

addition, since the frame display rate is increased as the displacement amount increases, the adjustment of the frame display rate can be comprehended intuitively.

[0017] The number-changing displacement amount and the number-fixed displacement amount are detected, and the frame change interval is changed when the operating device is operated at the number-changing displacement amount. When the displacement amount is gradually increased, the frame change interval is gradually shortened while the number of images in one frame is kept constant. When the displacement amount is further increased, the frame change interval is extended according to the increase in the number of images in one frame. Thereby, frame display rate is finely adjusted without loss of viewability, and a plurality of images can be viewed in a short time, reducing the burden on eyes of the user.

[0018] Since the displacement amount is shown on a slide bar in the monitor, an easily viewable GUI is realized where the result of the operation is immediately viewed on the monitor.

[0019] Since the frame change interval is extended when the number of images in one frame is increased, the time for displaying the frame is extended so that the displayed images can be viewed in sufficient time. Thereby, it becomes possible to prevent redundant display of the images, that is, displaying the frame with a few numbers of images for a long time. Also, it becomes possible to prevent difficulty in viewing images caused by displaying the frame with a plurality of images only for a short time.

[0020] Moreover, when the number of images in one frame is changed, the frame change interval is changed to keep the frame display rate constant. Therefore, the most viewable display configuration is provided.

BRIEF DESCRIPTION OF THE DRAWINGS

[0021] The above objects and advantages of the present invention will become apparent to a person skilled in the art from the following detailed description of the preferred embodiments of the invention when read in conjunction with the accompanying drawings, in which:

[0022] FIG. 1 is a block diagram illustrating schematic configuration of an image reproduction apparatus;

[0023] FIG. 2 is an explanatory view of an image reproduction window;

[0024] FIG. 3 is a schematic view of a speed gear table;

[0025] FIG. 4 is an enlarged view of a slide bar;

[0026] FIG. 5 is a flow chart of an image reproduction process;

[0027] FIG. 6 is an explanatory view illustrating an example of changes in image reproduction speed with respect to a displacement amount of a slider; and

[0028] FIG. 7 is another example of the speed gear table.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT(S)

[0029] In FIG. 1, an image reproduction apparatus 10 is constituted of a main unit 11, an operating section 12 connected to the main body 11, and a monitor 13. The image

reproduction apparatus 10 is, for instance, a general-purpose personal computer or a work station installed with an image reproduction program. The main unit 11 includes a memory device 14 constituted of a hard disk drive (HDD) and the like in which the image reproduction program is stored, and a CPU 15 which executes the image reproduction program stored in the memory device 14. The operating unit 12 is constituted of pointing devices such as a mouse. The monitor 13 is, for instance, an LCD panel.

[0030] A memory card 16 is a removable recording medium in which image data of still images captured by, for instance, a digital still camera is stored. A memory card reader 17 which reads the image data stored in the memory card 16 is connected to the main unit 11. The read image data is stored in the memory device 14. By executing the image reproduction program, the CPU 15 functions as an image reproduction window output section 18 and a slider detection section 19. The image reproduction window output section 18 generates an image reproduction window, and outputs the generated image reproduction window to the monitor 13.

[0031] In FIG. 2, the image reproduction window 25 displayed on the monitor 13 is constituted of a folder display area 26, an image reproduction area 27, and an operating area 29. The folder display area 26 displays virtual folder icons individually coupled to separate directories in which the image data is stored. The image reproduction area 27 reproduces the designated number of images and switches them at specified time intervals. The operating area 29 displays a slide bar 28 which is used for designating the number of reduced images to be contained in one frame in the image reproduction area 27.

[0032] A slider 31 moves along the slide bar 28 by a known dragging operation in which a pointer 30 displayed in the image reproduction window 25 is placed on the slider 31 and dragged by operating the operating section 12. A displacement amount (a slide amount) of the slider 31 is detected by the slider detection section 19. The image reproduction window output section 18 makes reference to the detected displacement amount. Based on the detected displacement amount, the image reproduction window output section 18 reproduces the images in the image reproduction area 27 in a display configuration previously determined in accordance with the displacement amount.

[0033] According to the position of the slider 31, the image reproduction window output section 18 makes reference to a speed gear table 32 to determine the display configuration of the images in the image reproduction area 27. The speed gear table 32 is previously defined in the image reproduction program. To reproduce the images in the image reproduction area 27, the image data of the designated directory in the folder display area 26 is read and reproduced.

[0034] In FIG. 3, the speed gear table 32 contains, for instance, 12 levels of gear numbers corresponding to the position of the slider 31. To each gear number, number of images N displayed in one frame in the image reproduction area 27 and a frame change interval T specifying an interval to change over the frames each of which displays the N numbers of images are previously assigned. The gear number takes a larger value as the displacement amount of the slider 31 from an origin point increases. The number of