

electrode and the receiving electrode, and a second capacitor-equivalent circuit is formed in parallel to the first capacitor-equivalent circuit when a human body approaches the upper surface of the mouse. Therefore, it can be determined whether the user is using the mouse, according to a change in alternating current flowing through the first capacitor-equivalent circuit, the change caused by a change in the capacitance of the second capacitor-equivalent circuit, generated according to the extent of approaching of the human body.

[0034] The use-form detection means can include modulation means for modulating the original signal to generate an output signal, transmission means formed of a first electrically conductive member and disposed on the user input means so as to be exposed to the outside to be able to transmit the output signal, receiving means formed of a second electrically conductive member and disposed on an external unit so as to be exposed to the outside to be able to receive the output signal, and demodulation means for demodulating the received signal. In such a case, it can be determined that the user is also using the external unit by using a fact that signal transfer between the transmission means and the receiving means is enabled by the contacts of a human body to the first and second electrically conductive members.

[0035] The user input means is, for example, a keyboard, and the external unit is, for example, an information terminal, such as a portable telephone. In such a case, the use-form detection means can determine that one hand of the user is placed on the keyboard and the other hand is used to hold the information terminal, through the signal transfer between the transmission means and the receiving means.

[0036] Alternatively, the use-form detection means can be formed of a plurality of line-shaped transmission electrodes, a transmitter for supplying alternating current for transmission to each of the transmission electrodes, a plurality of line-shaped receiving electrodes disposed so as not to contact each of the transmission electrodes, and a receiver for receiving alternating current flowing through the receiving electrodes. A use-form detection area where the plurality of transmission electrodes and the plurality of receiving electrodes intersect is superposed on a user input area of the user input apparatus, a first capacitor-equivalent circuit equivalent to a capacitor is formed at each of the intersections of the transmission electrodes and the receiving electrodes, and a second capacitor-equivalent circuit is formed in parallel to the first capacitor-equivalent circuit when a human body approaches the intersection of a transmission electrode and a receiving electrode.

[0037] In such a case, the form of use in which the user uses the user input means by the user's human body can be detected according to a change in alternating current flowing through the first capacitor-equivalent circuit, the change caused by a change in the capacitance of the second capacitor-equivalent circuit, generated according to the extent of approaching of the human body.

[0038] Such a use-form detection means can detect a multi-dimensional value formed of an output obtained at each intersection in response to an operation applied by the user's human body to the user input means.

[0039] A second aspect of the present invention is a computer connected to a user input apparatus for the user to

input data or a command by using the human body, and the computer connected to the user input apparatus is characterized by including:

[0040] application execution means for executing a pre-determined application;

[0041] use-form detection means for detecting a form in which the user uses the user input apparatus by the user's human body; and

[0042] operation control means for changing the operation of the application being executed by the application execution means, according to a detection result obtained by the use-form detection means.

[0043] The use-form detection means can determine whether the form in which the user uses the user input apparatus by the user's human body is a usual mode or an unusual mode. The operation control means can switch an assignment to an input content sent from the user input apparatus, in response to the detection of the unusual mode by the use-form detection means.

[0044] The user input apparatus may be a keyboard. In such a case, the operation control means may switch an assignment to each key on the keyboard in response to the detection of a use form in which the user can perform key inputs by using one hand only, by the use-form detection means.

[0045] Or, the user input apparatus may be formed of a combination of a keyboard and a mouse. In such a case, the use-form detection means may determine whether a first use mode in which the user can perform key inputs by using both hands or a second use mode in which the user uses the mouse by the left hand and can perform key inputs only by the other hand is used. The operation control means may assign a usual text character to each key of the keyboard in the first use mode, and command functions to left-hand-operation keys of the keyboard in the second use mode.

[0046] Alternatively, the use-form detection means may determine whether an another-terminal use mode in which the user is using a portable telephone or another information terminal by using at least one hand. In such a case, the operation control means can activate an application for driving the another terminal in response to the detection of the another-terminal use mode by the use-form detection means.

[0047] When the user input apparatus is a keyboard, the use-form detection means can be formed of a transmission electrode disposed almost at the center of the keyboard, a transmitter for supplying alternating current for transmission to the transmission electrode, a first receiving electrode disposed almost at the left end of the keyboard, a second receiving electrode disposed almost at the right end of the keyboard, a first receiver for receiving alternating current flowing through the first receiving electrode, and a second receiver for receiving alternating current flowing through the second receiving electrode. A first capacitor-equivalent circuit equivalent to a capacitor is formed between the transmission electrode and the first receiving electrode, and a second capacitor-equivalent circuit equivalent to a capacitor is formed between the transmission electrode and the second receiving electrode; and a first subordinate capacitor-equivalent circuit is formed in parallel to the first capacitor-