Claims

1. A graphical user interface GUI in which the GUI is characterised by the GUI detecting an input of pointer movement alone from a pointer device <u>wherein and</u> <u>thereby</u>,

when a pointer is immediately adjacent to or passes over a control area,

a procedure is initiated whereby subsequent movement of the pointer over a predetermined path generates a 'click' event, which simulates direct clicking of a control,

and moving outside the predetermined path prior to completion of the path resets the control to as if the pointer has never started along the predetermined path.

2. A GUI as defined in claim 1 wherein the control area may be any size, shape, or appearance, and relates to one or more functions to be accessed via the GUI.

3. A GUI as defined in claim 1 wherein the control area is associated with one or more predetermined paths generating one or more different 'click' events.

4. A GUI as defined in claim 1 wherein the predetermined path can extend outside the original control area and the appearance of said area outside the control area and/or the control area is adjustable to provide feedback to the user.

5. The user feedback in claim 4 may be information how to complete the correct movement to simulate the direct clicking of the control and is aided by visible subareas within the predetermined path.

6. The user feedback in claim 4 can provide the user within all the movement stages from the contact with the control area to final movement that leads to the simulated direct clicking of the control with the appropriate user feedback so that the user is provided with additional information that he may understand the significance and implications of activating a function by the simulated direct clicking of the control.

7. A GUI as defined in claim 1 wherein the predetermined path is adjustable so that it fits on the computer screen even if the original position of the control area would have meant that the predetermined path would have gone off the screen and not be accessible to the pointer.

8. A GUI as defined in claim 1 wherein the predetermined path is adjustable to suit a certain screen size.

9. A GUI as defined in claim 1 wherein the predetermined path and subsequent

movement within the predetermined path is adjustable for the purposes of error prevention.

10. A GUI as defined in claim 1 wherein the predetermined path and subsequent movement within the predetermined path is adjustable for the purposes of user preference.

11. A GUI as defined in claim 1 wherein the predetermined path and subsequent movement within the predetermined path is adjustable for the purposes of speed of completing this simulated click.

12. A GUI as defined in claim 1 wherein all the possible <u>standard</u> clicks and multiple different <u>standard</u> clicks related to each control in a program accessed via the GUI would have an equivalent 'click' event as defined in claim 1.

13. A GUI as defined in claim 12 wherein the various 'click' events for controlling the control may be listed.

14. A GUI as defined in claim 12 wherein the list of 'click' events for controlling the control includes a description of a function to be selected.

15. A GUI as defined in claim 1 wherein a function to be activated by the simulated click has previously only been accessed by other methods in the existing program context.

16. A GUI as defined in claim 15 wherein the previous other methods would have been by a standard click method.

17. A GUI as defined in claim 15 wherein the previous other methods would have been by a keyboard.

18. A GUI as defined in claim 1 is in the form of a HCG.

19. A GUI as defined in claim 1 is in the form of a bordergrid.

20. A GUI as defined in claim 1 is in the form of a qualifier grid.

21. A GUI as defined in claim 1 is in the form of a sequential grid.

22. A GUI as defined in claim 1 whereby the action of the simulated click or an activated function is reversed by a subsequent movement in an additional area of the control area.

23. A GUI as defined in claim 1 wherein existing programs without the 'click' event of

claim 1 can have the 'click' event by means of a transforming program in the operating system.

24. A GUI as defined in claim 1 wherein the predetermined path of the simulated click activates a pattern click.

25. A GUI as defined in claim 1 which is programmed easier by a set of procedures, functions or controls.

26. A GUI as defined in claim 1 which by programming can transform existing programs without the 'click' event of claim 1 to have the 'click' event.

27. A GUI as defined in claim 1 which by reinterpretation of the web source pages can transform existing programs without the 'click' event of claim 1 to have the 'click' event.

28. A GUI as defined in any preceding claim wherein the 'click' event as defined in claim 1 can be used in conjunction with standard clicks for controlling one or more program functions through the GUI.

29. A GUI as claimed in any preceding claim wherein

the GUI is displayed on a touch sensitive screen<u>as the pointer device</u>, which does not require to be pressure sensitive <u>to contact of a user's finger</u> for the GUI to detect the touch sensitive screen being touched by <u>thea</u>_user's finger at one or more locations on the touch sensitive screen as said input of pointer <u>movement alone from the pointer device</u> and thereby generate the 'click' event.

30. A method of operating a graphical user interface GUI in which the GUI is characterised by the GUI detecting an input of pointer movement alone from a pointer device <u>wherein and thereby</u>,

a function related to a control area is triggered by a pointer movement over the control area, then by further movement over an additional area comprising the steps of :

a. moving the pointer into contact with the control area

b. initiating activating the function associated with the control area by moving the pointer to an additional area related to the control area c. moving the pointer within a region containing the additional area defined in b. and completing a specified movement within the additional area to complete activation of the function associated with the control area.

31. A method of operating a GUI as defined in claim 30 wherein the function to be activated comprises generation of one or more further regions for further function activation.

32. A method of operating a GUI as defined in claim 30 wherein the control area is a screen control of any appearance, size, shape or colour.

33. A method of operating a GUI as defined in claim 30 wherein the movement of a pointer over the control area makes another area or areas visible within the control or in an area adjacent to the control area.

34. A method of operating a GUI as defined in claim 30 wherein the appearance of the control area and the region is varied to provide user feedback at different parts of the movement described in b. & c.

35. A <u>method of operating a GUI</u> as defined in any of claims 30 to 33 wherein the <u>'click' as defined in claim 1 function</u> is used in conjunction with standard clicks for controlling program functions through the GUI.

36. A method of operating a GUI as defined in claim 30 wherein the areas made visible is in the form of a bordergrid.

37. A method of operating a GUI as defined in claim 30 wherein the areas made visible is in the form of a qualifier grid.

38. A method of operating a GUI as defined in claim 30 wherein the areas made visible is in the form of a HCG.

39 A method of operating a GUI as defined in claim 30 wherein the areas made

visible is in the form of a sequential grid.

40. A method of operating a GUI as defined in claim 30 wherein the areas made visible is in the form of a pattern click.

41 A method of operating a graphical user interface GUI in which the GUI is characterised by the GUI detecting an input of pointer movement alone from a pointer device-wherein, and thereby

by pointer movement alone activates one or more functions of the GUI, which were previously activated in existing programs by other methods.

42. A method of operating a GUI as defined in claim 41.

where the other methodss is a standard click method.

43. A method of operating a GUI as defined in claim 41 where the other methodss is $a_{is a}$ keyboard.

44. A method of operating a GUI as defined in claim 30 wherein the additional area and subsequent movement within it is adjustable for the purposes of error prevention.

45. A method of operating a GUI as defined in claim 30 wherein the additional area and subsequent movement within it is adjustable for the purposes of speed of clicking.

46. A method of operating a GUI as claimed in any of claims 30 to 45 wherein

the GUI is displayed on a touch sensitive screen<u>as the pointer device</u>, which does not require to be pressure sensitive<u>to finger contact on the screen</u> for the GUI to detect one or more finger movements of a user<u>at one or more</u> <u>locations</u> on the touch sensitive screen <u>as the input of pointer movement</u> alone from the pointer device and thereby generate the 'click' event or activate one or more functions of the GUI.

47. A computer apparatus incorporating a user interface according to any of claims
1 to <u>28 29, 48 and 50</u> wherein,

the apparatus can optionally further comprise a device <u>including a</u> <u>touch sensitive screen as the pointer device</u> -with <u>at least</u> one or more of the following:

a) the device is operable by <u>a-the</u>touch sensitive screen without requiring the touch sensitive screen to be pressure sensitive_<u>including_any of_and_the device_is</u> a mobile phone, or a touch sensitive pad, or another computer device <u>with-including</u> the <u>a</u> touch sensitive screen;

b) the device activates a <u>the</u> touch sensitive screen, without requiring the touch sensitive screen to be pressure sensitive, by a start sequence of locations touched on the touch sensitive screen by a movement of a user's finger to start operating one or more further functions of the user interface selectable by one or more subsequent finger movements of the user on the touch sensitive screen to control the device by one or more subsequent selected operations of the user;

c) the device can browse the internet;

- d) the device can play video files;
- e) the device can play audio files;
- f) the device can display text;
- g) the device can display a multimedia file;
- h) the device can edit text;
- i) the device can search the internet or text by entering characters;

j) the device has a start sequence of locations to be touched on <u>athe</u> touch sensitive screen by one or more finger movements of a user on the touch sensitive screen without requiring the touch sensitive screen to be pressure sensitive to start operating one or more further functions of the user interface to control the device, and the start sequence does not require the sequence of locations to be touched to be deducible by another user from the appearance of the touch sensitive screen displaying the start sequence of locations to be touched;

 k) the device is operated by touching <u>a the</u> touch sensitive screen in two or more areas sequentially without requiring the touch sensitive screen to be pressure sensitive;

I) the device has one or more functions to activate a the touch sensitive screen display from a very low power mode;

m) the device requires a sequence of locations on <u>-athe</u> touch sensitive screen being touched by one or more finger movements on the touch sensitive screen, without requiring the touch sensitive screen to be pressure sensitive, thereby to activate a selected operation of a user to control the device;

n) a <u>the</u> touch sensitive screen being touched by one or more finger movements without requiring the touch sensitive screen to be pressure sensitive can generate one or more functions by any of placing a finger at a location on the screen, moving a finger in contact with the screen, or not touching removing the finger from the screen at a location of the screen;

 o) the device can operate a graphic program including the ability to draw a line on a the touch sensitive screen;

p) the device further includes detecting on <u>a the</u> touch sensitive screen, without requiring the touch sensitive screen to be pressure sensitive, a movement of a pen at one or more locations of the touch sensitive screen as a movement of a user's finger at said one or more locations on the touch sensitive screen;

q) the device in which the user interface is further configured to respond to a pointer speed at which a user's finger touching <u>a the</u> touch sensitive screen without requiring the touch sensitive screen to be pressure sensitive moves along the screen;

r) the device wherein the user interface is further configured to execute a selected operation by <u>a the</u> touch sensitive screen detecting coordinates of each of at least two of the user's fingers touching different areas of the touch sensitive screen sequentially without requiring the touch sensitive screen to be pressure sensitive;

s) the device wherein said user interface is further configured to make a triggering of a user selected operation by a sequence of locations touched on a-the touch sensitive screen without requiring the touch sensitive screen to be pressure

sensitive less probable to occur by accident than a user pressing a physical button or requiring pressing on a touch screen to trigger said user selected operation;

t) the device in which the user interface is further configured to cause a selected operation to control the device by one or more functions in addition to an appearance on <u>a-the</u> touch sensitive screen by detecting one or more coordinate positions of one or more finger movements touching the touch sensitive screen without requiring the touch sensitive screen to be pressure sensitive; and

u) the device can operate an application program within the user interface.

48. An apparatus in which the apparatus is a computer apparatus capable of operating software characterised by a mobile device with a touch sensitive screen displaying a user interface wherein,

the touch sensitive screen device is programmed to detect being touched on the touch sensitive screen by one or more finger movements of a user at one or more locations on the touch sensitive screen,

without requiring the touch sensitive screen to be pressure sensitive, and

thereby control one or more functions of the user interface to control the mobile device,

wherein the mobile device can comprise a mobile phone, or a touch sensitive pad as hereinbefore described with reference to the accompanying drawings.

49. A method in which the method is a method of operating a computer apparatus capable of operating software comprising a device with a touch sensitive screen characterised by a method of programming a user interface to detect the touch sensitive screen displaying the user interface being touched by a user without requiring the exertion of pressure on the screen to control the device by the following steps:

a) a start sequence of locations being touched on the touch sensitive screen without requiring the exertion of pressure by one or more finger movements of the user on the touch sensitive screen thereby generating one or more further functions of the user interface to be selectable by the user to control the device, and

b) in which said one or more further functions are selectable by the user by a subsequent one or more finger movements without requiring the exertion of pressure at a subsequent one or more locations on the touch sensitive screen to thereby activate said one or more further functions to control the device as hereinbefore described with reference to the accompanying drawings.

50. A graphical user interface GUI in which the GUI is incorporated in a computer apparatus capable of operating software comprising a device with a touch sensitive screen characterised by the GUI detecting an input of pointer movement alone from a pointer device to operate one or more functions of the GUI selectable by a user to control the device wherein,

the pointer device is the touch sensitive screen displaying the GUI programmed to operate and said input of pointer movement alone from the touch sensitive screen to operate said one or more functions of the GUI by is one or more locations touched by one or more finger movements of the user on the touch sensitive screen without requiring the touch sensitive screen to be pressure sensitive to the finger contact on the screen,

wherein the device can be a mobile phone or a touch sensitive pad as hereinbefore described with reference to the accompanying drawings.