

removable memory card, such as a Compact Flash (CF), a flash memory card, a Memory Stick (MS), a Smart Media (SM), a Secured Digital (SD), and the like. Accordingly, users can conveniently carry the touch display device with their own definition as a keyboard to other computer systems for use. Such keyboard formed from the touch display panel is very suitably used in products built with a keyboard or hand-writing input function and an image output function for replacing conventional keyboard or hand-writing input device.

[0026] As compared with conventional techniques, the present invention has advantages described as follows:

[0027] 1. With the touch display panel serving as a keyboard, it is possible for a user to alter the layout and the function of the keyboard as desired with the assist of the operation software to improve the variety for the keyboard input;

[0028] 2. Such keyboard may be with both a function of keyboard and a function of mouse since the keyboard region and the mouse region can be defined simultaneously on the display;

[0029] 3. The keyboard may become a second display device by touching the hot key, and the image display region can be also defined such that both of the keyboard and the display screen can exist in the same time; accordingly, such keyboard is also a display screen;

[0030] 4. A plurality of such keyboards can be used by connecting them in series through a serial connecting device of each keyboard, and the definition for the keyboard can be altered and even two or more different sets of definitions for the keyboard can be made as desired through the software; and

[0031] 5. To increase on-the-spot feeling, sound effects may be established using software and, through a speaker, allow users to feel like a key click sound.

[0032] Those skilled in the art will readily observe that numerous modifications and alterations of the device and method may be made while retaining the teachings of the invention.

What is claimed is:

1. A keyboard formed from a touch display panel comprising:

- a touch display panel unit; and
- a circuit board comprising:
 - a signal input/output device for signal input/output,
 - a memory for storing a driving program and an operating program, and
 - a microprocessor for executing the driving program to drive the touch display panel unit, executing the operating program to allow the touch display panel unit to display a keyboard layout image, and through the signal input/output device outputting a signal corresponding to the keyboard layout image in accordance with the position on the touch display panel unit being touched for a performance of a keyboard input function.

2. The keyboard formed from a touch display panel of claim 1, further comprising a serial connecting device for connecting another keyboard formed from a touch display panel in series.

3. The keyboard formed from a touch display panel of claim 1, further comprising a hot key for switching the touch display device unit to serve between the keyboard input function and a display function.

4. The keyboard formed from a touch display panel of claim 1, wherein the microprocessor executes the operating program for allowing the touch display panel unit to further display an image for mouse function, and through the signal input/output device outputting a signal corresponding to the image for mouse function in accordance with the position on the touch display panel unit being touched.

5. The keyboard formed from a touch display panel of claim 1, further comprising a device providing a key-pressing feeling.

6. The keyboard formed from a touch display panel of claim 1, wherein the microprocessor executes the operating program for allowing the touch display panel unit to further display a user-defined image, and through the signal input/output device outputting a signal corresponding to the user-defined image in accordance with the position on the touch display panel unit being touched.

7. The keyboard formed from a touch display panel of claim 1, further comprising a speaker for giving a key-click sound corresponding to each touch on the touch display panel unit.

8. The keyboard formed from a touch display panel of claim 1, wherein the touch display panel unit further comprises an image display region for displaying an input image.

9. The keyboard formed from a touch display panel of claim 1, wherein the memory stores at least a result of executing the operating program.

10. A method of imparting a keyboard input function to a touch display device comprising:

providing a computer comprising:

- a CPU, and
- a touch display device driving program;

providing at least a touch display device connected with the computer and driven; and

executing an operating program using the CPU to define the at least a touch display device to display a keyboard layout image, thereby to execute a keyboard input function corresponding to the keyboard layout image in accordance with the position on the at least a touch display device being touched.

11. The method of claim 10, wherein, a plurality of the touch display devices are further provided, and all of the touch display devices are connected in series to form an integrated keyboard.

12. The method of claim 10, further comprising defining the at least a touch display device to display an image for mouse function, thereby to execute the mouse input function in accordance with the position of the image for mouse function being touched.

13. The method of claim 10, further comprising disposing a device for simulating a key-pressing feeling on the at least a touch display device.

14. The method of claim 10, further comprising allowing the computer to receive an input signal from the at least a touch display device and give off sound for the touch.

15. The method of claim 10, further comprising disposing a hot key on the at least a touch display device for switching the at least a touch display device to serve between an image display function and the keyboard input function.

16. The method of claim 10, further comprising storing a definition of the keyboard layout image of the at least a touch display device in the memory for retrieve on demand.

17. The method of claim 10, further comprising defining a user-defined image on the at least a touch display device for