ADVERTISEMENT PLAYBACK APPARATUS

TECHNICAL FIELD

The present utility model relates to an advertisement playback apparatus, and in particular, to a network multimedia advertisement playback apparatus.

DESCRIPTION OF THE PRIOR ART

As the rapid development of the advertising industry, various advertisement propaganda materials are now everywhere. The development of liquid crystal television playback technology causes some sites, such as elevator and its waiting hall, to be also equipped with the liquid crystal television advertisement playback apparatus. There are mainly two kinds of the existing advertisement playback apparatus: one adopts a DVD playback mode, which is made by combining a DVD player with a LCD; and the other one is a computer playback mode, which adopts the mode of one computer combining with several displays. In the DVD playback mode, the image quality is excellent, but the shortage is that the information can not be issued instantly, since the advertising program is updated by replacing DVD disc, and it is impossible to play different advertising content in different time period, and to meet the requirements on times of repetition. In the computer playback mode, a wired network transmission playback and instant information issuance can be implemented. However, since the computer must be placed in a machine house, and the work of wiring to the working field is very difficult, it is limited by the environment in many aspects.

SUMMARY OF THE INVENTION

The object of the present utility model is to provide an advertisement playback apparatus, which can implement network transmission playback and instant information issuance without being limited by the environment.

In order to realize the above object, the present utility model comprising: a computer

motherboard, a hard disc, a power supply, a LCD control panel, a LCD screen, a casing, a speaker, and a keyboard/mouse, wherein the computer motherboard integrating a CPU, a memory, a display card, a north/south bridge, and a sound card, as well as an IDE interface, a 100M network port, double USB2.0 interfaces, a RS232 interface, a VGA display interface, a Video/Audio interface, and a keyboard/mouse interface, wherein the IDE interface being connected with the hard disc, the LCD control panel having its input port connected with the VGA display interface, and its output port connected with the LCD screen, the keyboard/mouse being connected with the keyboard/mouse interface, the speaker being connected with the speaker output terminal of the LCD control panel, and the power supply having its 5V output terminal connected with the computer motherboard, and its 12V output terminals connected with the computer motherboard and the LCD control panel respectively, wherein the 100M network port, one of the USB interfaces, the Video/Audio interface, and the keyboard/mouse interface on the computer motherboard being used as external interfaces of the apparatus, characterized in that further comprising a timer and a GPRS/CDMA 1X wireless modem, wherein the timer having its input terminal connected with the 220V AC network, and its output terminal connected with the input terminal of power supply, and the GPRS/CDMA 1X wireless modem being connected to the RS232 interface, wherein the computer motherboard, the hard disc, the power supply, the GPRS/CDMA 1X wireless modem, the timer, and the speaker being respectively mounted at the inner bottom of the casing, and the LCD screen being mounted at the top of the casing. In using, the timer switches the present apparatus on time by controlling the on/off of the 220v AC. When the present apparatus is powered on, the hard disc serves as data source and stores software and data, i.e. advertising program files etc. The software and data are read from the hard disc by the CPU via the IDE interface. The software is performed and the data of the advertising program file is read out to be processed and played back. If the data on the hard disc need to be updated, the new data can be obtained either from the wired network via the 100M network port of the computer motherboard, or from the wireless network via wireless modem or 802.11 wireless LAN card. The new data can also be obtained from an external mobile storage device via one of

the USB interface.

The abovementioned computer motherboard is implemented by FM-266, and LE362 can also be adopted. The hard disc is implemented by Hitachi 40G or Seagate 40G. GPRS/CDMA 1X wireless modem is implemented by ETPro series, and ME45, ME1203, ZXGM18 can also be adopted. The LCD control panel is implemented by gm5020. the LCD screen is implemented by Qimei 17-inch-screen, and Youda 17-inch-screen and Samsung 17-inch-screen can also be adopted.

In order that several apparatuses adjacent to each other can playback synchronously, an 802.11 wireless LAN card is connected to one of the USB interfaces on the computer motherboard, and the 802.11 wireless LAN card is implemented by XI-735 or XI-725, so that flow media broadcasting type playback can be performed over the network. In using, one apparatus serves as a host computer and sends out the advertising program file stored on the hard disc via the wireless LAN card, and the other apparatuses receive data via wireless LAN card and perform decoding and playback.

With a GPRS/CDMA 1X wireless modem and an 802.11 wireless LAN card added, the present utility model changes the conventional mode in which the playback contents are transmitted only through a wired network into the mode in which the playback contents can be transmitted not only through a wired network but also through a wireless network, and further playback information can be obtained from an external mobile storage device via a USB interface. The present utility model has the function of synchronous playback of several apparatuses adjacent to each other. The usage of the present apparatus is not limited by the environment. The application range thereof is extended. Further, since the size of the employed computer motherboard is only 11cm×7cm×3.2cm, the employed CPU has a low power consumption, and the employed display chipset has a MPEG II hardware acceleration function, the size of the present apparatus is small, and it is not necessary to construct a machine house for the apparatus.

Moreover, the employed GPRS/CDMA 1X wireless modem can directly receive new information by means of short massage, so as to issue instant news information and update the playback list.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a block diagram of the present utility model;

Fig. 2 is a three-dimensional schematic diagram of the present utility model.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

As shown in Fig. 1, the computer motherboard 1 is implemented by FM-266, the hard disc 2 is implemented by Hitachi 40G, the LCD screen 4 is implemented by Qimei 17-inch-screen, the speaker 5 is implemented by 2-watt-8-ohm sound-box-type speaker, there is no special requirement on the keyboard/mouse 6, timer 7, and power supply 3, which can be implemented as conventional. The GPRS/CDMA 1X wireless modem 8 is implemented by ETPro IV, the 802.11 wireless LAN card 9 is implemented by XI-735, and the LCD control panel is implemented by 11gm5020. The computer motherboard 1 integrates a CPU, a memory, a display card, a north/south bridge, a sound card as well as an IDE interface, a 100M network port, double USB2.0 interfaces, a RS232 interface, a VGA display interface, a Video/Audio interface, and a keyboard/mouse interface. The IDE interface is connected with the hard disc 2, the LCD screen 4 is connected with the output interface of the LCD control panel 11, the input interface of the LCD control panel 11 is connected with the VGA display interface, the keyboard/mouse is connected with the keyboard/mouse interface, the speaker 5 is connected with the speaker output terminal of the LCD control panel. The 100M network port, one of the USB interfaces, the Video/Audio interface, and the keyboard/mouse interface on the computer motherboard 1 are used as the external interfaces of the apparatus. The timer 7 has its input terminal connected with the 220V AC network, and its output terminal connected with the input terminal of power supply 3. The power supply 3 has its 5V output terminal connected with the computer motherboard 1, and its 12V output terminals connected with the computer

motherboard 1 and the LCD control panel 11 respectively. The GPRS/CDMA 1X wireless modem 8 is connected to the RS232 interface, the 802.11 wireless LAN module 9 is connected to the other USB interface. In using, the CPU reads software data on the hard disc via the IDE interface to perform the software, and reads the advertising program file data to perform decompressing process, then sends the display data to the display card after the caption information is converted into the dot-matrix information and superimposed on the image data. The display card D/A converts the display data into a RGB analog VGA signal, which is then sent to the LCD control panel. The LCD control panel A/D converts the analog display signal generated by the computer motherboard into the digital signal required by the liquid crystal module, and sends the digital signal to the liquid crystal module to present the display signal processed by the display control panel. The GPRS/CDMA 1X wireless modem 8, which is a wireless modem embedded with a TCP/IP protocol, mainly provides a wireless interface for voice transmission, short massage transmission and reception, and data service. The GPRS/CDMA 1X wireless modem 8 integrates a complete RF circuit and a base band processor for GSM or CDMA 1X, and realizes the man-machine conversation via the RS232 interface or USB interfaces. The CPU controls the GPRS/CDMA 1X modem 8 via the RS232 interface, and reads the data, such as advertising program files, file lists and caption information, received by the GPRS/CDMA 1X modem 8, and stores them into the hard disc 2 to perform data update. The data update can also be performed by coupling the apparatus to either the wideband network of the building via the 100M network port or the wireless wideband network via the 802.11 wireless LAN card, and obtaining the data from a network server of the company at background through Internet, or the data update can be performed by directly connecting the USB external mobile storage device to the USB interface and the apparatus automatically downloading data to the hard disc 2. For the purpose that several apparatuses adjacent to each other can playback synchronously, one of them serves as a host computer and sends out the advertising program file stored on the hard disc 2 via the 802.11 wireless LAN card 9, and the other apparatuses receive data via the 802.11 wireless LAN card 9 and perform decoding and playing back. The apparatus can also be connected

to other LCDs having Audio/Video input interface in a wired manner via Audio/Video output interface, so as to perform synchronous playback. The apparatus can be set via the keyboard/mouse. Ordinarily, the keyboard and mouse are not connected to the machine, and the data update of the apparatus is performed by the controlled automatic detection and automatic update of the software.

As shown in Fig. 2, the computer motherboard 1, the hard disc 2, the power supply 3, the speaker 5, the LCD control panel 11, the timer 7, the GPRS/CDMA 1X modem 8, and the 802.11 wireless LAN card 9 according to the present utility model are respectively mounted at the inner bottom of the casing 10, the LCD screen 4 is mounted at the opening on the top of the casing 10. Ordinarily, mouse 6 is not connected to the machine, and is connected only when the apparatus needs to be set.

CLAIMS

What is claimed is:

1. An advertisement playback apparatus, comprising: a computer motherboard (1), a hard disc (2), a power supply (3), an LCD control panel (11), a LCD screen (4), a casing (10), a speaker (5), and a keyboard/mouse (6), wherein the computer motherboard (1) integrating a CPU, a memory, a display card, a north/south bridge, and a sound card as well as an IDE interface, a 100M network port, double USB2.0 interfaces, a RS232 interface, a VGA display interface, a Video/Audio interface, and a keyboard/mouse interface, wherein the IDE interface being connected with the hard disc (2), the LCD control panel (11) having its input port connected with the VGA display interface and its output port connected with the LCD screen (4), the keyboard/mouse (6) being connected with the keyboard/mouse interface, the speaker (5) being connected with the speaker output terminal of the LCD control panel (11), the power supply (3) having its 5V output terminal connected with the computer motherboard (1) and its 12V output terminals connected with the computer motherboard (1) and the LCD control panel (11) respectively, wherein the 100M network port, one of the USB interfaces, the Video/Audio interface, and the keyboard/mouse interface on the computer motherboard (1) being used as external interfaces of the apparatus, characterized in that further comprising a timer (7) and a GPRS/CDMA 1X wireless modem (8), wherein the timer (7) having its input terminal connected with the 220v AC network and its output terminal connected with the input terminal of the power supply (3), and the GPRS/CDMA 1X wireless modem (8) being connected to the RS232 interface, wherein the computer motherboard (1), the hard disc (2), the power supply (3), the GPRS/CDMA 1X modem (8), the timer (7), and the speaker (5) being respectively mounted at the inner bottom of the casing (10), and the LCD screen (4) being mounted on the top of the casing (10).

2. The advertisement playback apparatus according to claim 1, characterized in that: the computer motherboard (1) is implemented by FM-266, the hard disc (2) is

implemented by Hitachi 40G, the GPRS/CDMA 1X wireless modem (8) is implemented by ETProIV, the LCD control panel (11) is implemented by 11gm5020, and the LCD screen (4) is implemented by Qimei 17-inch-screen.

3. The advertisement playback apparatus according to claim 1 or 2, characterized in that: an 802.11 wireless LAN card (9) is connected to one of the USB interfaces on the computer motherboard (1), and the 802.11 wireless LAN card (9) is implemented by XI-735.