

the purpose of reproducing the images, that is, to perform the slide show or to search the images.

[0044] The present invention is not limited to the above embodiment, and changes can be made thereto. For instance, as shown in a speed gear table **35** in FIG. 7, the slide show can be performed at a constant frame display rate by extending the frame change interval T as the number of images N increases. When there are only a few options for the number N as shown in the speed gear table **35**, it is also possible to use a pull-down menu instead of the slide bar **28** to select the number of images N .

[0045] The operating device for designating the number of images N is not limited to the slider **31** which linearly moves along the slide bar **28**. It is also possible to display a dial that rotates to indicate the displacement amount. Further, other than using a graphical user interface (GUI) in which the slide bar **28** or the dial displayed on the monitor **13** is operated by the pointing device such as the mouse, it is also possible to provide an actual slide bar or a dial.

[0046] In the case the frame display rate is increased as the displacement amount of the slider **31** is increased, the slide show with the larger increment in the frame display rate can be performed by gradually shortening the frame change intervals T even when the number of images N is increased. It is also possible to use a speed gear table whose values are arbitrarily determined by the user. Further, it is also possible to make the input detection section to detect the displacement amount of the slider **31** with higher accuracy so that the number of images N and the frame change interval T can be obtained by computations. The present invention is not limited to the above embodiment in which the personal computer is used as the image viewer. It is also possible to use the digital still camera which is capable of performing the slide show of the images, a DVD player which performs the slide show of the image data recorded in the optical disk such as a DVD, or the like.

[0047] Although the present invention has been fully described by way of the preferred embodiments thereof with reference to the accompanying drawings, various changes and modifications will be apparent to those having skill in this field. Therefore, unless otherwise these changes and modifications depart from the scope of the present invention, they should be construed as included therein.

What is claimed is:

1. An image reproduction apparatus having a memory device for storing images and a monitor, comprising:

an input detection section for detecting input information designating number of images to be displayed in one frame;

an image output section for reading said designated number of images from said memory device, arranging said images with a size corresponding to said designated number in said one frame, and outputting said arranged images to said monitor; and

a frame change interval determining section for determining an interval to changeover said frames in accordance with said designated number.

2. An image reproduction apparatus according to claim 1, wherein said image reproduction apparatus further includes an operating device for designating said number of images, and said input detection section detects a displacement amount of said operating device from an origin point as said input information when said operating device is operated,

and said frame change interval determining section determines said frame change interval such that a frame display rate represented by a product of said number of images and a reciprocal number of said frame change interval is increased as said displacement amount increases.

3. An image reproduction apparatus according to claim 2, wherein said input detection section detects a number-changing displacement amount necessary for changing said number of images displayed in said one frame, and a number-fixed displacement amount within a range of which said number of images is not changed, and said frame change interval determining section shortens said frame change interval when said number-fixed displacement amount is detected.

4. An image reproduction apparatus according to claim 2, wherein said monitor displays a slide bar, which is moved in accordance with said displacement amount detected by said input detection section.

5. An image reproduction apparatus according to claim 1, wherein said frame change interval determining section extends said frame change interval in accordance with an increase in said number of images displayed in said one frame.

6. An image reproduction apparatus according to claim 5, wherein said frame change interval determining section determines said frame change interval such that said frame display rate represented by a product of said number of images displayed in said one frame and a reciprocal number of said frame change interval is kept constant.

7. An image reproduction program for instructing a computer to execute processes in which plural frames are reproduced in sequence on a monitor, each of said frames having at least one image, said image reproduction program comprising:

detecting input information which designates number of images to be displayed in said one frame;

determining a display period of said frame on said monitor in accordance with said designated number;

reading said designated number of images from a memory device, and arranging said images in said frame;

displaying said frame having said arranged images on said monitor; and

changing over said frames every time said display period having elapsed.

8. An image reproduction program according to claim 7, wherein said input information detecting step detects a displacement amount of an operating device from an origin point as said input information, and said frame display period determining step determines said display period of said frame such that said frame display rate increases as said displacement amount increases.

9. An image reproduction program according to claim 8, wherein said displacement amount of said operating device includes a first displacement amount in which said number of images is changed and a second displacement amount in which said frame display period is shortened in a range not to change said number of images.

10. An image reproduction program according to claim 9 further including the step of:

displaying said displacement amount with a slide bar on said monitor.