

a meeting can irradiate the display sensor 7 with the light beam 9 emitted by an operation of the laser instruction device 8 and select an arbitrary position of a display screen. Further, by moving the light beam 9 on the screen in a state of irradiating an arbitrary symbol, a drag operation can be performed in a manner similar to the case on the touch sensor in the first to fourth embodiments.

[0060] FIG. 9 is a block diagram showing a system configuration of the display system apparatus 6 of FIG. 8. A main CPU 61 is connected to the display sensor 7 through an interface circuit 62 and controls a light sensor 7a and a display 7b. Also, the main CPU 61 is connected to an image server 63, a printer 64 and other devices 65 such as fax, and sends and receives data and commands to and from these. A document and other image data corresponding to the symbol 49 displayed on the display 7b as a control object are stored in the image server 63.

[0061] In the fifth embodiment, an operation of control processing of the main CPU 61 will be described, but control processing in the case is nearly equal to control processing of the first embodiment shown in FIG. 4 except that processing for detecting irradiation of the light beam 9 is performed rather than processing for detecting a touch of a finger, so that a flowchart for the fifth embodiment is omitted.

[0062] In FIG. 8, when a user irradiates one image 49a of the symbol 49 with the light beam 9 from the laser instruction device 8 for a predetermined time (for example, two or three seconds) or longer as a predetermined instruction operation, the main CPU 61 detects the instruction operation through the light sensor 7a and the interface circuit 62, and selects the image 49a of the symbol 49. In the case, the main CPU 61 blinks the image 49a of the symbol 49 and notifies the user that the image is selected.

[0063] When the user drags (moves) in a direction of an arrow of the drawing with the selected image 49a of the symbol 49 irradiated with the light beam 9 as a predetermined movement operation, the main CPU 61 moves a display position of the image 49a in response to the movement operation. In the case, an icon whose contrast is weakened may be displayed in the original display position of the image 49a.

[0064] When the user moves the light beam 9 to an image 50a of a print mark of the symbol 50 in a state of irradiation and stops the drag, a display position of the image 49a of the symbol 49 overlaps with a display position of the image 50a of the print mark of the symbol 50. When the main CPU 61 detects a stop of the drag and further detects that the stop position is located on the image 50a of the print mark of the symbol 50, the main CPU 61 reads image data of a document corresponding to the image 49a of the symbol 49 out of the image server 63 and outputs the image data to the printer 64 to provide printout. This also applies to images other than the image 50a of the print mark. For example, when the image 49a of the symbol 49 is dragged on an image 50b of a fax mark, image data of a document corresponding to the image 49a of the symbol 49 is read out of the image server 63 and is sent by fax. That is, the selected details of the control are executed with respect to the selected control object.

[0065] According to the fifth embodiment as described above, since the irradiation position is detected in response

to a particular light beam with which the display screen 7 on which the symbol is displayed is irradiated, an instruction operation by irradiation of the light beam 9 and a movement operation by drag of the light beam 9 can be performed using the laser instruction device 8 for emitting the particular light beam 9 of a red laser, so that desired details of the control can be executed easily with respect to a desired control object by an untouched remote control operation from a position distant from the display screen without performing a troublesome switch operation.

[0066] According to the fifth embodiment as described above, when the light sensor 7a is irradiated with the light beam 9 for a predetermined time or longer in a display position of an arbitrary symbol, the symbol irradiated with the light beam is selected, so that a malfunction due to instantaneous irradiation of the light beam can be prevented.

[0067] A navigation apparatus in a sixth embodiment of the invention will be described based on the drawings. An outward appearance of the navigation apparatus is nearly equal to an outward appearance of the vehicle-mounted acoustic apparatus of the first embodiment shown in FIG. 1. That is, an operating panel is provided on the front of a cabinet, and an opening is formed in the approximately center of the operating panel and a display touch sensor is exposed to the opening. Specifically, the navigation apparatus is configured so that a touch sensor having a switch function of shifting to an on state in response to a touch is placed on a display surface of a display having a display function.

[0068] FIG. 10 is a block diagram showing a system configuration of the navigation apparatus in the sixth embodiment. As shown in the drawing, a CD-ROM player 71 for reproducing CD-ROM in which data of a map image is stored, a vehicle sensor 72 for detecting a position of a vehicle, a direction of the vehicle, a vehicle speed, etc., and other devices 73 such as a receiver for receiving traffic information are connected to a system bus of a main CPU 74 (corresponding to selection unit, movement unit and setting means). Also, a display touch sensor 76 (corresponding to display unit) is connected to the main CPU 74 through an interface circuit 75, and a touch sensor 76a and a display 76b are controlled.

[0069] FIGS. 11a through 11e are diagrams showing an operating procedure of the case of performing point registration of navigation. Incidentally, an operation of control processing of the main CPU 74 is nearly equal to control processing of the first embodiment shown in FIG. 4, so that a flowchart for the sixth embodiment is omitted.

[0070] As shown in FIG. 11a, a symbol 77 (corresponding to a symbol) and a map image 78 are displayed on a screen of the display touch sensor 76. The symbol 77 is an icon showing point registration which is one of navigation processing. In addition to the icon of the symbol 77, a symbol 79 about various navigation processing such as route finding or freeway toll calculation is displayed.

[0071] As shown in FIG. 11b, when a user touches an icon of the symbol 77 with a finger 5 for a predetermined time (for example, two or three seconds) or longer as a predetermined instruction operation, the main CPU 74 detects the instruction operation through the touch sensor 76a and the interface circuit 75, and selects the icon of the symbol 77 and