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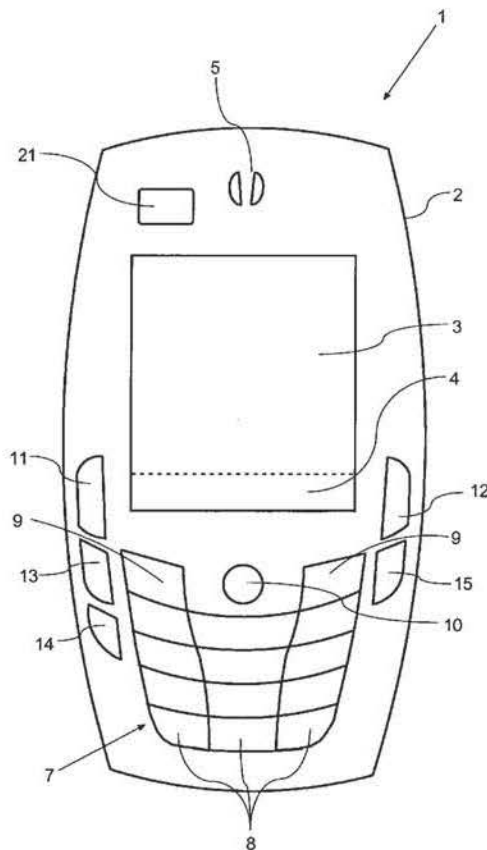
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(54) Title: FINGERPRINT ACTIVATED QUICK FUNCTION SELECTION



(57) Abstract: A device (1) such as a laptop computer includes a fingerprint sensor (21) and has a specific function to be performed associated with at least two of the fingerprints of an authorized user of the device (1). The device performs the specific function when an authorized user places a finger on the fingerprint sensor (21). The functions associated with the fingerprints of the authorized users can be quickly-accessed even when a security or keyboard lock is active. A mobile communication terminal (1) includes a fingerprint sensor (21) in a call handling key (11). Calls are answered, rejected or initiated when an authorized user places a finger on the fingerprint sensor (21).

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Apple and Samsung Ex. 1110



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

FINGERPRINT ACTIVATED QUICK FUNCTION SELECTIONFIELD OF THE INVENTION

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The present invention relates to devices in which functions are activated by user input, in particular to devices in which user input is performed with a fingerprint sensor. The invention relates to a method of quickly selecting or activating a function in a device, 10 in particular in a device the operation of which is controlled by a processor.

BACKGROUND OF THE INVENTION

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It is known to use fingerprint sensors on personal computers and on mobile handsets, in particular to enable secure access (authentication) for a number of users based on a fingerprint. Hereto, a database connected to the fingerprint sensor contains information relating to 20 authorized users by means of fingerprint data.

Most personal computers and mobile handsets are provided with a security lock (or just a keypad lock "keylock") function, i.e. a state of the device in which the processor will ignore any key activations, except those 25 that deactivate the lock function.

Many personal computers and telephone headsets are also provided with quick access keys (shortcuts) by means of which a user can activate a specific function associated with a given quick access key by a single press of the key. 30

However, a problem associated with the security or keypad lock function is that it has to be opened first before any quick selection can be done with the quick access keys. This slows down quick selection and thereby
5 undermines the concept of quick selection keys.

In most mobile handsets the keylock function is deactivated for the "call answer key" in order to enable a user to easily answer an incoming call even if the
10 keylock is active. However, a problem associated with this way of handling keylock on a mobile handset is that incoming calls may also be answered either by accident (when phone is in a pocket for example) or intentionally by an unauthorized third-person should they get access to
15 the handset.

DISCLOSURE OF THE INVENTION

On this background, it is an object of the present
20 invention to provide a device, which allows quick selection of functions when a keylock is active. This object is achieved by providing a device comprising a processor controlling the operation of the device, the processor is configured to perform a multitude of
25 functions, a fingerprint sensor for scanning a fingerprint of a user, a memory in which the fingerprints of at least two different fingers of one and the same user are stored, a specific function to be performed being associated with each of the at least two
30 fingerprints, and the processor being configured to perform the function associated with a fingerprint when the fingerprint scanned by the fingerprint sensor matches one of the stored fingerprints.

Since the human hand normally has 10 fingers, each having a different print, up to ten different functions can be activated quickly with the fingerprint sensor. Further, only a single sensor is required for activating up to 10
5 different quick selection functions, where conventionally up to ten keys were required. Thus, the size of the user interface can be reduced.

The specific function can be the start of an application
10 or of an applet on the device.

Preferably, the device further comprises a keypad, in which case the device has at least one mode in which a security lock or a keylock is applied, and the processor
15 is configured to perform the command associated with a given fingerprint when the fingerprint sensor scans the given fingerprint, also when the device is in a mode in which the security lock or keylock is active.

20 The device may comprise one or more further fingerprint sensors, in which case a specific function to be performed is associated with each of the at least two fingerprints and the further fingerprint sensor. Thus, an increased number quick selection functions can be
25 activated

The fingerprint data of one or more authorized users can be stored in the device to support multi-user operation.

30 It is also an object of the invention that the device is coupled to a secure network.

It is another object of the invention to provide an automated teller machine including the device.

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