

USER INTERFACE FOR MOBILE HANDHELD COMPUTER UNIT

TECHNICAL FIELD

The present invention relates to a user interface for a mobile handheld computer unit, which computer unit comprises a touch sensitive area, and which touch sensitive area is divided into a menu area and a display area.

The computer unit is adapted to run several applications simultaneously and to present any active application on top of any other application on the display area.

The present invention also relates to an enclosure for a handheld computer unit.

The present invention also relates to a computer readable medium. A computer program product with computer program code is stored within the computer readable medium, which code, when read by a computer, will make it possible for this computer to present a user interface according to the invention.

DESCRIPTION OF BACKGROUND ART

Mobile handheld computers are known in various embodiments. One kind of handheld computer is the personal digital assistant (PDA), which is getting more and more powerful.

Another kind of handheld computer unit is the mobile phone, which also is getting more and more powerful. There are also examples of where the mobile phone and the PDA are merging into one unit.

A third kind of handheld computer is the laptop computer, which is getting smaller and smaller, even competing in size with the PDA's.

The need to manage more information has led the development towards new solutions regarding user interfaces and navigation. The PDA's and mobile phones are getting larger and larger in order to provide a user-friendly interface.

Since the users have gotten used to small handheld units, it is hard to move towards larger units. This has led to foldable keyboards, different kinds of joy sticks and different kinds of touch sensitive displays and pads intended to help in providing a user interface that is suitable for small handheld computer units.

SUMMARY OF THE PRESENT INVENTION

Technical Problems

It is a problem to provide a user-friendly interface that is adapted to handle a large amount of information and different kinds of traditional computer-related applications on a small handheld computer unit.

It is a problem to provide a user interface that is simple to use, even for inexperienced users of computers or handheld devices.

It is a problem to provide a small handheld computer unit with an easily accessible text input function.

It is also a problem to provide a simple way to make the most commonly used functions for navigation and management available in the environment of a small handheld computer unit.

Solution

Taking these problems into consideration, and with the starting point from a user interface for a mobile handheld computer unit, which computer unit comprises a touch sen-

sitive area, which touch sensitive area is divided into a menu area and a display area, which computer unit is adapted to run several applications simultaneously and to present an active application on top of any other application on the display area, the present invention teaches that the menu area is adapted to present a representation of a first, a second and a third predefined function, where the first function is a general application dependent function, the second function is a keyboard function, and the third function is a task and file manager. The present invention also teaches that any one of these three functions can be activated when the touch sensitive area detects a movement of an object with its starting point within the representation of the function on the menu area and with a direction from the menu area to the display area.

With the purpose of providing a simple way of managing any application or the operations system, the present invention teaches that if the first function is activated, the display area is adapted to display icons representing services or settings, depending on the current active application. One of the icons always represents a "help"-service, regardless of application. The icons are adapted to represent services or settings of the operations system of said computer unit, such as background picture, clock, users, help, etc. if no application is currently active on the computer unit.

Selections of preferred service or setting is done by tapping on corresponding icon.

With the purpose of providing the access to a text input function in any application in the computer unit, the present invention teaches that when the second function is activated, the display area is adapted to display a keyboard and a text field,

If a text passage in an active application is highlighted, then this text passage is displayed in the text field for editing through the keyboard and that the highlighted text passage is replaced by the edited text passage when the second function is deactivated.

If no text passage in an active application is highlighted, then the text field is available for inputting and editing of text through the keyboard.

In the case of the latter the first function can be activated, or the second function can be closed, in which a choice of saving or deleting the inputted text is given. The choice of saving the inputted text results in an activation of the first function. In this case the first function will present services or settings available for the inputted text, such as saving the inputted text for later use, using the inputted text as telephone number in a telephone application, or sending the inputted text as message in communications application.

In order to provide a task and file management in a user interface for a handheld mobile computer, the present invention teaches that, if the third function is activated, the display area is adapted to display a list with a library of available applications and files on the computer unit. A selection of an application will start the application, and a selection of a file will open the file in an application intended for the file.

A selection of an application or a file is done by moving the object so that the representation of desired application or file is highlighted, removing the object from the touch sensitive area, and then tapping on the touch sensitive area.

According to the present invention a navigation in the list is performed by moving the object in a direction towards the top of the list or towards the bottom of the list. This will cause the marking to move in the same direction. The speed of the movement of the marking is lower than the speed of the movement of the object, with the purpose of making the navigation easier.