

**METHOD, SYSTEM, APPARATUS AND  
COMPUTER-READABLE MEDIA FOR DIRECTING  
INPUT ASSOCIATED WITH KEYBOARD-TYPE  
DEVICE**

FIELD OF THE INVENTION

[0001] The present invention relates to a method, system, apparatus and computer-readable media for directing input associated with a keyboard-type device.

SUMMARY OF THE INVENTION

[0002] In one aspect of the present invention, there is provided a computer-implemented method of processing input key events associated with user input received from a keyboard-type device, the keyboard-type device selected from at least one of a keyboard and a keypad. In this aspect, the method comprises:

[0003] (a) receiving input key events associated with a first process active within an operating system;

[0004] (b) monitoring the input key events for a first predefined input key event associated with user selection of a first key of the keyboard-type device for at least a predetermined time period;

[0005] (c) in response to identifying the first predefined input key event, redirecting the input key events from the first process to a second process;

[0006] (d) monitoring the input key events for a second predefined input key event associated with further redirection of the input key events; and

[0007] (e) in response to identifying the second predefined input key event, redirecting the input key events to another process.

[0008] Many variations of this method are contemplated, as described further in this specification. There is also provided a computer-readable medium having stored instructions for use in execution of the aforementioned method and its variations.

[0009] In another aspect of the present invention, there is provided a system for processing input key events associated with user input received from a keyboard-type device, the keyboard-type device selected from at least one of a keyboard and a keypad. In one arrangement, the system comprises:

[0010] (a) means for receiving input key events associated with a first process active within an operating system;

[0011] (b) means for monitoring the input key events for a first predefined input key event associated with user selection of a first key of the keyboard-type device for at least a predetermined time period;

[0012] (c) means for redirecting the input key events from the first process to a second process in response to identifying the first predefined input key event;

[0013] (d) means for monitoring the input key events for a second predefined input key event associated with further redirection of the input key events; and

[0014] (e) means for redirecting the input key events to another process in response to identifying the second predefined input key event.

[0015] In yet another aspect of the present invention, there is provided a keyboard-type device comprising:

[0016] (a) a plurality of user input signal generators for producing first input signals in response to user actuation thereof;

[0017] (b) a display device;

[0018] (c) a processor circuit in communication with said display device and said user input signal generators, said processor circuit configured to:

[0019] (i) generate a plurality of predictive text completion candidates in response to said first input signals and display said plurality of predictive text completion candidates on said display device; and

[0020] (ii) communicate at least one of said predictive text completion candidates to a personal computing device remote from the keyboard-type device in response to user selection of the at least one of said predictive text completion candidates.

[0021] Several other aspects and features of the present invention will become apparent to those ordinarily skilled in the art upon review of the following description of specific embodiments of the invention in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022] In the accompanying drawings which illustrate embodiments of the invention,

[0023] **FIG. 1** is a block diagram of an input management system in use in association with a first process and a second process, according to a first embodiment of the invention;

[0024] **FIG. 2** is a block diagram of a personal computing device loaded with a data entry system, according to a first embodiment of the invention;

[0025] **FIGS. 3 and 4** are flow diagrams illustrating the operation of an input management system in accordance with the first embodiment of the present invention;

[0026] **FIG. 5** is a block diagram of a data structure for a keyboard message used in connection with the first embodiment;

[0027] **FIG. 6** is a block diagram illustrating operation of a keyboard when keyboard input is redirected to a second process, according to the first embodiment of the invention;

[0028] **FIG. 7** is a block diagram illustrating another form of operation of a keyboard when keyboard input is redirected to a second process, according to the first embodiment of the invention;

[0029] **FIG. 8** is a block diagram of an input management system in use in association with a first process and a second process, according to another embodiment of the invention;

[0030] **FIGS. 9 and 10** are flow diagrams illustrating the operation of an input management system in accordance with the embodiment of the present invention shown in **FIG. 8**;