

display device 10F and the electronic appliance 20 by optical communication or radio communication. Accordingly, the card-type display device 10F may transmit a signal to control some functions of the electronic appliance 20. That is to say, the card-type display device 10F may have the ability to perform remote control over the electronic appliance 20. For example, if the electronic appliance 20 is a camera or a TV, the user can operate the electronic appliance 20 while watching an image on the card-type display device 10F. Then, the user can control the electronic appliance 20 even more easily. Examples of such operations include shuttering operation of cameras and channel switching operation of TVs.

[0129] Hereinafter, electronic appliances 20 according to the present invention will be described in further detail by way of specific examples.

[0130] FIG. 9A schematically shows a configuration for a digital still camera 20A as an exemplary electronic appliance according to the present invention. In the example illustrated in FIG. 9A, the card-type display device 10 is supposed to be the card-type display device 10E shown in FIGS. 7A and 7B. However, the card-type display device 10 may also be any of the other devices 10, 10A, 10B, 10C and 10D described above although some functions are just added thereto or deleted therefrom. FIG. 9B schematically shows a configuration for a conventional digital still camera 90 as a comparative example.

[0131] First, the configuration of the conventional camera 90 will be described. As shown in FIG. 9B, the conventional camera 90 includes: an imaging optical system 92; an imaging optical system controller 93 to control the imaging optical system 92; an image information generator 94 to generate image information based on the optical information that has been obtained from the imaging optical system 92; a driver 96 to produce a display signal based on the image information that has been generated by the image information generator 94 and a drive signal for a display section 97; a system controller 99 to perform control over these circuits; and an input section 98 to allow the user to input his or her command. The camera 90 further includes a memory circuit 95 to store the image information that has been generated by the image information generator 94. A media card may be used as portion or all of the memory circuit 95.

[0132] In the conventional camera 90, while watching the object through a viewfinder (included in the imaging optical system 92) or an image being presented on the display section 97, the user adjusts the photographing conditions, including selection of objects, angles and magnification power, before taking a picture. The image information captured in this manner is once stored in the memory circuit 95 and then transferred to a PC (not shown), which is connected to the camera 90 via a connector cable. If the memory circuit 95 is a media card, the image information is transferred to the PC with the memory circuit 95 inserted into the slot of the PC.

[0133] In the conventional camera 90, if the user wants to watch an image that is stored in the memory circuit 95, then the image should be presented on the display section 97 of the camera 90. While the image is being presented on the display section 97, the user cannot take any picture with the camera 90. Also, if the user has a number of media cards, it would be troublesome for him or her to manage them as described above.

[0134] In contrast, by using the card-type display device 10 according to the preferred embodiment of the present invention and the camera 20A to which the card-type display device 10 is inserted, the user can take a picture with the camera 20A while watching a recorded image on the card-type display device 10. In addition, the user can manage the stored image information easily and just as intended.

[0135] As shown in FIG. 9A, the camera 20A according to the preferred embodiment of the present invention includes: an imaging optical system 22; an imaging optical system controller 23 to control the imaging optical system 22; an image information generator 24 to generate image information based on the optical information that has been obtained from the imaging optical system 22; a transceiver 21 to generate and output a display signal based on the image information that has been generated by the image information generator 24; a system controller 29 to control the imaging optical system 22, imaging optical system controller 23, image information generator 24 and transceiver 21; and a housing (not shown) to store these circuits. It should be noted that the imaging optical system controller 23 may be included in the system controller 29.

[0136] The card-type display device 10 is fitted into, but removable from, the housing of the camera 20A. As shown in FIG. 9A, the card-type display device 10 includes: the display section 12; the transceiver 11 to transmit or receive a signal to/from the transceiver 21; the driver 13 to drive the display section 12 in accordance with the display signal; and the system controller 19 to control the transceiver 11 and driver 13.

[0137] In the preferred embodiment shown in FIG. 9A, the camera 20A includes a memory circuit 25 to store the image information thereon. But the memory circuit 25 may be omitted from the camera 20A or provided for the card-type display device 10 instead. Also, although the camera 20A and the card-type display device 10 are regarded herein as separate components, the combination of camera 20A and card-type display device 10 may also be regarded as a camera with a removable display.

[0138] The card-type display device 10 has the functions that have already been described with reference to FIGS. 7A and 7B. Accordingly, by exchanging signals between the card-type display device 10 and the camera 20A, the user can use the card-type display device 10 in various manners.

[0139] Next, it will be described with reference to FIG. 10 how the camera 20A and the card-type display device 10 may be used.

[0140] The image information that has been captured by the camera 20A may be once stored in the memory circuit 15 and then presented on the card-type display device 10 that has been removed from the camera 20A. Accordingly, although the viewfinder included in the imaging optical system 22 also needs to be used to take another picture, the user can check out the contents of the recorded image information on the card-type display device 10 and take another picture with the camera 20A concurrently.

[0141] As also shown in FIG. 10, if the card-type display device 10 is inserted into the slot 42 of another electronic appliance (e.g., a PC) 20', then the image information that is stored in the memory circuit 15 of the card-type display device 10 can be transferred to the electronic appliance 20'.