

according to the user function of a portable terminal. The first input event may include at least one of a touch event according to a touch displayed on a touch screen, a key input event by a key pad input and a pressure event generated by a pressure sensor of the portable terminal. The second input event may include an operation signal corresponding to at least one of tilting, shaking, grabbing and tapping of the portable terminal. For example, the portable terminal may collect various input signals including an input signal from a touch unit including a touch sensor, an input signal generated from a key pad or a pressure sensor, an input signal generated by applying pressure to the portable terminal, an input signal generated by movements of the portable terminal such as shaking or snapping, an input signal generated by tilting of the portable terminal, and an input signal generated by a tapping on the body of the portable terminal. The portable terminal may execute an application program of the portable terminal. To this end, the portable terminal can generate input signals using to the above-stated methods and devices including, for example, various sensors, such as a key pad and touch sensor, a pressure sensor, an acceleration sensor, a magnetic sensor, and a gyro sensor. The portable terminal can also perform the function control of an application program being executed according to generated input signals. Thus, the user of a portable terminal can generate necessary input signals through easy operations for the user.

Hereinafter, exemplary embodiments of the present invention are described in detail with reference to the accompanying drawings.

FIG. 1 is a block diagram illustrating a configuration of a portable terminal according to exemplary embodiments of the present invention.

Referring to FIG. 1, the portable terminal **100** may include a wireless communication unit **110**, an audio processing unit **120**, a sensor unit **130**, a sensor detection unit **140**, a touch screen **150** including a display unit **151** and a touch unit **153**, a storage unit **170**, and a controller **160**.

The portable terminal **100** may perform zoom-in or zoom-out commands in the process of executing an application program that requires a zoom-in or zoom-out function according to the user's request. The portable terminal **100** may support a direction function to execute an application program, and a content arrangement function to arrange content on the display unit **151**. The portable terminal **100** may generate corresponding input signals based on input motion operations, and may then apply the generated input signals to the function being executed. Hereinafter, a configuration of the portable terminal **100** is explained in more detail.

The wireless communication unit **110** may transmit and receive voice signals for implementing a phone call function and data for data communication according to control of the controller **160**. For transmission and reception of signals, the wireless communication unit **110** may include a wireless frequency transmission unit which may upconvert the frequency of a signal to be transmitted and amplify the signal to be transmitted, and a wireless frequency reception unit which may low-noise-amplify a received signal and downconvert the frequency of the received signal. The wireless communication unit **110** may form a communication channel with another portable terminal, and may transmit and receive audio or video signals according to the communication channel.

The audio processing unit **120** may include a speaker (SPK) for playing audio data transmitted and received during a phone call and a microphone (MIC) for collecting the user's voice or other audio signals received during a phone call. The audio processing unit **120** can sound an alarm for a zoom-in or

zoom-out operation using, for example, a zoom operation sound. The portable terminal **100** may further include a vibration module to perform a vibration alarm. The vibration alarm can substitute the zoom operation sound. If the portable terminal **100** is touched and shaken consecutively and/or simultaneously, the audio processing unit **120** can output an alarm while performing other application programs such as execution of a menu screen or a message writing function. The touching and shaking may occur in any order. The portable terminal **100** may store the alarm sound and/or may link the alarm sound to an application program corresponding to a certain complex signal.

The sensor unit **130** may include various sensors. Examples of the various sensors include an acceleration sensor, a gyro sensor, a magnetic sensor, and a piezoelectric sensor. Such various sensors may operate based on power supplied according to the control of the controller **160**, and may generate signals according to movement of the portable terminal **100**. The sensor unit **130** can transmit signals generated by various sensors to the sensor detection unit **140**.

The sensor detection unit **140** can check signals generated in the sensor unit **130** by monitoring the sensor unit **130**. Specifically, the sensor detection unit **140** may distinguish tilting, shaking, snapping, and/or grabbing of a portable terminal **100** based on sensor signals generated by an acceleration sensor or a gyro sensor, and may transmit the signal corresponding to the motion, to the controller **160**. The sensor detection unit **140** may analyze motions input from the sensor unit **130**. For example, if a portable terminal **100** is tilted forward/backward or is shaken, the sensor detection unit **140** may analyze the amplitude, change in the amplitude, and/or duration of cycle of the movement, and may determine whether the current portable terminal **100** is performing the tilting, shaking, and/or snapping. For example, if a user tilts a portable terminal **100** right, left, forward, backward or in any other direction, the sensor unit **130** may generate a frequency according to the tilting, shaking, and/or snapping. If the sensor signal has a constant amplitude or a certain level of change in the amplitude and the same frequency is generated for a given duration, the sensor detection unit **140** can determine the motion (e.g., tilting, shaking and/or snapping) of the portable terminal **100**.

The touch screen **150** may be formed such that a touch unit **153** may be arranged at one side of a display unit **151** of a portable terminal **100**. The touch screen **150** may serve as an input unit of a portable terminal **100**. The touch screen **150** can receive the input of number or letter information from the user, set images and coordinates values corresponding to input keys and function keys for setting various functions, and may transmit a corresponding touch event to the controller **160**. The function keys may include direction keys, side keys, and shortcut keys. The touch screen **150** may generate key signals related to the user setting and function control of the portable terminal **100**, and may transmit the generated signals to the controller **160**. Particularly, the touch screen **150** can output various key images used for operation of the portable terminal **100** to the display unit **151**. After a user's touch is sensed using the touch unit **153**, the touched key can be mapping to the key image output on the display unit **151**. Also, the touch screen **150** can be formed as a full screen. The touch screen **150** may generate a touch event corresponding to a touch signal for selecting a file stored in the storage unit **170**, a drag signal for moving the selected file, and an input signal for editing a file. The touch screen **150** may transmit the generated event to the controller **160**. If the user of the touch screen **150** touches certain coordinates, the touch screen **150** may transmit information on the coordinates to the controller