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# (12) United States Patent

Keely et al.

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# (54) SIMULATING GESTURES OF A POINTING DEVICE USING A STYLUS AND PROVIDING FEEDBACK THERETO

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

patent is extended or adjusted U.S.C. 154(b) by 69 days.

(21) Appl. No.: 09/815,272

(22) Filed: Mar. 23, 2001

(65) **Prior Publication Data** 

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### Related U.S. Application Data

- (60) Provisional application No. 60/247,844, filed on Nov. 10, 2000.
- (51) Int. Cl.<sup>7</sup> ...... G09G 5/00

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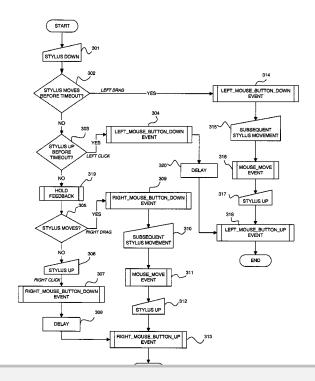
<sup>\*</sup> cited by examiner

Primary Examiner—Henry N. Tran (74) Attorney, Agent, or Firm—Banner & Witcoff, Ltd.

### (57) ABSTRACT

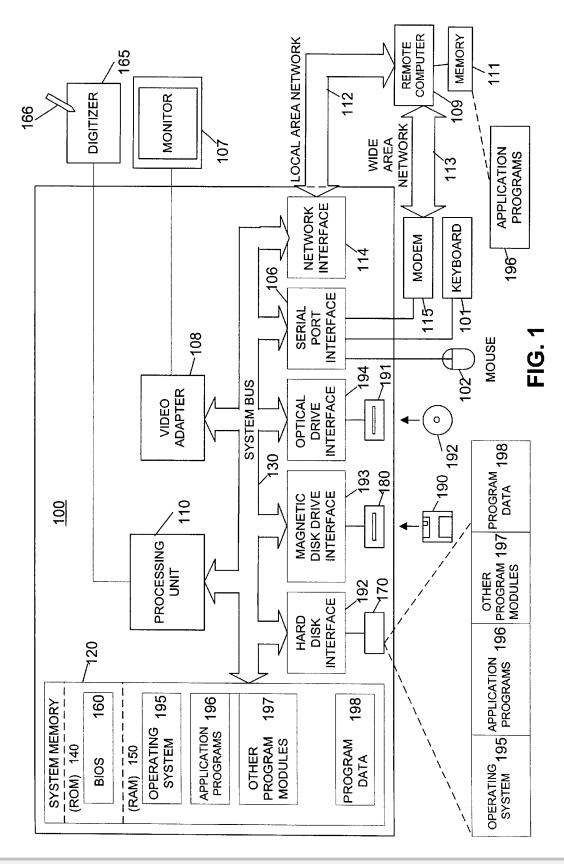
A method and apparatus for simulating at least one gesture of a pointing device such as a mouse. A left click, right click, left drag, right drag, and/or mouse movement may be simulated using a stylus in conjunction with a touch-sensitive display surface. For example, a computer having the display surface may detect whether a stylus is being held down on a touch-sensitive display surface for at least a threshold amount of time. The computer may further detect whether the stylus is then removed from the touch-sensitive display surface after at least the threshold amount of time. Responsive to the stylus being removed, the computer may generate at least one event representing a right mouse button being pressed.

### 47 Claims, 4 Drawing Sheets





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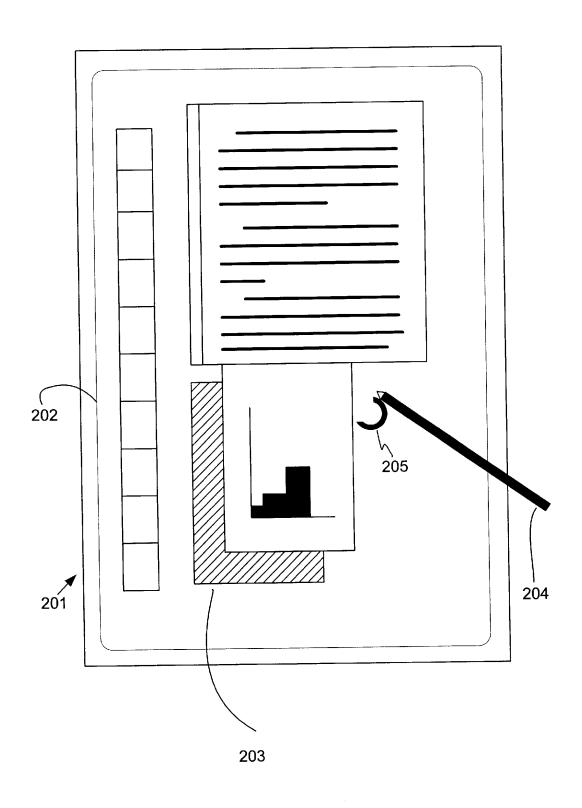
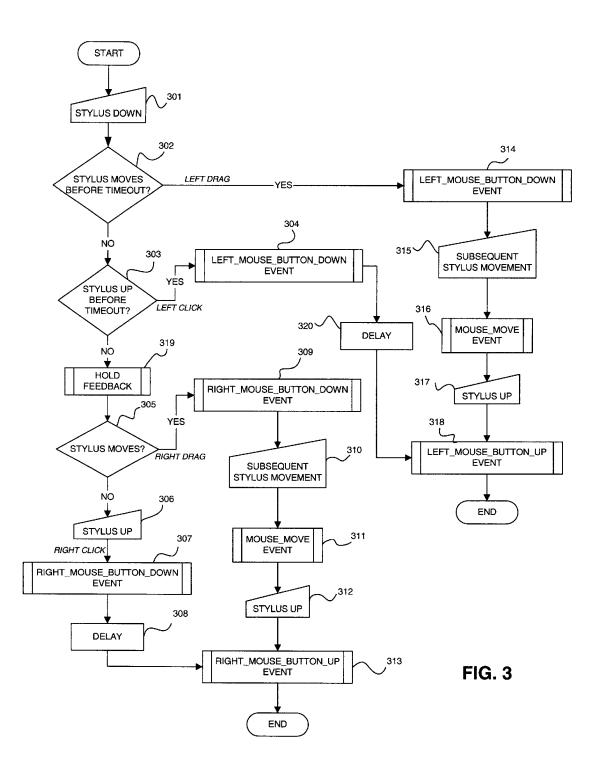


FIG. 2





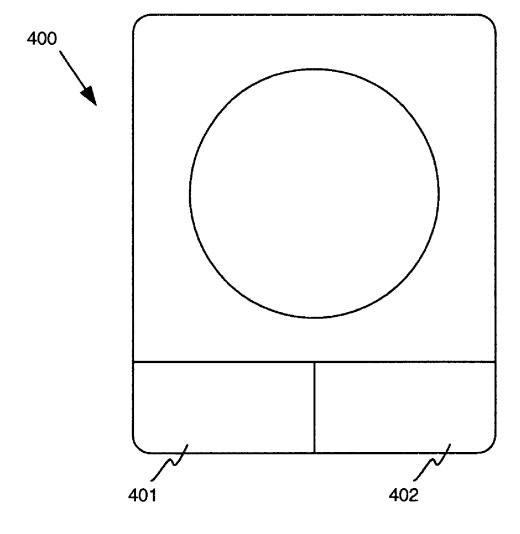


FIG. 4

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