(12) **United States Patent**
Murphy

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(54) **METHOD OF FACILITATING THE SELECTION OF FEATURES AT EDGES OF COMPUTER TOUCH SCREENS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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(52) **U.S. Cl.** **345/173**; 345/157; 345/179; 345/180; 345/856; 345/901; 178/18.01; 178/19.01; 178/19.04

(58) **Field of Search** 345/173, 179, 345/157, 180, 901, 856; 178/18.01, 19.04, 19.01

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(57) **ABSTRACT**

In one embodiment of the invention, a hot spot is normally centered in an area of contact between a user's finger and a touch screen to position the hot spot on an icon or other feature thereby selecting a program or function corresponding to the icon or feature. When the contact area is near an edge, the hot spot is offset toward the edge so that it coincides more closely to the center of the users finger, thus allowing an icon or other feature adjacent the edge of the screen to be more easily selected. In another embodiment, a cursor is displayed on a touch screen at a location that is offset from the contact area between a finger and the screen. The cursor, which is used as the hot spot of the computer, is normally offset above the contact area except when the contact area is close to the bottom of the screen. The cursor is then offset to the left or right of the contact area depending on whether the contact are is to the left or right of the screen, respectively, so that icons or features adjacent the left or right edges of the screen can be selected. Similarly, when the contact area is very close to the bottom of the screen, the cursor is offset downwardly and to the right or left so that icons or features adjacent the bottom edge of the screen can be selected. Alternatively, a touch sensitive area incapable of displaying an image may be provided beneath a display area of the touch screen to allow icons or features adjacent the bottom edge of the display area to be selected.

86 Claims, 13 Drawing Sheets
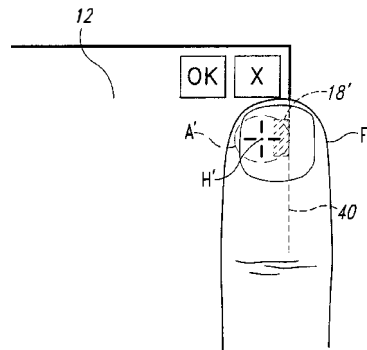
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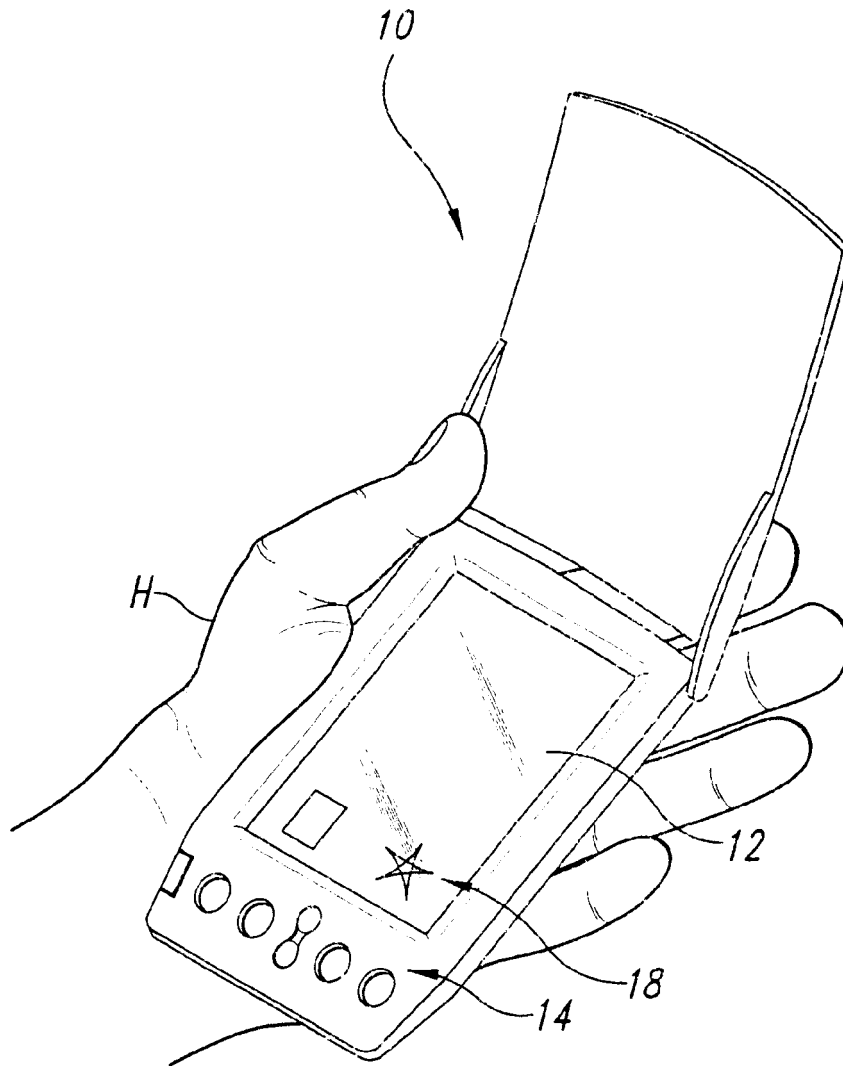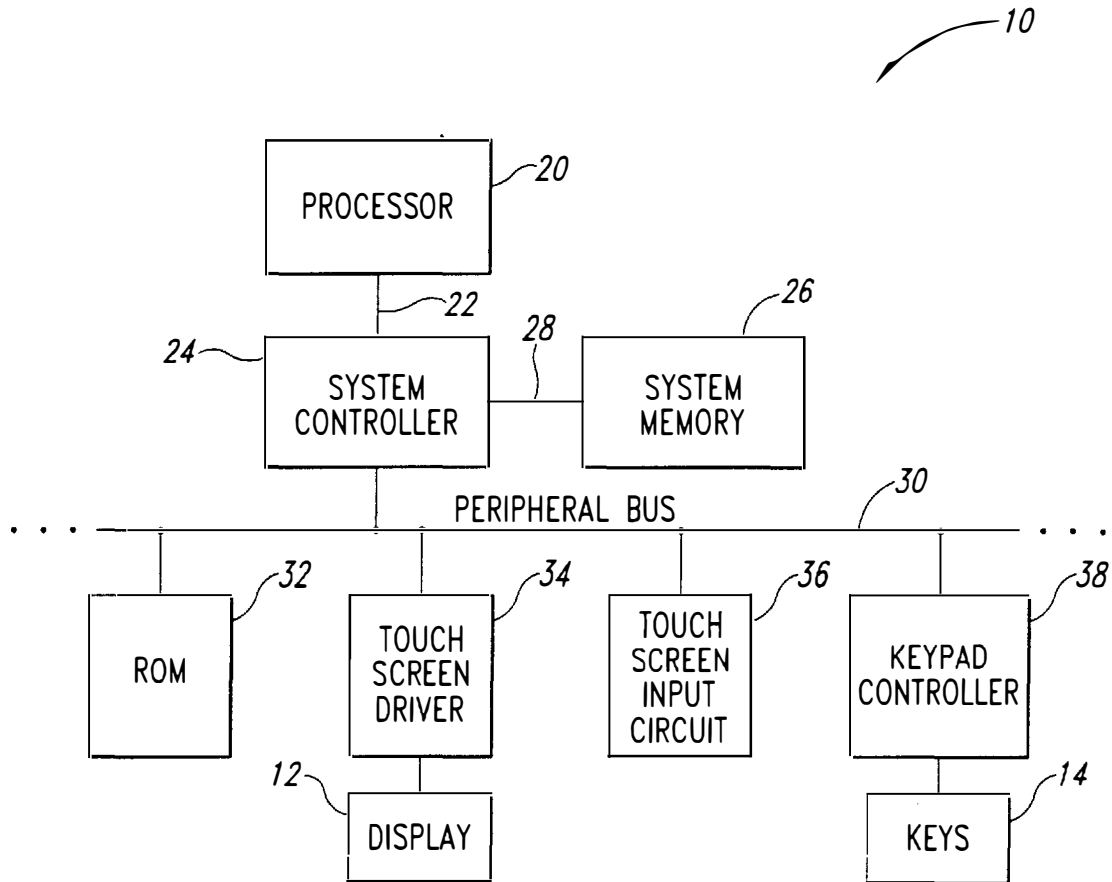
Fig. 1
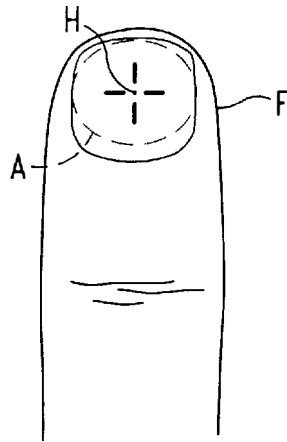*(Prior Art)*
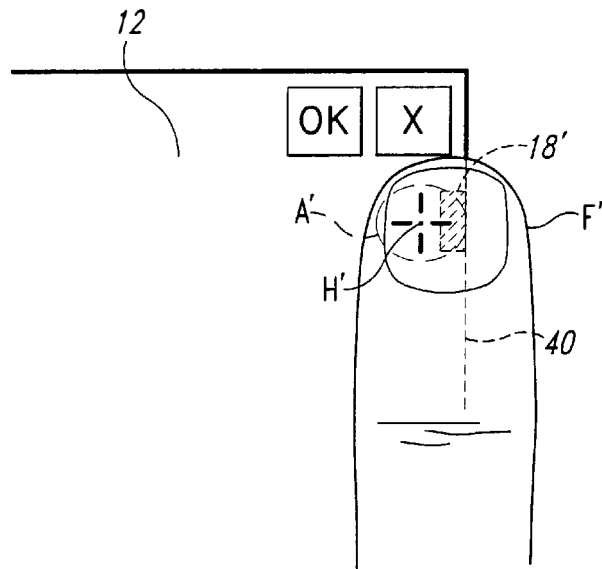
Fig. 2
(Prior Art)

Fig. 3

Fig. 4

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