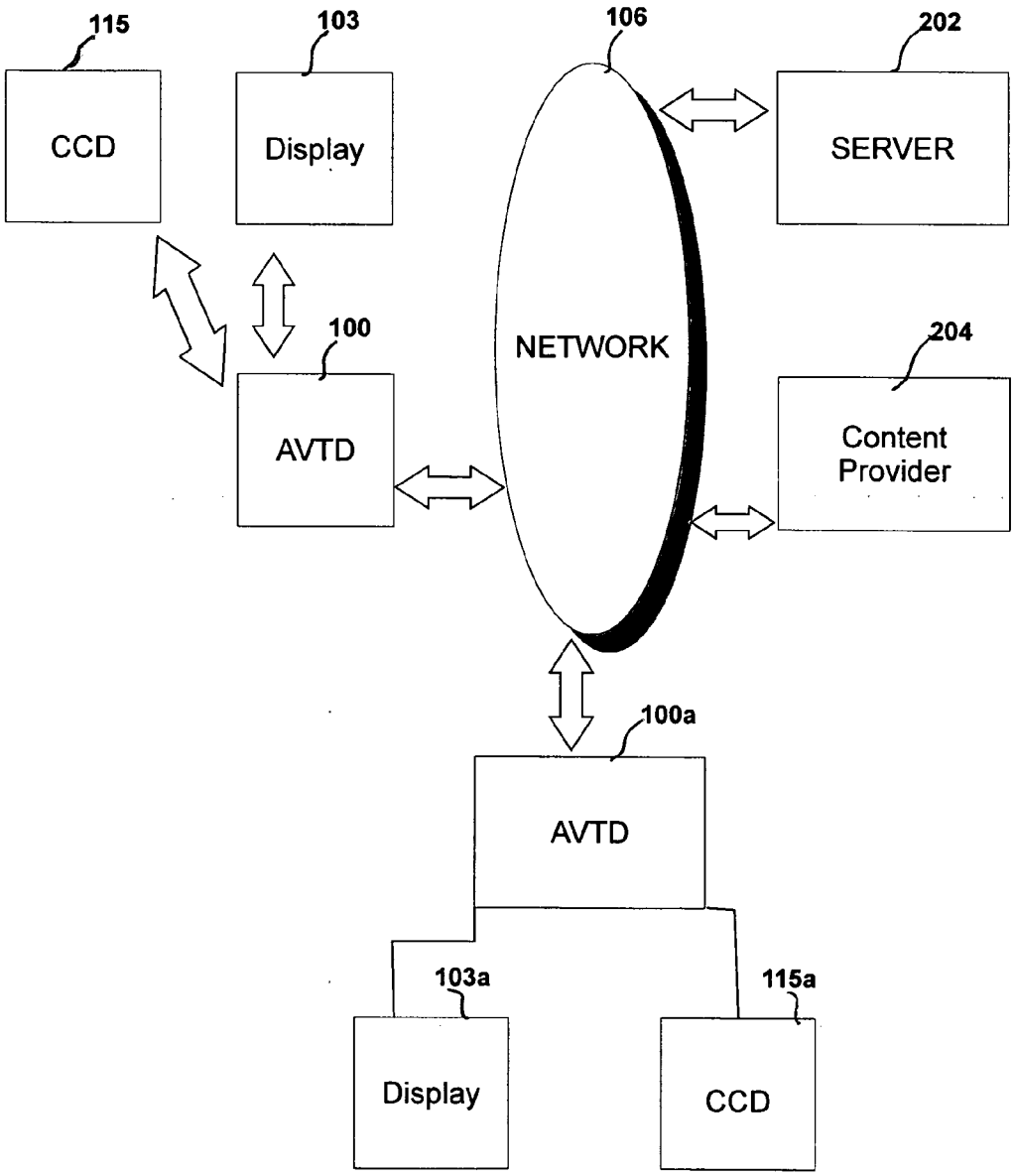

115
CCD
103
Display
106
NETWORK
202
SERVER
100
AVTD
204
Content Provider
100a
AVTD
103a
Display
115a
CCD

Figure 13

GLOBAL A/V TELECOMMUNICATIONS I.A.D. APPLIANCE, SYSTEMS AND SERVERS

RELATED APPLICATIONS

[0001] This application claims priority to U.S. Provisional Patent Application Ser. No. 60/592,651, entitled "HOUSEHOLD BROADBAND INFORMATION APPLIANCE" filed on Jul. 30, 2004, having J. Hutton Pulitzer, listed as the inventors, and Ser. No. 60/598,650, entitled "ON-DEMAND AUDIO VISUAL PROGRAMMING ON A TWO-WAY TELECOMMUNICATIONS DEVICE" filed on Aug. 4, 2004, having J. Hutton Pulitzer, listed as the inventors the entire content of each of which is hereby incorporated by reference.

TECHNICAL FIELD OF THE INVENTION

[0002] The invention relates to the field of video telephony, in particular to an integrated multi-network video telephones.

BACKGROUND OF THE INVENTION

[0003] The combination of video and audio channels provide a unique platform for interpersonal communication. With the availability of broadband Internet network connections in the home, there is an opportunity to provide further methods of interaction between content providers and consumers.

[0004] What is needed, therefore, is a system and method of providing a broadband information appliance.

SUMMARY OF THE INVENTION

[0005] An information appliance includes a network connection, a telecommunications processor connected to the network connection and a video processor connected to the network connection. When information appliance sends a media request through the network connection to a server such that media is sent to the information appliance in response to said media request.

[0006] On-demand audio-visual programming is provided on a two-way communication device by receiving a request for audio-visual programming from the two-way communication device at a server, connecting the two-way communication device to a content provider and providing audio-visual programming to the two-way communication device.

[0007] A method of providing advertisements on an A/V telecommunication device includes collecting demographic data with the A/V telecommunication device. The demographic data is provided to a host server. The hose server accumulates and provides the demographic data to a content provider. The A/V telecommunication device then receives media content, where the media content is selected by the content provider in response to the demographic data.

[0008] A method for incentive based promotion on an A/V telecommunication device includes delivering promotional content to an A/V telecommunication device. User input is requested over the A/V telecommunication device and a response to the input is delivered to the A/V telecommunication device.

[0009] A method of providing promotional content to an AW telecommunication device is performed by generating media content and providing media content to the A/V telecommunication device.

[0010] A method of commerce using an A/V telecommunication device is performed by requesting a transaction using the A/V telecommunication device. The transaction request is received by a host server and communicated to a provider. The provider then delivers according to the transaction to a user of the A/V telecommunication device.

[0011] An information appliance including a network connection, a telecommunications processor connected to the network connection and a video processor connected to the network connection. The information appliance collects data regarding a user of the information appliance.

[0012] An A/V telecommunication device including a network connection, a telecommunications processor connected to the network connection, and a video processor connected to the network connection may include an integrated interactive promotion.

[0013] An A/V telecommunication device including a network connection, a telecommunications processor connected to the network connection, and a video processor connected to the network connection may include an integrated incentive promotion manager connected to said telecommunication processor.

[0014] A method for providing advertising content in A/V messaging for an A/V telecommunication device including a network connection, a telecommunications processor connected to the network connection, and a video processor connected to the network connection may be performed by receiving a call initiation from a caller and recognizing a "no-answer" condition. A content provider sends advertising content to said caller. A message from the caller is then recorded.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] For a more complete understanding of the present invention and the advantages thereof, reference is now made to the following description taken in conjunction with the accompanying Drawings in which:

[0016] **FIG. 1** illustrates a household broadband information appliance;

[0017] **FIG. 1A** illustrates a handset for a household broadband information appliance;

[0018] **FIG. 2** illustrates a block diagram of a household broadband information appliance;

[0019] **FIG. 3** illustrates a block diagram of a household broadband information appliance;

[0020] **FIG. 4** illustrates a household broadband information appliance system;

[0021] **FIG. 5** illustrates a block diagram of a system for providing two-way audio-visual programming on demand;

[0022] **FIG. 6** illustrates a demographic driven advertising system;

[0023] **FIG. 7** illustrates a flowchart of incentive based promotion over an A/V telecommunication device;

[0024] **FIG. 8** illustrates a system for providing promotional content to an A/V telecommunication device;

[0025] **FIG. 9** illustrates a system for commerce using an A/V telecommunications device;

[0026] **FIG. 10** illustrates an A/V telecommunication system for collecting and processing user data;

[0027] **FIG. 11** illustrates a flowchart of an integrated interactive promotion;

[0028] **FIG. 12** illustrates an integrated incentive promotion manager; and

[0029] **FIG. 13** illustrates a system for providing advertising in messaging.

DETAILED DESCRIPTION OF THE INVENTION

[0030] Referring now to the drawings, wherein like reference numbers are used to designate like elements throughout the various views, several embodiments of the present invention are further described. The figures are not necessarily drawn to scale, and in some instances the drawings have been exaggerated or simplified for illustrative purposes only. One of ordinary skill in the art will appreciate the many possible applications and variations of the present invention based on the following examples of possible embodiments of the present invention.

[0031] With reference to **FIG. 1**, a functional depiction of a broadband information appliance **100** is shown. The broadband information appliance **100** includes a base unit **101**. The base unit **101** typically houses the processing circuits, memory storage, interfaces **105**, manual inputs **102** and power connections. The base unit **101** may be attached to a display **103**. The display **103** may be integral with the base unit **101**. The display **103** may be an independent unit fixedly attached to the base unit **101**. The display **103** may be interchangeably attached to the base unit **101** such that the display **103** may be easily exchanged for a different display **103**.

[0032] Base unit **101** may include manual inputs **102**. Typically the manual inputs **102** may include a standard telephone keypad with ten numeric buttons plus "#" and "*" buttons. The manual inputs **102** may further include any number of other buttons, switches, thumbwheels or other appropriate manual input devices. A wide variety of functions and features may be controlled using the manual inputs **102**. Manual inputs **102** may include navigation keys or a joystick for up, down, right and left selections, programmable soft keys. Power and status LEDs may also be provided.

[0033] Base unit **101** may be connected to a handset **104**. Handset **104** may be substantially a standard telephone handset including a microphone and speaker. Handset **104** may be directly connected to the base unit **101**. A handset **104** directly connected to the base unit **101** may be called a "tethered" or "wired" handset. Handset **104** may also include a wireless transceiver for wireless connection to a base unit including (or connected to) a wireless transceiver. The wireless transceivers may be a 2.4 gigahertz transceivers or may use any other suitable wireless transceiver frequency. The wireless transceivers may be spread spectrum transceivers. A handset **104** wirelessly connected to the base unit may be called a "wireless" handset.

[0034] Base unit **101** may be connected to an interface **105**. Typically, interface **105** will be integral with base unit **101**. Interface **105** includes an interface for connection to network **106**. Network **106** may be an open network such as the Internet. Interface **105** includes interface connections **107** for connecting the base unit **101** to a variety of peripherals or networks. Typically, the interface **105** will provide Ethernet ports, telephone handset and keypad support, video capture and display ports including NTSC composite input and output ports, S-video ports, NTSC camera ports and LCD display ports. The interface **105** may include audio capture and reproduction ports, an external microphone port, an external speaker port, two audio line level inputs, a handsfree speakerphone,

[0035] A digital video camera **115** may be connected to base unit **101**. Typically digital video camera **1105** is a CCD camera device. The digital video camera **115** may be integral with the base unit **101** or the display **103**. An additional digital video camera **137** may be integral with the handset **104**. A privacy shield **141** may be a cover provided to disable the digital video camera **137** by covering the lens of the digital video camera **137**.

[0036] With reference to **FIG. 1A**, a more detailed depiction of the features that may be incorporated into handset **104** is shown. The handset **104** typically includes a speaker **135** and a microphone **136** to provide standard audio communication. Handset **104** may include a digital video camera **137**, typically at one end of the handset **104**. A scanner **138** may be provided on the handset **104** to read machine readable codes or to scan image data. An LCD display **139** may be provided on the handset **104** to allow the user to see the input from digital video camera **137**, show video data being shown on display **103** when the handset **104** is being used remotely from the base **101**. The handset display **139** may also show alternate visual data. The handset **104** may include further manual inputs **140** to control the video camera **137**, handset display **139**, scanner **138**.

[0037] With reference to **FIG. 2**, a functional block diagram of a basic broadband information appliance **100** is shown. A gateway **110** provides an interface to network **106**. The gateway communicates with voice-over-internet-protocol (VOIP) hardware **111** and video hardware **114**. The VOIP hardware **114** may be directly connected to wired handset **104** or may be connected to a cordless base unit **112** which provides wireless communication with a cordless handset **113**. The video hardware **114** may be connected to a video camera **115** and a display **103**.

[0038] With reference to **FIG. 3**, a more detailed functional block diagram of a broadband information appliance **100** is shown. A gateway **110** provides communication with one or more networks **106**. Gateway **110** may be a Micrel KS8695P processor. The gateway **110** typically acts as the master boot processor for the broadband information appliance **100**. The gateway **110** is typically an integrated, multi-port PCI bridge system on a chip. The KS8695P integrates an ARM922T CPU, a PCI bridge that can support up to 3 external PCI masters and a 5-port switch with integrated media access controllers and low power Ethernet PHYs. The PCI interface can be connected gluelessly to miniPCI or cardbus wireless LAN cards that support 802.11a/g/b. Those skilled in the art will recognize that other processors, chips or configurations could be used for the gateway **110**.

[0039] The KS8695P gateway processor includes five Ethernet MAC and PHY, 10/100 Base-Transceivers. It

includes a PCI bridge and Master arbiter of up to 3 external PCI 2.1 compliant controllers, supporting a 32 bit data bus as 33 MHz clock speed. The processor includes a memory controller for glueless synchronous DRAM support at 133 MHz access of up to 32 MB, The processor has a standard memory bus for SRAM and flash ROM, 32 bit address, 32 bit data up to 32 MB, with general purpose I/O pins and a JTAG port.

[0040] Gateway **110** provides one or more external Ethernet ports. Gateway **110** includes Ethernet ports for both uplink **116** and downlink **117** connections. Typically, uplink **116** and downlink **117** are integrated, however according to some embodiments, separate communication links may be provided for the uplink **116** and downlink **117**, particularly where bandwidth limitations make it advisable to provide greater bandwidth for the downlink **117** than the uplink **116**.

[0041] Gateway **119** may be connected to a link controller **119**, a USB host controller **120**, a mini-PCI slot **121** or other interfaces. Gateway **119** may be connected to gateway memory **118**. Gateway memory **118** may be flash memory, SDRAM or other suitable memory device.

[0042] Gateway **119** may be connected to a VOIP processor **111**. A VOIP processor **111** is a communication processor for audio codec and telephone management. The VOIP processor **11** may be a Telogy TNETV1050 DSP. The VOIP processor may include a MIPS32 reduced instruction set computer processor and a C55 DSP. The RISC processor software supplies overall system services and performs user interface, network management, protocol stack management, call processing and task scheduling functions. The DSP software provides real-time voice processing functions such as echo cancellation, compression, pulse-code modulation data processing and tone generation and detection.

[0043] Two 10/100 Base-T Ethernet MAC and PHY are included with integrated layer-2 three-port Ethernet switches. On-chip peripherals include an 8×8 keypad interface, USB controller host, universal asynchronous receiver/transmitter serial interface, a programmable serial port, several general-purpose input/outputs and integrated voltage regulator.

[0044] The integrated dual channel 16-bit voice coder/decoder integrates the critical functions needed for IP phone applications, including two analog-to-digital converters and two digital to analog converters. Other features include analog and digital sidetone control, filter, programmable gain options, a programmable sampling rate, 8-speaker driver, microphone, handset and headset interfaces.

[0045] The VOIP processor **111** may include dual Ethernet MAC and PHY, 10/100 base transceivers. The VOEP processor **111** may include a speaker and microphone for handset, headset, and optional input and output sources. The VOIP processor **111** may include a PC and Palm compatible IrDA transceiver, a RS-232 serial port, a USB host port, general purpose I/O pins for LED and configuration options. The VOIP processor **111** may include synchronous DRAM, 133 MHz up to 128 MB, a standard memory bus, a JTAG port and HP Logic analyzer connectors. Those skilled in the art will recognize that other VOIP processors may be used as suitable.

[0046] VOIP processor **111** may be connected to a VOIP memory **112**. VOIP memory **112** may be a flash memory, SDRAM or other suitable memory devices. The VOIP hardware **111** may be connected to a handset **104** or a cordless base **112** which provides wireless communication with a cordless handset **113**. The VOIP hardware **111** may be connected to manual input devices **102**, a microphone **124**, a speaker **123**. VOIP hardware **111** may be connected to an alpha-numeric keyboard **125**.

[0047] Gateway **110** may be connected to video processor **114**. The video processor **114** is a video codec and LCD panel controller. The VOIP processor **111** may be a TI TMS320DM642 digital signal processor. The digital signal processor may be based on the second-generation high-performance advanced VelociTI very-long-word-instruction (VLIW) architecture. The digital signal processor may provide 4800 million instructions per second at a clock rate of 600 MHz. The DSP offers operational flexibility of high speed controllers and the numerical capability of array processors. A DSP core processor has 64 general purpose registers of 32-bit word length and eight independent functional units including two multipliers for 32 bit word length and six arithmetic logic units. The DSP provides extensions in the eight functional units including new instructions to accelerate performance in video and imaging applications to extend parallelism. The DSP can produce four 32-bit multiply accumulates per cycle for a total of 2400 million MACs per second or eight 8-bit MACs per cycle for a total of 4800 million MACs. The DSP may have application specific hardware logic, on-chip memory and additional on-chip peripherals,

[0048] The DSP typically uses a two-level cache-based architecture. A Level 1 program cache is a 128-Kbit direct mapped cache and a Level 1 data cache is a 128-Kbit 2-way set-associative cache. A Level 2 memory cache consists of a 2-Mbit-memory space that is shared between program and data space. Level 2 memory can be configured as mapped memory.

[0049] The peripheral set may include configurable video ports; a 10/100 Mb/s Ethernet MAC; a management data input/output; a VCXO interpolated control port; a multichannel buffered audio serial port; an inter-integrated circuit bus module; two multichannel buffered serial ports; three 32-bit general purpose timers; a user-configurable 16-bit or 32-bit host port interface; a peripheral component interconnect; a 16-ping general-purpose input/output port with programmable interrupt/even generation modes; and a 64-bit glueless external memory interface which is capable of interfacing to synchronous and asynchronous memories and peripherals.

[0050] The DSP may have three configurable video port peripherals. These video port peripherals provide a glueless interface to common video decoder and encoder devices. The DSP video port peripherals support multiple resolutions and video standards. The video ports peripherals are configurable and can support video capture and video display modes. Each video port may include two channels with a 5120 byte capture/display buffer that is split-able between the two channels.

[0051] The DSP may include three video ports including a capture port interfaced with a Philips SAA7115 decoder with integrated multiplexer for NTSC, S-video sources; display port interfaced with Philips SAA7105 NTSC and S-video encoder and a third port dedicated to an LCD panel.

The DSP may include Ethernet MAC 10/100 Base-Transceivers, The DSP may include general purpose I/O pins and a JTAG port. The DSP may be a synchronous DRAM 64-bit wide, 133 MHz up to 1 GB support. The DSP may include a standard asynchronous memory bus 32 bit. The DSP may include HP logic analyzer connectors for memory bus address, data and control signals. Those skilled in the art will recognize that other DSP processors may be implemented.

[0052] The video processor **114** may be connected to a video memory **128**. Video memory **128** may be a flash memory, SDRAM or other suitable memory device. The video processor **114** may be connected to an video decoder **126**. Video decoder **126** may be a NTSC decoder. Video decoder **126** may receive video signals from an external source **127** or a video camera **115**. The video processor **114** may be connected to a video encoder **129**. The video encoder **129** may be an NTSC encoder. The video encoder **129** may be integral with a CSC **133** to provide video signals to an RGB/LCD panel **132**. The video encoder **129** may provide video signals to an LCD panel **130** and a CV/S/RGB output.

[0053] The gateway **110**, VOIP processor **111** and video processor **114** may be mutually connected to a CPLD decoder **134**.

[0054] The broadband information appliance **100** may include smart media access, an infrared transceiver, an unpowered firewire port, fast peripheral ports, a wireless interface, Bluetooth support and a HomePlug interface.

[0055] The broadband information appliance **100** may be an AC powered device, using residential power distribution of 120 VAC at 60 Hz or 230 VAC at 50 Hz. A power adapter may convert the AC power to 12 volts DC.

[0056] With reference to **FIG. 4**, a household broadband information appliance system **200** is shown. A household broadband information appliance **100** may be connected to a network **106** such as the Internet with a broadband connection. The network **106** is connected to a host server **202** which manages the information network. The host server **202** is connected to one or more content providers **204**. The content provider **204** may be connected directly to the Internet **106**.

[0057] The household broadband information appliance **100** may send requests for and retrieve various educational, informational and entertainment messages and information. The host server **202** receives the requests from the household broadband information appliance **100**. The host server **202** sends a request to the content provider **204**. The content provider **204** may provide content to the household broadband information appliance **100** directly through the Internet **106** or through the host server **202**.

[0058] The content provider **204** may send video, audio, text or other forms of media.

[0059] The broadband information appliance typically includes three memory module, particularly the gateway memory **118**, the VOIP memory **122** and the video memory **128**. SDRAM memory may be connected through each of the direct SDRAM interfaces in the DSP and gateway processors. SDRAM may be rated to operate at 133 MHz and terminated with discrete components. Dedicated SDRAM for each processor may be used.

[0060] The household broadband information appliance **100** may send programming requests, scheduling requests or other information requests to the host server **202**. The host server **202** processes the received requests and sends appropriate requests to content providers. The host server **202** may store scheduling requests in memory for action at the later, scheduled time. The content provider, here shown as a call center **208**, assistance operator **238** and A/V content **240**, connects to the household broadband information appliance **100** at the appropriate time to engage the consumer in a two-way audio-visual communication session. The assistance operator **238** is typically a human operator who may speak to the consumer while a video image of the assistance operator **238** is shown on display **103**. The assistance operator **238** may transmit A/V content **240** as appropriate. The assistance operator **238** may send e-mail, print material or other forms of communication to the consumer.

[0061] With reference to **FIG. 4**, a system for providing advertisement to a A/V telecommunication device **100** in response to demographic information **262** is shown. The A/V telecommunication device **100** collects demographic information from the users by means of a scanner **137** which may read machine readable codes or provide other forms of scanned data and manual inputs **102**. The demographic data is sent to the host server **202** over network **106**. Host server **202** may accumulate the demographic data in a database **221**. The demographic data may be processed by the host server **202**. The server **202** may provide the demographic data to content providers. Content providers **204** provide media content to the A/V telecommunication device in response to the demographic data. The demographic data may result from the scan of codes associated with print advertisements, codes associated with purchased products, codes input from other media sources, acknowledgments or requests for further information of media content displayed on the A/V telecommunication device.

[0062] With reference to **FIG. 4**, a flowchart of a process **266** for providing incentive-based promotions on an A/V telecommunication device **100**. Content providers may wish to provoke consumer responses, in the form of simple acknowledgements, data inputs, scanned data inputs, voting or other forms of interactive promotions. Promotional content is delivered to the A/V telecommunication device **100** at function block **268**. A promotional request for consumer action is delivered at function block **270**. The A/V telecommunication device monitors the inputs **102** to determine if there has been an input at decision block **272**. If there is no input, the process follows the NO path to function block **268** where further promotional content is delivered. If an input is detected, the process follows the YES path to function block **274** where a promotional response is delivered. The promotional response may be further promotional material, a connection to a human operator, entry into a contest, the mailing of a paper coupon, email or any other suitable response to the input.

[0063] With reference to **FIG. 4**, a system for providing promotional content to an A/V telecommunication device **100** is shown. In this embodiment, a content provider generates media content including audio or video programming such as advertisements, informational or educational content, entertainment content, interactive communication content or other A/V content. In response to a consumer request from the A/V telecommunication device **100** or as

determined by the host server **202**, the content provider **204** provides the media content to the A/V telecommunication device.

[**0064**] With reference to **FIG. 4**, a system for conducting commerce **306** using an A/V telecommunication device **100** is shown. An AW telecommunication device **100** sends a request for a product or service to the host server **202** via network **106**. A financial transaction may be arranged over the network **106** or may be arranged in any other suitable fashion. The server **202** may arrange the delivery of product or service to the A/V telecommunication device **100** user by communication with a goods or service provider **304**. The goods or service provider **304** delivers the purchased goods or services to the user of the A/V telecommunication device **100**.

[**0065**] With reference to **FIG. 4**, an A/V telecommunication system for collecting and processing consumer and demographic data is shown. A/V telecommunication devices 1OOa, 1OOb, 1OOc and 1OOd are connected to network **106** and thereby to server **202** having memory **221**. As users of the A/V telecommunication devices **100** collect user data including preferences and habits. The data may be collected by manual inputs, scans or other inputs. The data may be inferred from the users use or choices in using the A/V telecommunication devices. Interactive content may solicit data from users. The server **202** collects the user data from each of the A/V telecommunication devices 1OOa, 1OOb, 1OOc and 1OOd. The user data is processed **205** and may be distributed as appropriate to commercial markets, advertisers or other interested parties.

[**0066**] With reference to **FIG. 4**, a flowchart of an in integrated interactive promotion is shown. With the A/V telecommunication device **100** functioning, video data may be displayed on display **103**. Visual promotional content is displayed at function block **404**. The visual promotional content may include a request for interaction in the audio or video. A manual input **102** may change states, for example, begin flashing, to encourage interaction. When the request for interaction is made at function block **406**, the A/V telecommunication device determines if an input has been made at decision block **408**. Where the user has performed the requested input, the process follows the NO path to function block **410** where additional content is displayed. If the user has provided the requested inputs, the process follows the YES path to function block **412** where the A/V telecommunication device is given further access to the promotional material, by establishing two-way A/V communication with an associate, the display of further media content or a mixture of the two. Further input requests may lead the process to feed back to decision block **408** to check the presence of additional requested inputs.

[**0067**] With reference to **FIG. 4**, an A/V telecommunication device **100** with an integrated incentive promotion manager **414** is shown. A/V telecommunication device **100** may receive transmissions from content provider **204** or host server **202** via network **106**. The transmissions may request inputs from a consumer, such as scanning bar codes of products using scanner **138** of A/V telecommunication device **100**. In return for providing the requested inputs, the content provider **204** may provide incentives to the consumer, such as entering the consumer into a contest or transmitting coupons to the consumer, perhaps to be printed on printer **182** of A/V telecommunication device **100**.

[**0068**] With reference to **FIG. 4**, an A/V telecommunication system for providing advertising in A/V message recording and playback. When an AVTD 1OOa initiates an A/V telecommunication session with AVTD **100** via network **106** in cooperation with server **202**, a call notification is played on AVTD **100**. If there is no answer at AVTD **100**, server **202** notifies content provider **204**. Content provider sends advertising content to AVTD 1OOa, including a request for message recording. The user at AVTD 1OOa may record a message using CCD camera **115**. The recorded message may be stored at server **202** or some other appropriate location.

[**0069**] It will be appreciated by those skilled in the art having the benefit of this disclosure that this invention provides a broadband information appliance. It should be understood that the drawings and detailed description herein are to be regarded in an illustrative rather than a restrictive manner, and are not intended to limit the invention to the particular forms and examples disclosed. On the contrary, the invention includes any further modifications, changes, rearrangements, substitutions, alternatives, design choices, and embodiments apparent to those of ordinary skill in the art, without departing from the spirit and scope of this invention, as defined by the following claims. Thus, it is intended that the following claims be interpreted to embrace all such further modifications, changes, rearrangements, substitutions, alternatives, design choices, and embodiments.

What is claimed is:

1. An information appliance comprising:

a network connection;

a telecommunications processor connected to the network connection;

a video processor connected to the network connection;

wherein said information appliance sends a media request through the network connection to a server such that media is sent to the information appliance in response to said media request.

2. A method of providing on-demand audio-visual programming on a two-way communication device including a network connection, a telecommunications processor connected to the network connection and a video processor connected to the network connection, comprising the steps of:

receiving a request for audio-visual programming from the two-way communication device at a server;

connecting said two-way communication device to a content provider; and

providing audio-visual programming to the two-way communication device.

3. A method of providing advertisements on an A/V telecommunication device comprising the steps of:

collecting demographic data with the A/V telecommunication device;

providing the demographic data to a host server; and

providing the demographic data to a content provider receiving media content at the A/V telecommunication

device, where said media content is selected by said content provider in response to said demographic data.

4. A method for incentive based promotion on an A/V telecommunication device comprising the steps of:

delivering promotional content to an A/V telecommunication device;

requesting user input over the A/V telecommunication device; and

responding to user input over the A/V telecommunication device.

5. A method of providing promotional content to an A/V telecommunication device comprises the steps of:

generating media content; and

providing media content to the A/V telecommunication device.

6. A method of commerce using an A/V telecommunication device comprising the steps of:

requesting a transaction using the A/V telecommunication device;

receiving said transaction request by a host server;

communicating said transaction request to a provider; and

delivering according to the transaction by the provider to a user of the A/V telecommunication device.

7. An information appliance comprising:

a network connection;

a telecommunications processor connected to the network connection; and

a video processor connected to the network connection.

8. An information appliance comprising:

a network connection;

a telecommunications processor connected to the network connection;

a video processor connected to the network connection; and

wherein said information appliance collects data regarding a user of the information appliance.

9. An A/V telecommunication device comprising:

a network connection;

a telecommunications processor connected to the network connection;

a video processor connected to the network connection; and

an integrated interactive promotion.

10. An A/V telecommunication device-comprising:

a network connection;

a telecommunications processor connected to the network connection;

a video processor connected to the network connection; and

an integrated incentive promotion manager connected to said telecommunication processor.

11. A method for providing advertising content in A/V messaging for an A/V telecommunication device including a network connection, a telecommunications processor connected to the network connection, and a video processor connected to the network connection, said method comprising:

receiving a call initiation from a caller;

recognizing a "no-answer" condition;

sending advertising content to said caller; and

recording a message from said caller.

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