



(19) **United States**

(12) **Patent Application Publication**

Lee et al.

(10) **Pub. No.: US 2003/0125077 A1**

(43) **Pub. Date: Jul. 3, 2003**

(54) **MULTIMEDIA WATCH**

(52) **U.S. Cl. .... 455/556; 455/550**

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(57) **ABSTRACT**

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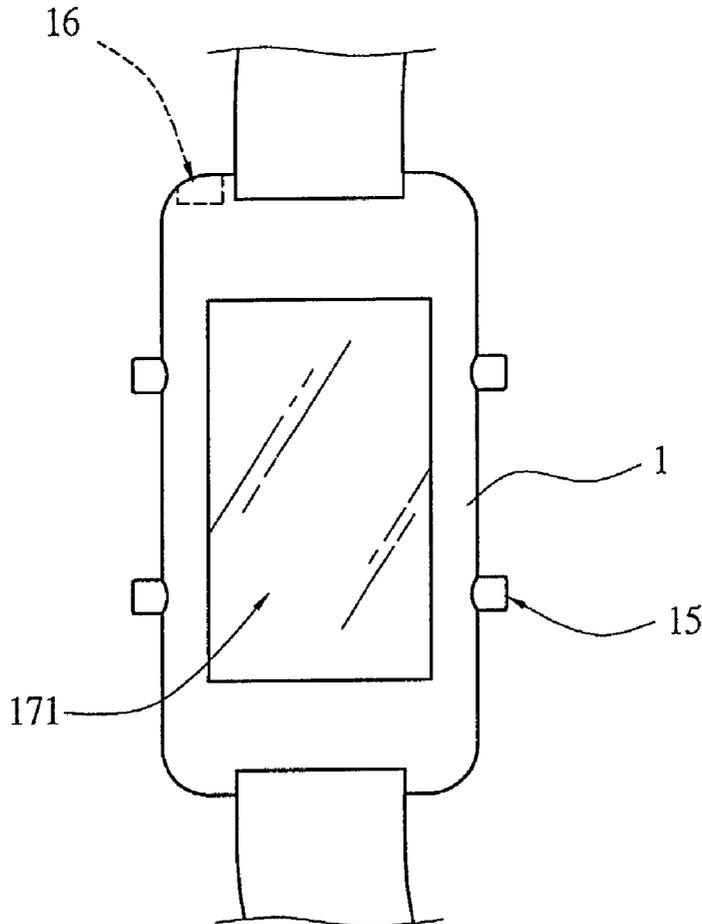
A multimedia watch includes CPU, memory, timer, a communication interface, a keyboard, a connector, a display interface, an amplifier, and a driver. The display interface is connected with a flat screen, the amplifier is linked to a speaker and the driver is joined with a vibrator. Image or voice data from computers or PDA is transmitted through the connector, the communication interface to the CPU. By the control of the CPU, the flat screen displays images repetitively. By the voice displayed from the speaker, or the action of the vibrator, users are reminded for the preset events.

(21) Appl. No.: **10/033,982**

(22) Filed: **Jan. 3, 2002**

**Publication Classification**

(51) **Int. Cl.<sup>7</sup> ..... H04M 1/00**



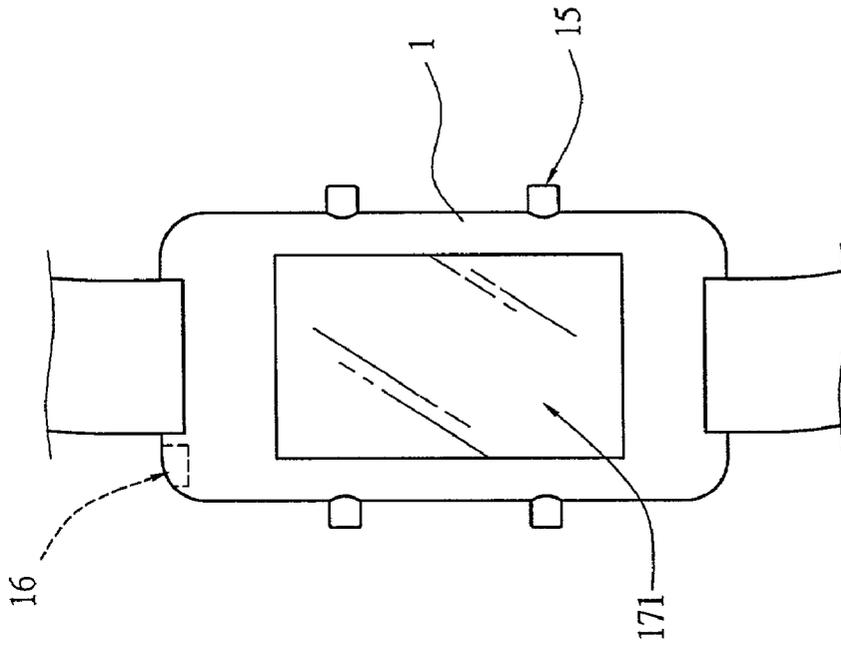


FIG.1

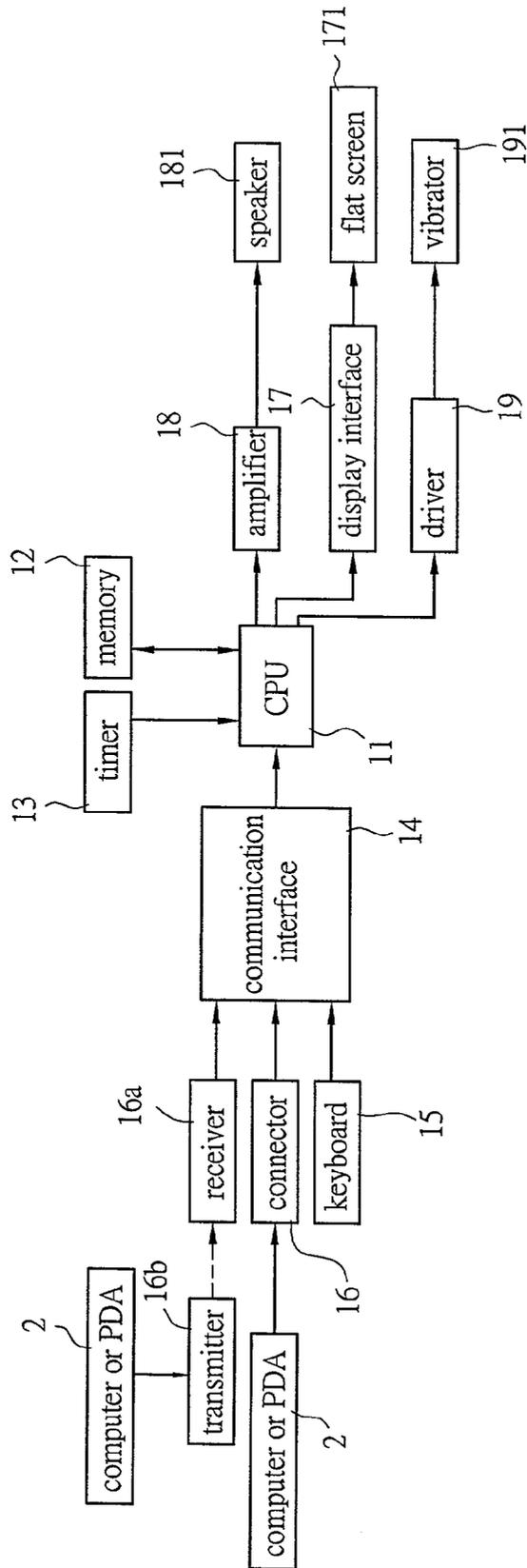


FIG.2

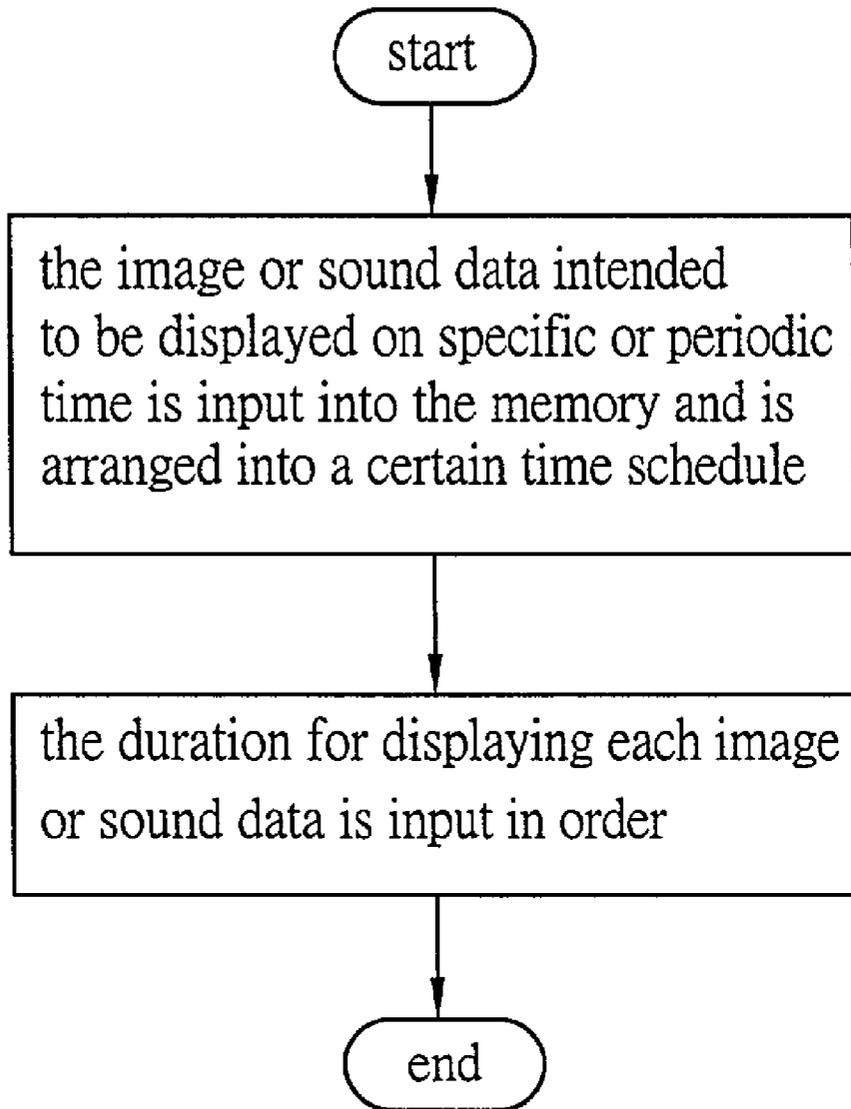


FIG.3

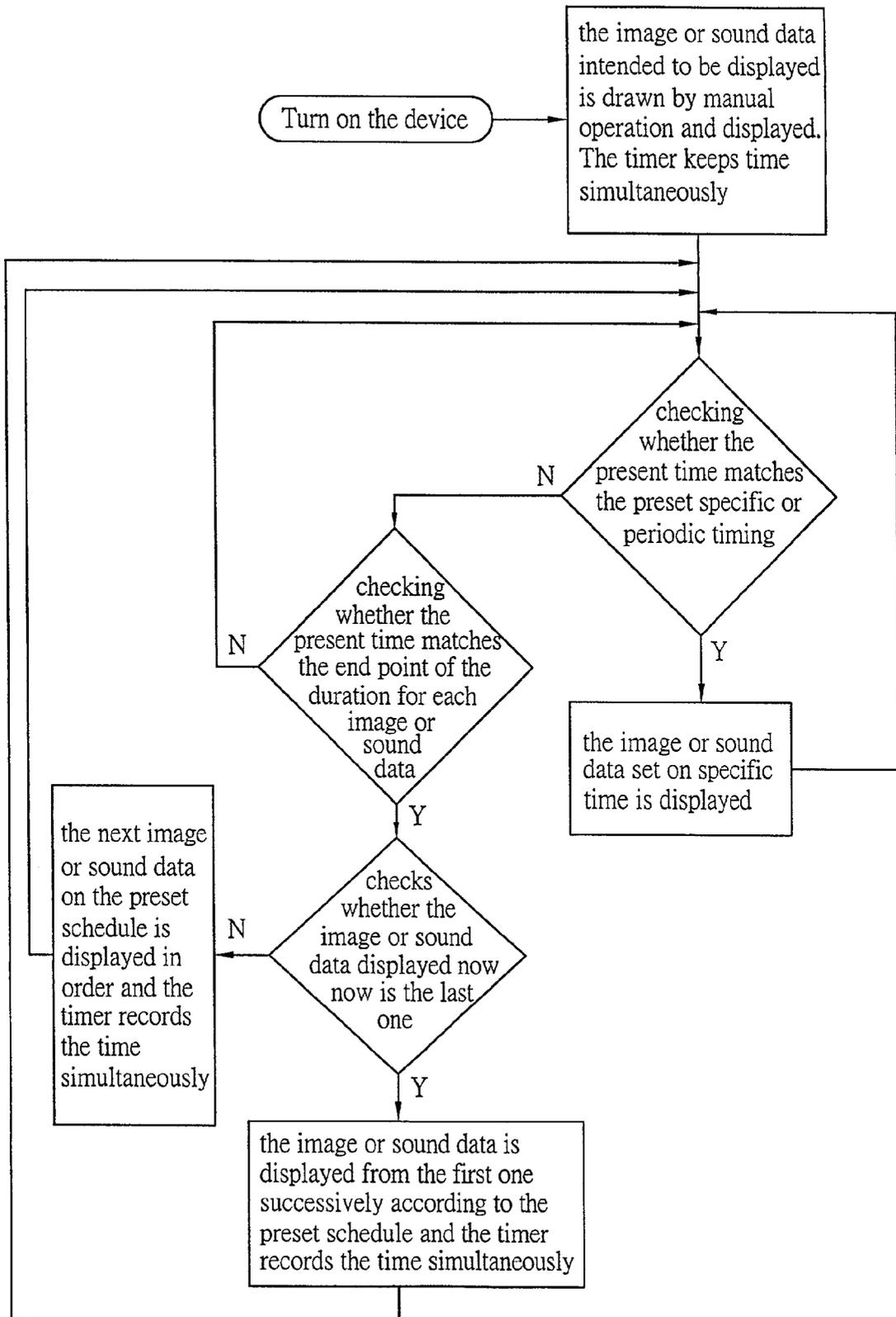


FIG.4

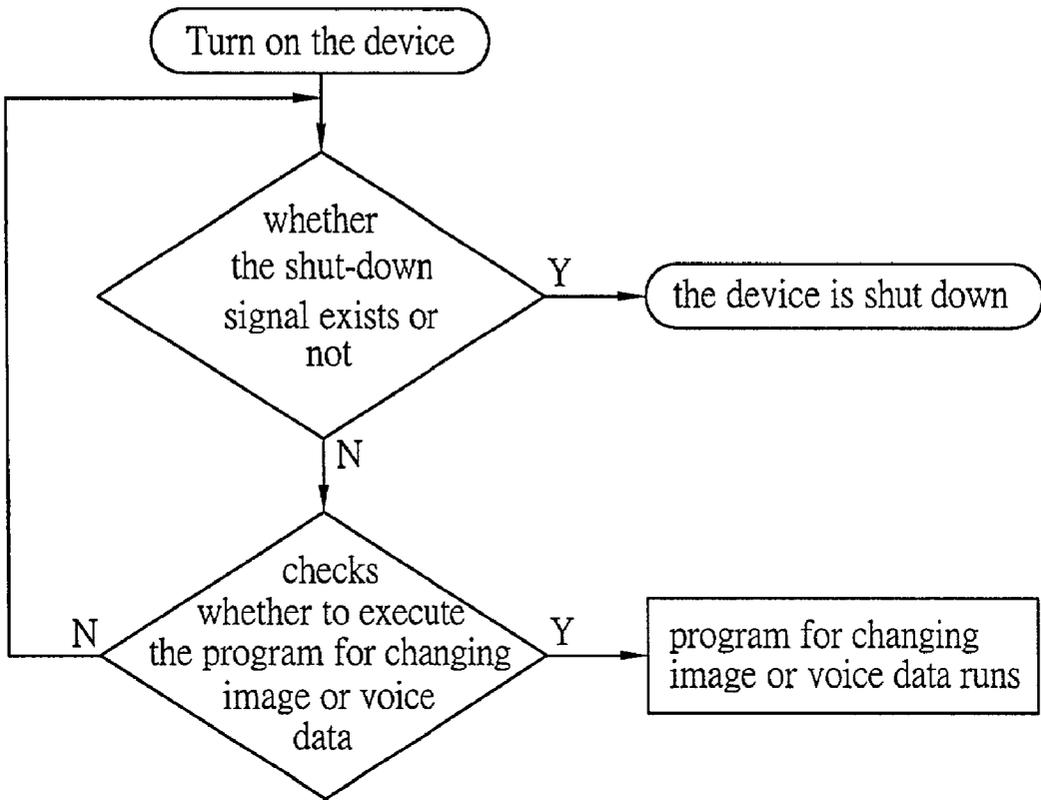


FIG.5

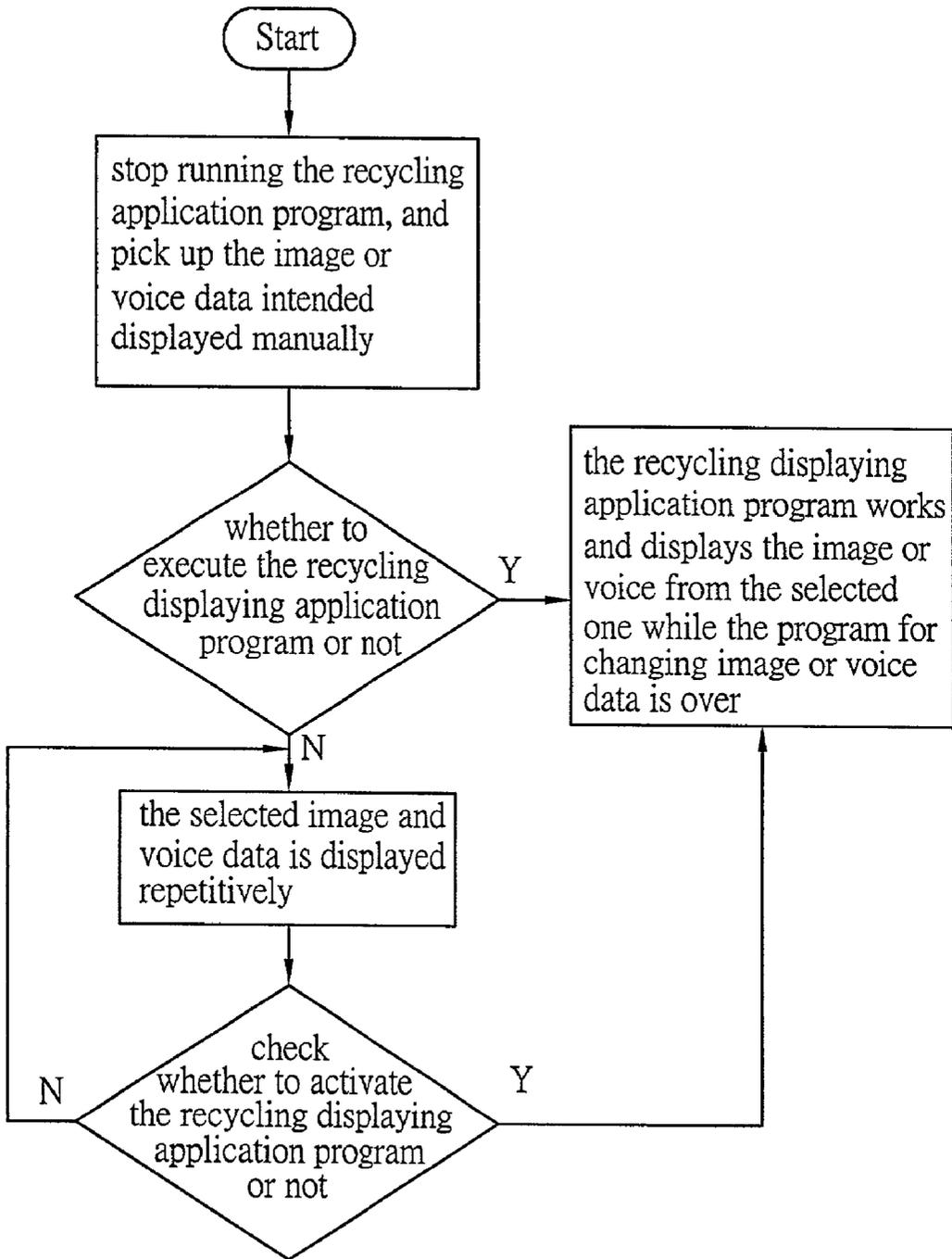


FIG.6

## MULTIMEDIA WATCH

### BACKGROUND OF THE INVENTION

#### [0001] 1. Field of the Invention

[0002] The present invention relates to a multimedia watch, especially to a watch that displays images continuously, sends voices or activate the vibrator for reminding users the preset events.

#### [0003] 2. Description of the Prior Art

[0004] The conventional swatches include a movement arranged inside a case with a cover upside. For integrated design, the wrist strap must match the color or style of the watch face. Although in some new designs, the watch belt connected with the watch face by pivots is interchangeable, such kind of design is still flat and relieved. Young people like fashionable and futuristic design, not only on appearance but also on function. Changing the watch belt only alters part of the outlook. Moreover, there should be hooks or retainers on the bezels for easily changing watch belts. Otherwise people need to use removing tools or driver to get the straps out or in. The most common material with flexibility used for such design is plastic. After a period of time, the acids and proteins in body sweat will corrode the plastic and leave it shiny and brittle. Rough handling of the plastic can break it easily. The watch belt and case made of plastic look not only get cracked easily but also get scratched or shiny. Only changing the belt or strap can not satisfy people's need.

### SUMMARY OF THE INVENTION

[0005] It is therefore a primary object of the present invention to provide a multimedia watch that displays images repetitively, sends voices out or activate the vibrator for reminding users the preset events, not only having attractive watch face but also with various functions.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0006] The accomplishment of the above-mentioned object of the present invention will become apparent from the following description and its accompanying drawings which disclose illustrative an embodiment of the present invention, and are as follows:

[0007] FIG. 1 is a schematic drawing of the present invention;

[0008] FIG. 2 is a circuitry diagram of the present invention;

[0009] FIG. 3 is a flow chart of the filing application program in accordance with the present invention;

[0010] FIG. 4 is a flow chart of the recycling displaying application program in accordance with the present invention;

[0011] FIG. 5 is a flow chart of the shut-down program in accordance with the present invention;

[0012] FIG. 6 is a flow chart of the program for changing image or voice data in accordance with the present invention.

### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0013] Refer to FIGS. 1 & 2, the present invention is composed of the following parts: CPU 11 for controlling internal circuitry is disposed inside a watch case 1; memory 12 connected with the CPU 11 is used for information storage;

[0014] a timer 13 is attached to the CPU 11 for keeping time and output the time-related information to CPU 11;

[0015] a communication interface 14 joined with CPU 11 is for transmitting input signals;

[0016] a keyboard 15 linked with the communication interface 14 is for inputting control signals;

[0017] a connector 16, connected with the communication interface 14, connects the present invention with computer or PDA 2 so that the image or sound data therein is transmitted to the CPU 11;

[0018] a display interface 17 is installed between the CPU 11 and a flat screen 171 for transmitting image information from the CPU 11 and displaying through the flat screen 171;

[0019] an amplifier 18 with a speaker 181 connected to the CPU 11 thereby the sound data is transmitted from the CPU 11 and to be displayed through the speaker 181;

[0020] a driver 19 is connected with the CPU 11 and a vibrator 191. By the control of the CPU 11, the driver 19 makes the vibrator 191 activate or unactivate.

[0021] In accordance with the structure mentioned above, the present invention is connected with computer or PDA 2 by the connector 16 on the watch case 1 to download the image and sound data from the computer or PDA 2, through the communication interface 14 into the CPU 11 thereof. By programming, the image can be displayed periodically, the voice is displayed on preset time or the vibrator 19 is activated for reminding users the preset schedule.

[0022] The procedure of downloading image or sound data from computers or PDA to the present invention is controlled by the filing application program. The workflow of the filing application program is shown in FIG. 3. The image or sound data intended to be displayed on specific or periodic time is input into the memory 12 and is arranged into a certain time schedule. Afterwards, the duration for displaying each image or sound data is input in order so that the displaying program can display image or sound repeatedly in order time after time.

[0023] The flow chart of the recycling displaying application program is shown in FIG. 4. After turning on the invention, the image or sound data intended to be displayed is drawn by manual operation and displayed. At the same time, the timer 13 keeps time. By checking whether the present time matches the preset specific or periodic timing, if it matches, the image or sound data set on specific time is displayed. If not, the program checks whether the present time matches the end point of the duration for each image or sound data. If the answer is no, the pathway returns to check the preset specific or periodic timing. If the answer is yes, the program checks whether the image or sound data dis-

played now is the last one. If no, the next image or sound data on the preset schedule is displayed in order and the timer records the time simultaneously. If the answer is yes, the image or sound data is displayed from the first one successively according to the preset schedule. Thus the preset image or sound data is displayed time and again.

[0024] Refer to **FIG. 5**, the start-up program checks whether the shut-down signal exists or not first after the invention turn on. If yes, the device is shut down. If no, the program checks whether to execute the program for changing image or voice data. If yes, the program for changing image or voice data runs. If no, the program turns back to check the shut-down signal.

[0025] The work flow of the program for changing image or voice data is shown in **FIG. 6**. First stop running the recycling displaying application program, and pick up the image or voice data intended displayed manually. Then the program decides to execute the recycling displaying application program or not. If the response is yes, the recycling displaying application program works and displays the image or voice from the selected one while the program for changing image or voice data is over. If the answer is no, the selected image and voice data is displayed repetitively. Afterwards, the program checks whether to activate the recycling displaying application program or not. If no, the previous-mentioned selected image and voice data is displayed over and over again. If yes, the program shifts to the recycling displaying application program and displays the image or voice from the selected one and the followings in sequence. Due to the changeable images or sounds displayed by the watch, the present invention has novel and appealing appearance for users.

[0026] Refer to **FIG. 2**, the connector **16** can be replaced by a receiver **16a** for receiving signals according to users' need. A transmitter **16b** is disposed on computers or PDA **2** so as to transmit image or voice data in wireless way. This is another embodiment of the present invention.

[0027] The watch case **1** can be designed to a brooch, a necklace or belt buckle.

[0028] It should be noted that the above description and accompanying drawings are only used to illustrated some embodiments of the present invention, not intended to limit

the scope thereof. Any modification of the embodiments should fall within the scope of the present invention.

What is claimed is:

1. A multimedia watch comprising

CPU for controlling internal circuitry disposed inside a watch case;

memory connected with said CPU for information storage;

a timer attached to said CPU for keeping time and output the time-related information to said CPU;

a communication interface joined with said CPU for transmitting input signals;

a keyboard linked with said communication interface for inputting control signals;

a connector connected with said communication interface for connecting the multimedia watch with computer or PDA so that the image or sound data therein is transmitted to said CPU;

a display interface, installed between said CPU and a flat screen, for transmitting image information from said CPU to said flat screen and displaying;

an amplifier with a speaker connected to said CPU thereby transmitting the sound data from said CPU to said speaker and displaying;

a driver connected with and controlled by said CPU and joined with a vibrator for making said vibrator activate or unactivate.

2. A multimedia watch as claimed in claim 1, wherein said connector can also be a receiver that receives signals from transmitters on computer or PDA for transmitting data in wireless way.

3. A multimedia watch as claimed in claim 1, wherein said watch case can be designed to a brooch.

4. A multimedia watch as claimed in claim 1, wherein said watch case can be designed to a necklace.

5. A multimedia watch as claimed in claim 1, wherein said watch case can be designed to a belt buckle.

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