EXHIBIT 14

$\#$ 110/ 115   2609

Banerjee 11/5/94   **PATENT**

In the United States Patent and Trademark Office

In re application of:) BEERNINK et al.) Serial No: 08/228,460) Filed: April 15, 1994) Title: GESTURE SENSITIVE BUTTONS) FOR GRAPHICAL USER) INTERFACES)	Examiner: Banerjee, A. Group Art Unit: 2609 Attorney Docket: P1017C/P053A

#14/ Reg ex
D. _____
11-7-94

Amendment B

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Dear Sir:

In response to the Office Action of 7/7/94, please amend the above identified patent
application as follows. Applicant hereby requests a one month extension of time to file this
response.

In the Claims:

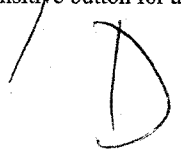Please cancel claims 21-23.

_____

1. (twice amended) A gesture sensitive button for a graphical user interface comprising:

a digital processor;

a display screen coupled to said digital processor;

a pointer for pointing to locations on said display screen;

a button image displayed on said display screen, said digital processor being responsive without any intermediate input to at least two different button gestures made by said pointer on said display screen at any location over said button image; and

gesture recognition means for detecting gestures made on said display screen by said pointer and operative to initiate a process in said digital processor that is determined by a recognizable button gesture made with said pointer on said display screen which both selects said button image and which has meaning to said digital processor based upon a context associated with said button image wherein the gesture recognition means is arranged such that the function associated with each of said button gestures will be initiated and executed in an identical manner regardless of the location over the button image that the gesture was made.

5. (amended) A gesture sensitive button as recited in claim 3 wherein a first one of said button gestures is a tap made by said stylus on said screen over any segment of said button image.

6. (amended) A gesture sensitive button as recited in claim 3 wherein another of said button gestures is selected from [the] a group consisting of a check-mark[s] and an X-mark[s and] that is made by said stylus on said display screen means over said button image.

7. (amended) A gesture sensitive button as recited in claim 5 wherein the appearance of said button image [displays an] is altered [image] upon the detection of a button gesture.

8. (twice amended) A method for providing and utilizing a gesture sensitive button for a graphical user interface, wherein the gesture sensitive button has a plurality of distinct gestures associated therewith, each distinct gesture that is associated with the gesture sensitive button having a distinct process associated therewith, the method comprising the steps of:

providing a button image on a computer display screen;

detecting a<u>n inputted</u> gesture made upon said computer display screen by a pointer;

determining whether said <u>inputted</u> gesture is associated with said button image by determining whether said gesture contacts said button image and determining whether said gesture is <u>one of the distinct gestures that is associated with the gesture sensitive button</u> [a recognizable gesture in a context of said button image]; and

when the inputted gesture is determined to be associated with the button image, initiating [one of at least two] <u>the</u> process[es if said gesture is] associated with said <u>inputted gesture and the button image</u>[, where said initiated process is determined based on both said context associated with said button image and said gesture].

~~13.~~ (amended) A method for providing a gesture sensitive button as recited in claim ~~8~~ wherein a tap gesture is a [recognizable] <u>first one of the distinct</u> gesture<u>s associated with</u> [for] said button image.

~~14.~~ (amended) A method for providing a gesture sensitive button as recited in claim ~~13~~ wherein a check-mark gesture is a [recognizable] <u>second one of the distinct</u> gesture<u>s associated with</u> [for] said button image.

~~15.~~ (amended) A method for providing a gesture sensitive button as recited in claim ~~13~~ wherein an X-mark gesture is a [recognizable] <u>third one of the distinct</u> gesture<u>s associated with</u> [for] said button image.

19. (amended) A method for initiating <u>and executing</u> one of a plurality of command sequences from inputs made with a stylus on a <u>gesture sensitive</u> button image displayed on a touch-sensitive display screen of a pen-based computer system, the method comprising the steps of:

displaying a[t least one] button object having a button context on [a] <u>the</u> display screen of [a] <u>the</u> pen-based computer system, said button object having a button bounding box;

entering with a stylus a gesture object <u>,having a gesture bounding box, anywhere over said button object</u> [on a display screen, said gesture object comprising one of tap, a check-mark, and an X-mark and having a gesture bounding box];

determining whether said gesture bounding box substantially overlaps said button bounding box [and whether said gesture has a gesture meaning within a context associated with said button object on said display screen]; and

executing a command sequence in said pen-based computer system that is [selected by said] associated with the entered gesture [meaning,] without utilizing an intermediate input to the pen-based computer system[.] when the gesture bounding box is determined to substantially overlap the button bounding box;

wherein when a first gesture type is entered, the executed command sequence turns a function associated with said button object on if previously off and off if previously on; and

wherein when a second gesture type is entered, the executed command sequence brings up a choice palette wherein a further selection within the choice palette can be made and a function associated therewith executed.

20. (amended) A method as recited in claim 19 wherein said substantial overlap is an overlap of at least approximately 40% [or more] of the gesture bounding box and the button bounding box.

Please add the following new claims.

24. (NEW)   A method as recited in claim 19 wherein when a the third gesture type is entered, the executed command sequence activates at least one of the functions associated with said button object.

25. (NEW)   A method as recited in claim 19 wherein the gestures types include a tap, a check-mark, and an X-mark.

REMARKS

Amendments have been made to claims 1, 5-8, 13-15, 19, 20. Claims 21-23 were canceled. New claims 24 and 25 were added. Claims 1-3, 5-11, and 13-20 remain pending in the application.

Claims 1-3, 5-11, and 13-18 were rejected under 35 U.S.C. § 103 as being unpatentable over Liljenwall et al. in view of Mizzi. Briefly, Liljenwall et al. discloses an information entry system of a wristwatch that allows a user to enter information by using "finger strokes" across the face of the watch device. Mizzi discloses a hand held computer enabling information entry by writing directly on a touch sensitive flat screen.

The Examiner argues that the data entry system of Liljenwall (wristwatch face) constitutes a gesture sensitive button. The button of Liljenwall is subdivided into what the Examiner calls button segments and it is this array of button segments that form a single button. Examiner contends that it is obvious to superimposed this button on a display screen since Mizzi teaches the use of soft buttons or a specific labeled area on the screen. But Liljenwall, as the Examiner admits, does not teach that the buttons are images that can be located on a display screen (last paragraph of page 3 in 7/7/94 office action). Also, the Mizzi button images have single functions associated with them that respond to a single gesture and does not teach or suggest the use of buttons that recognize different gestures that perform different functions. The Liljenwall button does respond to a plurality of gestures but the placement of the gesture is crucial in order to determine what the gesture is. For example, in Fig. 8 of Liljenwall, a six button segment display is shown where the location of a "tap" made on the display determines its meaning. In calculator mode for instance, a "tap" in the upper left segment is interpreted as a plus operation and a "tap" in the lower left segment is a multiply operation. Thus the same gesture made in different button segments does not initiate the execution of the same function.

The button images in the Applicant's invention recognizes different gestures but also that each gesture initiates and executes the same function from anywhere within the button image that it

was made (after determination that the gesture is associated with the button). Thus gesture location within the button is irrelevant to the associated function of the gesture. Claims 1, 8 have been amended to more particularly point out this feature of the Applicant's invention. Specifically, amended claim 1 states that gestures can be made at any location over the button image and that the same function is executed regardless of the location over the button image that the gesture was made. Claim 8 was amended to specifically state that the gesture sensitive button has a plurality of distinct gestures associated with it and when an inputted gesture is detected and determined to be associated with the button image, the process associated with the gesture is initiated. In view of the foregoing, Applicant respectfully submits that the button image taught in the Applicant's invention and the button of Liljenwall are patentably distinct thus it would not be obvious to modify Liljenwall by substitution of a soft button (image) as the Examiner argues.

The dependent claims depend on independent claims 1, 8, and 19 and thus and are respectfully submitted as allowable for at least those reasons stated with respect to independent claims. In view of the foregoing, the Applicant submits that the pending claims are patentable over the cited art and respectfully requests that the rejection under 35 U.S.C. § 103 be withdrawn. Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below. The Commissioner is authorized to charge any fees that may be due to our Deposit Account No. 08-2120 (Order No. APL1P053A). A duplicate copy of this sheet is enclosed for this purpose.

Respectfully submitted,
HICKMAN & BEYER

Steve D Beyer
Reg. No. 31,234

P.O. Box 61059
Palo Alto, CA 94306
415-328-6500