

tions at steps 505-507 are repeated to drag the selection frame 29 following the finger tip 16. As the user releases the finger tip 16 from the touch panel 9 during this operation so that the pushing force P becomes smaller than P1 (step 505), the dragging operation is interrupted, the menu object 27a returns to the initial position (step 510), and the initial image (1) illustrated in FIG. 22 is displayed on the display screen 2 (step 500).

[0124] As shown in FIG. 23, the user moves the finger tip 16 without releasing from the touch panel 9 with the pushing force P equal to or larger than P1 and smaller than P2 ($P1 \leq P < P2$), causing the selection frame 29 to reach the position of a desired menu object 27d (within an option region) in the pop-up menu 28 (step 507). Then, the user pushes the touch panel 9 in without releasing the finger tip 16 from the selection frame 29, so that the pushing force P becomes equal to or larger than P2 ($P \geq P2$), as illustrated in FIG. 23, resulting in a selection of the desired menu object 27d (step 508). A image (4) illustrated in FIG. 22 shows an image displayed on the display screen 2 in this event, wherein the selection frame 29 is changed in color to indicate the selection. Then, the image (4) is switched to a image (5) in FIG. 22, wherein the selected menu object 27d is displayed at the same position of the former menu object 27a in place of the menu object 27a (step 509), followed by the flow returning to step 500 for waiting for the next operation.

[0125] As described above, in the fifth specific example, the user can select an object from a pop-up menu through a simple touch operation. Particularly, in a pop-up menu, a pop-up menu is often opened to show selective options (functions) for the user to select a desired function. In this embodiment, such showing can be made through quite simple operations consisting of "touching with a finger," "confirming," and "releasing the finger." When the user eventually attempts to activate the selected option, the user pushes the option in with a large pushing force, thereby reducing erroneous operations such as inadvertent activation of a different option not intended by the user, possibly caused by the finger unintentionally moving off the touch panel.

[0126] While the foregoing embodiment has been described in connection with a single pop-up menu, a plurality of pop-up menus may be displayed simultaneously on the display screen, in which case similar advantages can be provided.

[0127] As described above, the display unit with a touch panel according to the present invention comprises sensing means for sensing a pushing force P applied by a finger tip or the like, and a control unit which performs first processing when the pushing force P is equal to or larger than P1 and smaller than P2 ($P1 \leq P < P2$), and performing second processing when the pushing force changes from a value equal to or larger than P1 and smaller than P2 ($P1 \leq P < P2$) to a value equal to or larger than P2 ($P2 \leq P$). The first processing includes moving a touch-driven member following the finger tip as it moves, and the second processing includes activating a function associated with the touch-driven member touched by the finger tip. Thus, the display unit permits the user to perform an operation for moving a touch-driven member such as a drag-and-drop operation through a touch operation with a finger tip. Accordingly, the user can readily

carry out relocation of a touch-driven member on the display screen, and the like through a touch operation without fail. When a single function is activated in association with operations on a touch-driven member, the display unit of the present invention can eliminate the need for confirming a sequence of touch operations on the touch-driven member, simplify the operation, and reduce erroneous operations.

[0128] It should be further understood by those skilled in the art that although the foregoing description has been made on embodiments of the invention, the invention is not limited thereto and various changes and modifications may be made without departing from the spirit of the invention and the scope of the appended claims.

What is claimed is:

1. A display unit having a display panel, and a touch panel disposed on a display surface of the display panel for detecting a position touched by indicating means, said touch panel permitting an operator to touch a touch-driven member displayed on said display surface to handle said touch-driven member, said display unit comprising:

sensing means for sensing a pushing force P produced by said indicating means when said indicating means touches said touch-driven member; and

a control unit for performing first processing associated with said touch-driven member pushed by the indicating means when the pushing force P detected by said sensing means is equal to or larger than a first set pressure P1 and smaller than a second set pressure P2 ($P1 \leq P < P2$), said second set pressure P2 being larger than said first set pressure P1, and for performing second processing associated with said touch-driven member pushed by said indicating means when the pushing force P is equal to or larger than the second set pressure P2 ($P2 \leq P$),

wherein said first processing includes dragging said touch-driven member following said indicating means pursuant to a movement of said indicating means, and said second processing includes activating a processing previously assigned to said touch-driven member.

2. A display unit with a touch panel according to claim 1, wherein:

said second processing includes activating the function previously assigned to said touch-driven member in combination with a region to which said touch-driven member is moved through said first processing.

3. A display unit having a display panel, and a touch panel disposed on a display surface of the display panel for detecting a position touched by indicating means, said touch panel permitting an operator to touch a touch-driven member displayed on said display surface to handle said touch-driven member, said display unit comprising:

sensing means for sensing a pushing force P produced by said indicating means when said indicating means touches said touch-driven member; and

a control unit for performing first processing associated with said touch-driven member pushed by the indicating means when the pushing force P detected by said sensing means is equal to or larger than a first set pressure P1 and smaller than a second set pressure P2 ($P1 \leq P < P2$), said second set pressure P2 being larger