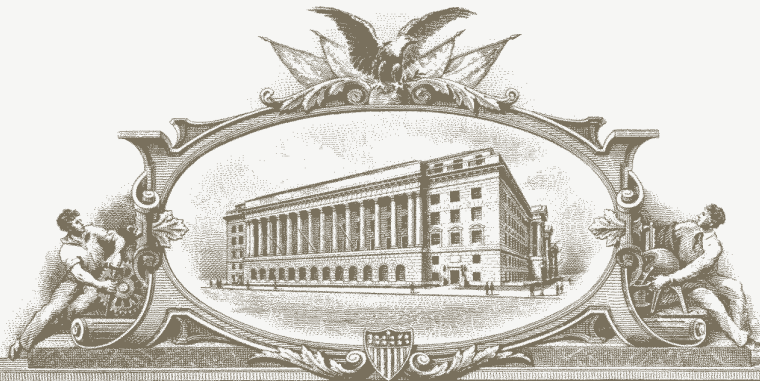


Exhibit E

U 7293220



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April 26, 2011

**THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM
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**U.S. PATENT: 7,844,915
ISSUE DATE: November 30, 2010**

**By Authority of the
Under Secretary of Commerce for Intellectual Property
and Director of the United States Patent and Trademark Office**



**P. SWAIN
Certifying Officer**



US007844915B2

(12) **United States Patent**
Platzer et al.

(10) **Patent No.:** **US 7,844,915 B2**
(45) **Date of Patent:** **Nov. 30, 2010**

- (54) **APPLICATION PROGRAMMING INTERFACES FOR SCROLLING OPERATIONS**
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- (75) Inventors: **Andrew Platzer**, Santa Clara, CA (US);
Scott Herz, Santa Clara, CA (US)
- (73) Assignee: **Apple Inc.**, Cupertino, CA (US)
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 583 days.

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- (21) Appl. No.: **11/620,717**
- (22) Filed: **Jan. 7, 2007**
- | | | |
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| EP | 1517228 | 3/2005 |
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- (65) **Prior Publication Data**
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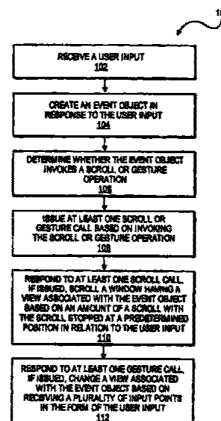
- (51) **Int. Cl.**
G06F 3/00 (2006.01)
G06F 3/033 (2006.01)
G06F 3/041 (2006.01)
G06F 3/048 (2006.01)
- (52) **U.S. Cl.** **715/781; 715/784; 715/800; 345/173**
- (58) **Field of Classification Search** **715/764, 715/765, 784, 786, 788, 800, 864, 866, 973, 715/974; 345/156, 157, 169, 173**
See application file for complete search history.
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- Primary Examiner*—Xiomara L. Bautista
(74) *Attorney, Agent, or Firm*—Blakely, Sokoloff, Taylor & Zafman LLP

(57) **ABSTRACT**

At least certain embodiments of the present disclosure include an environment with user interface software interacting with a software application. A method for operating through an application programming interface (API) in this environment includes transferring a set bounce call. The method further includes setting at least one of maximum and minimum bounce values. The set bounce call causes a bounce of a scrolled region in an opposite direction of a scroll based on a region past an edge of the scrolled region being visible in a display region at the end of the scroll.

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21 Claims, 37 Drawing Sheets



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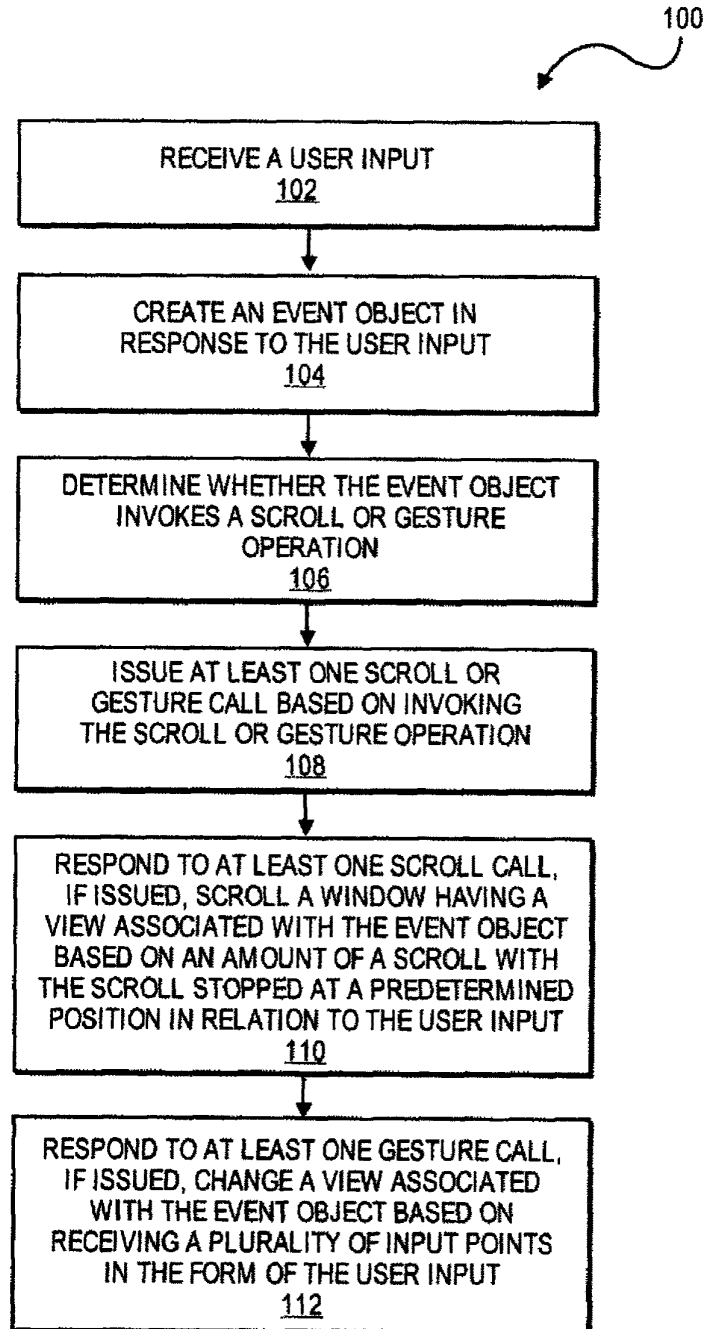


FIG. 1

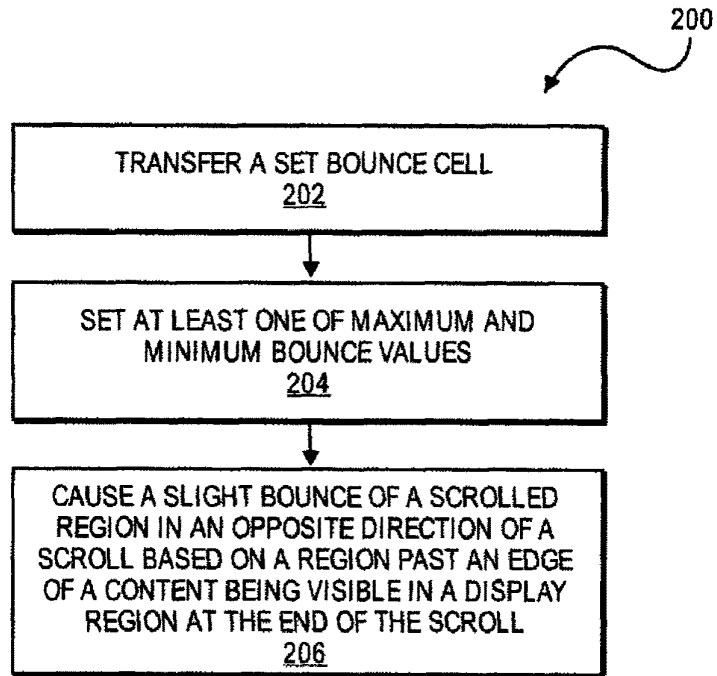


FIG. 2

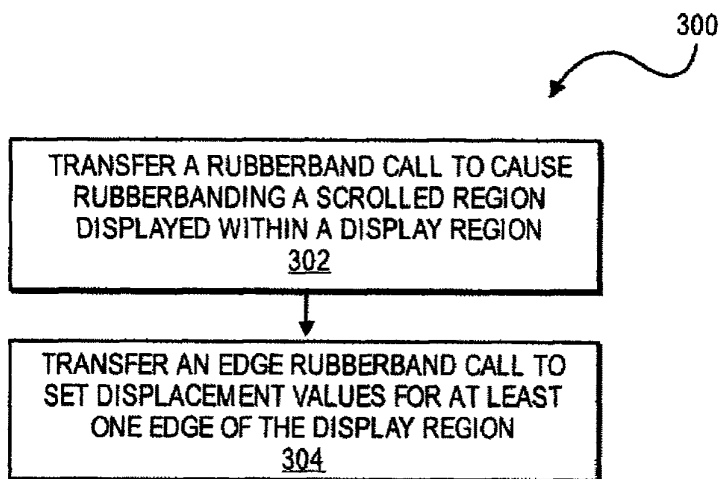


FIG. 3

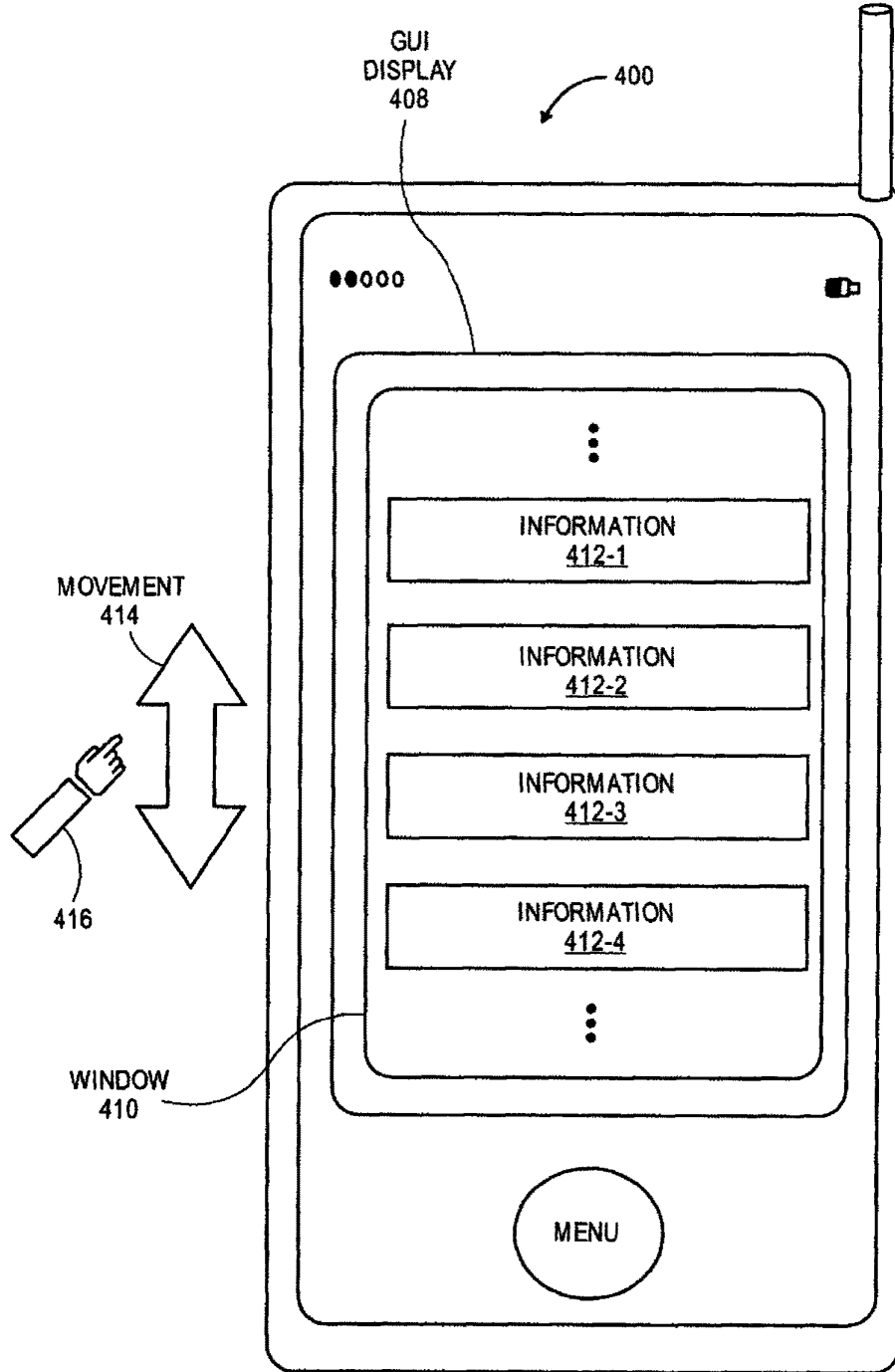


FIG. 4

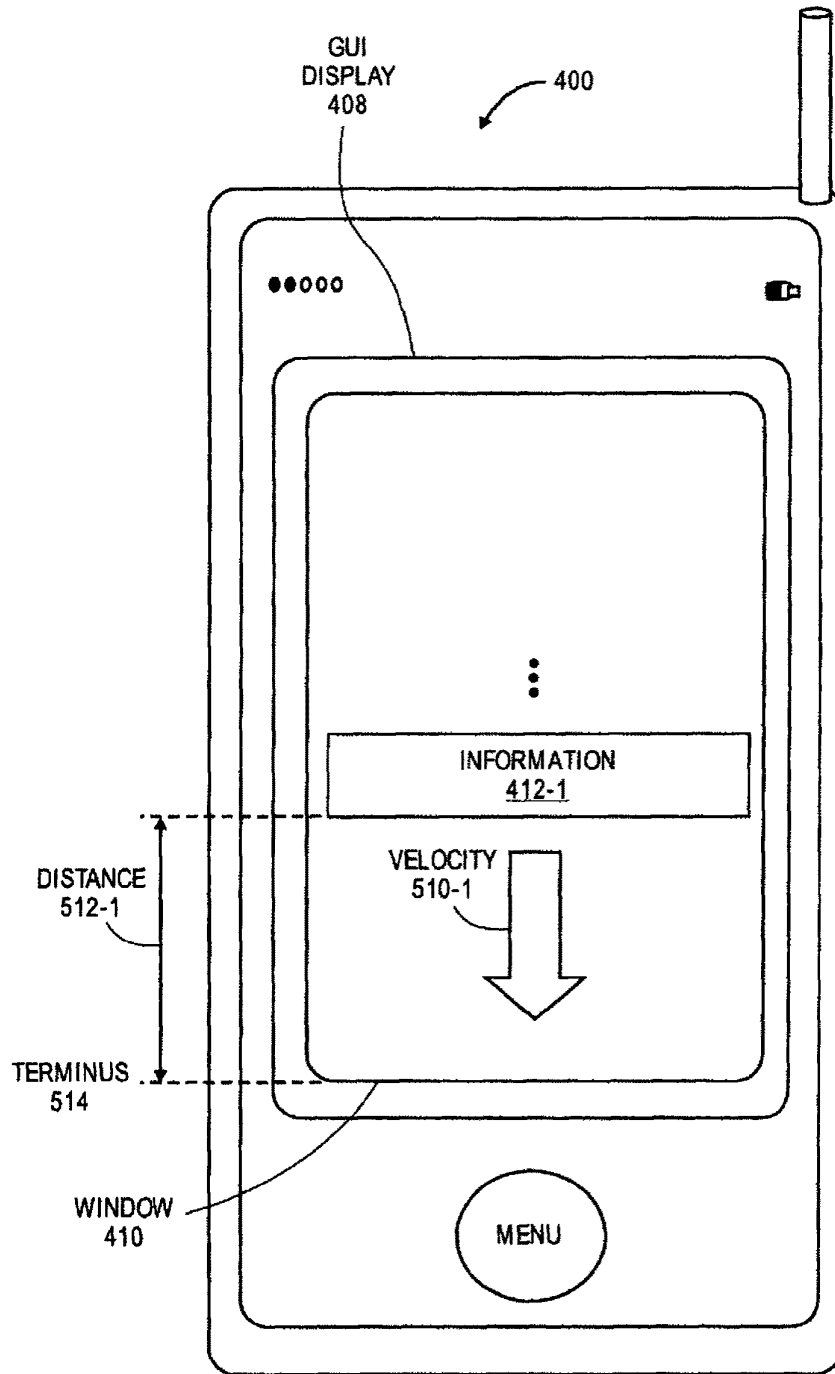


FIG. 5A

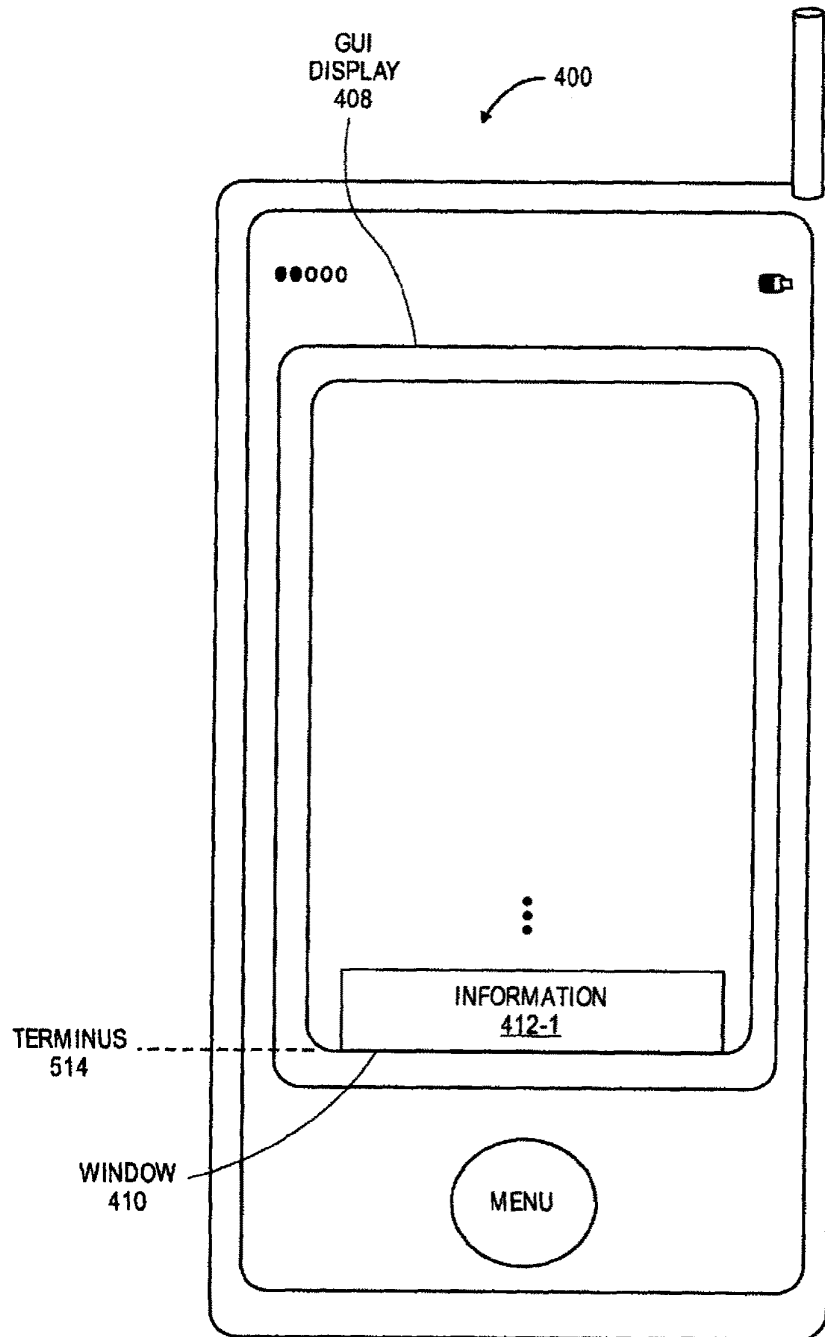


FIG. 5B

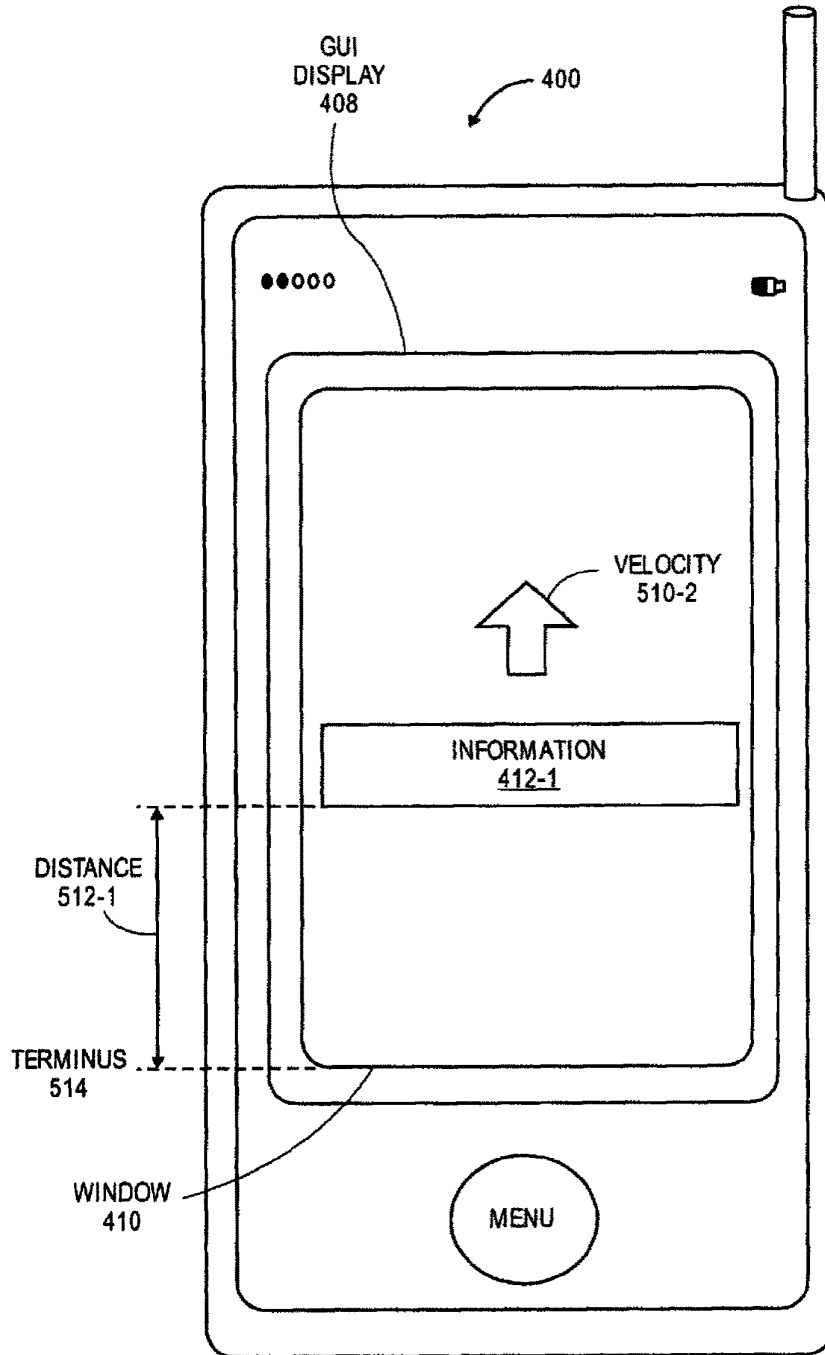


FIG. 5C

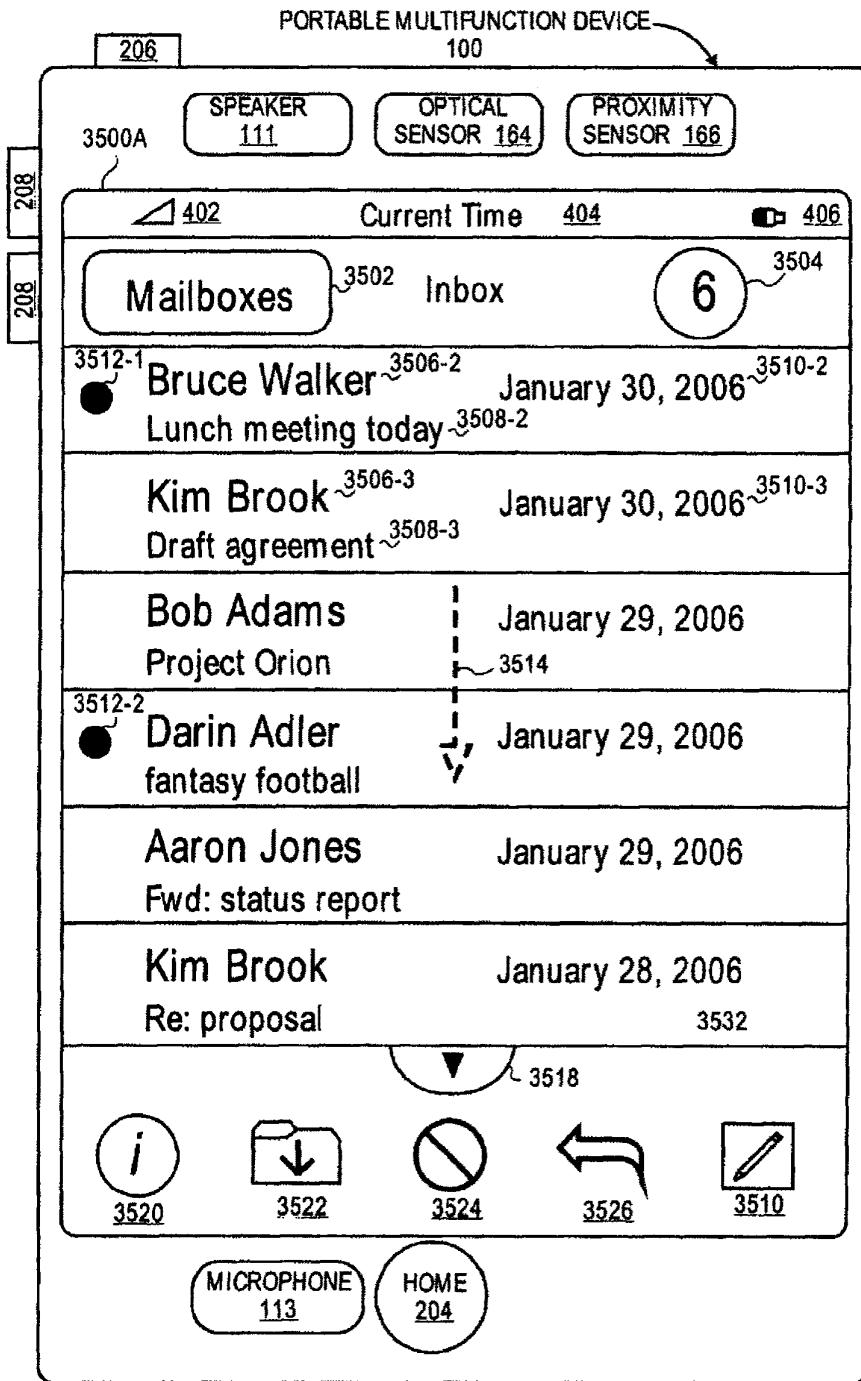


FIG. 6A

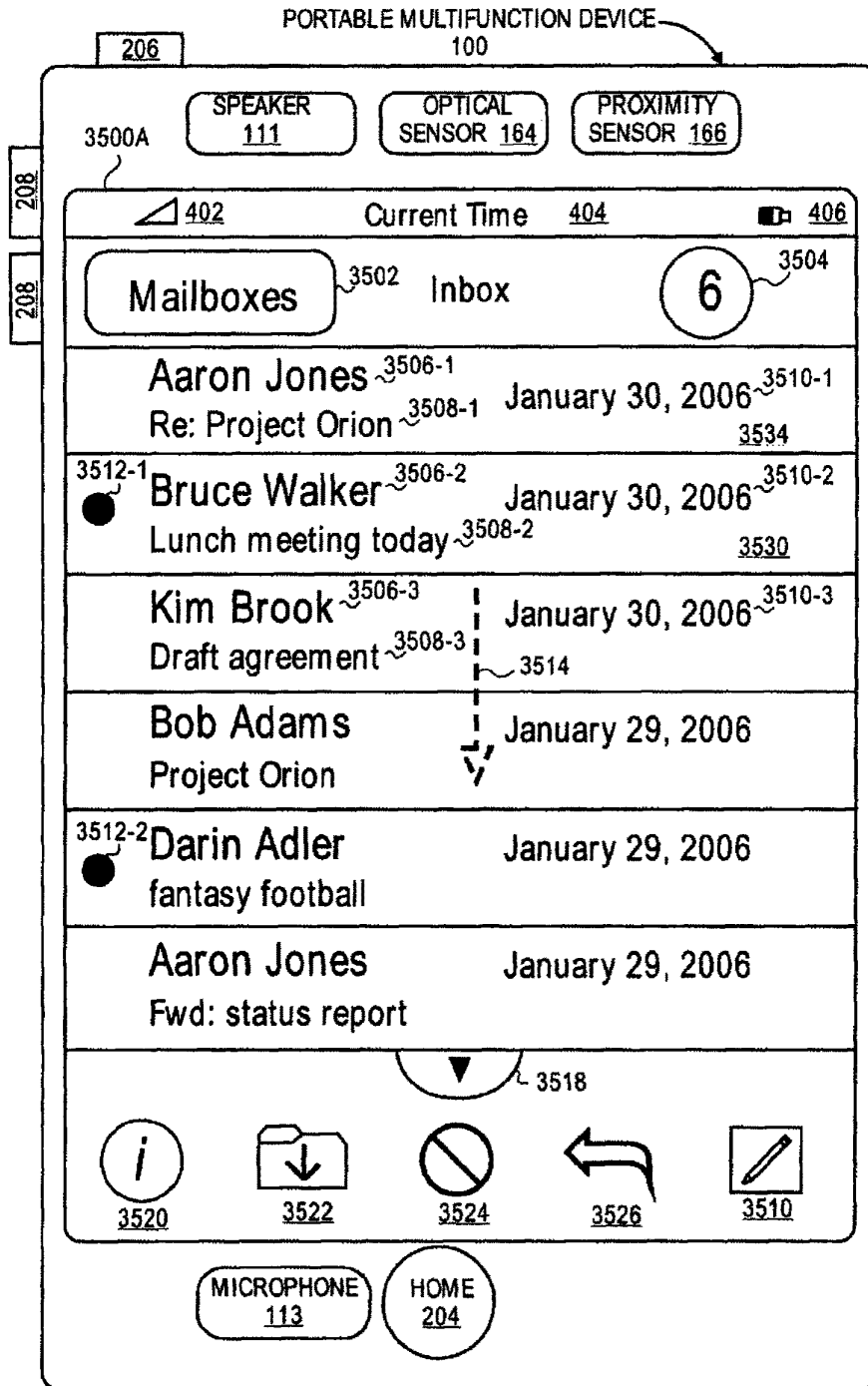


FIG. 6B

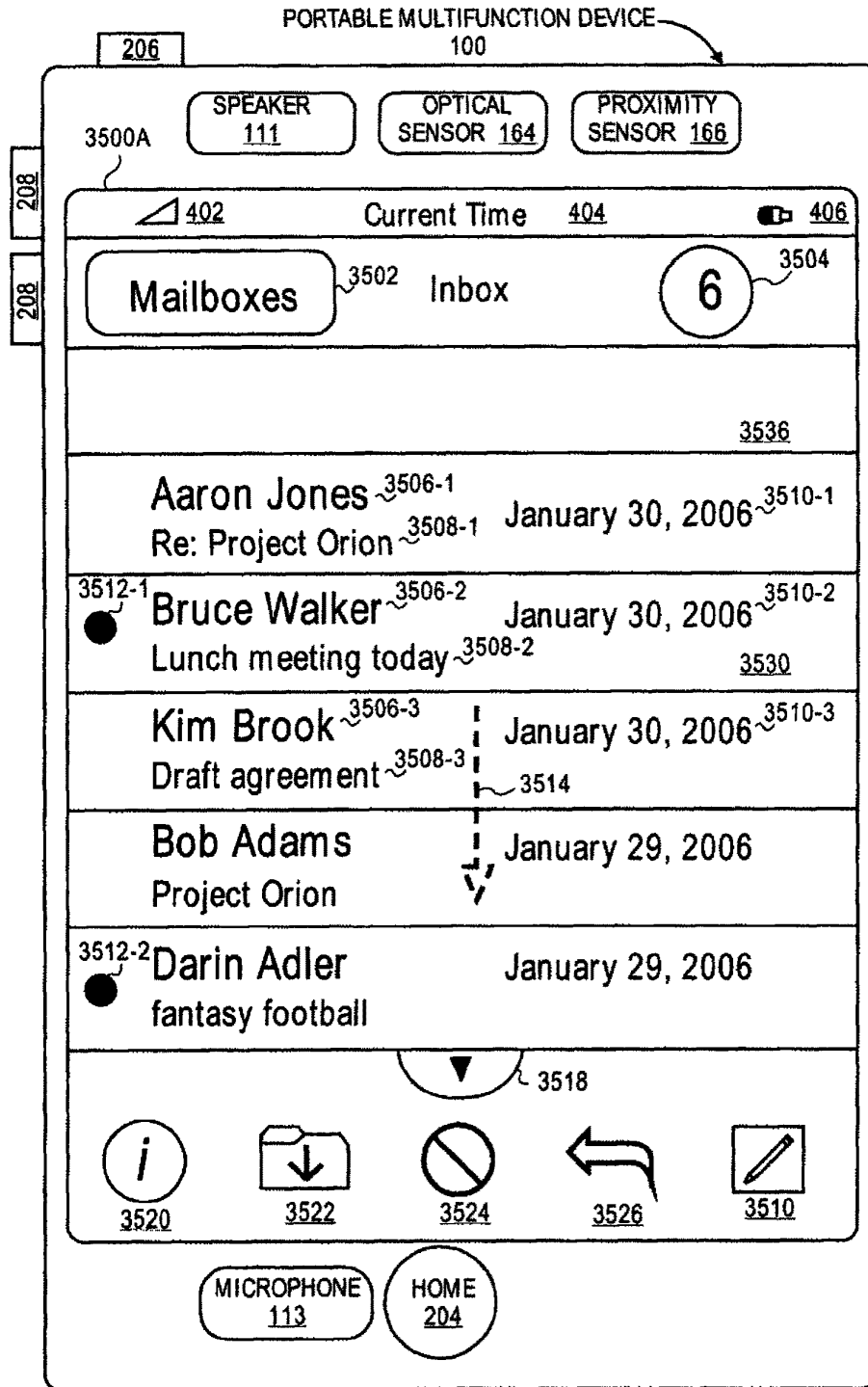


FIG. 6C

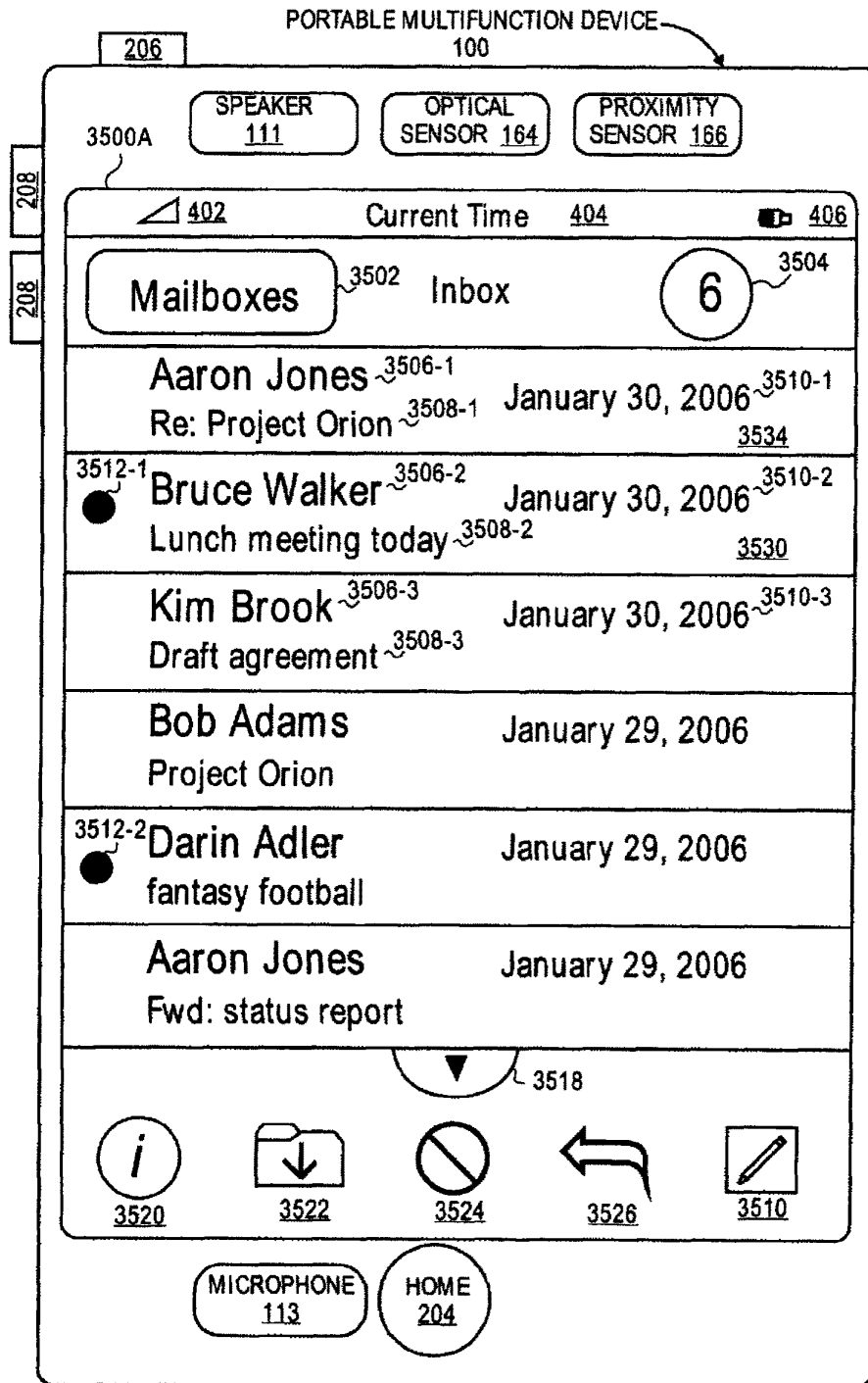
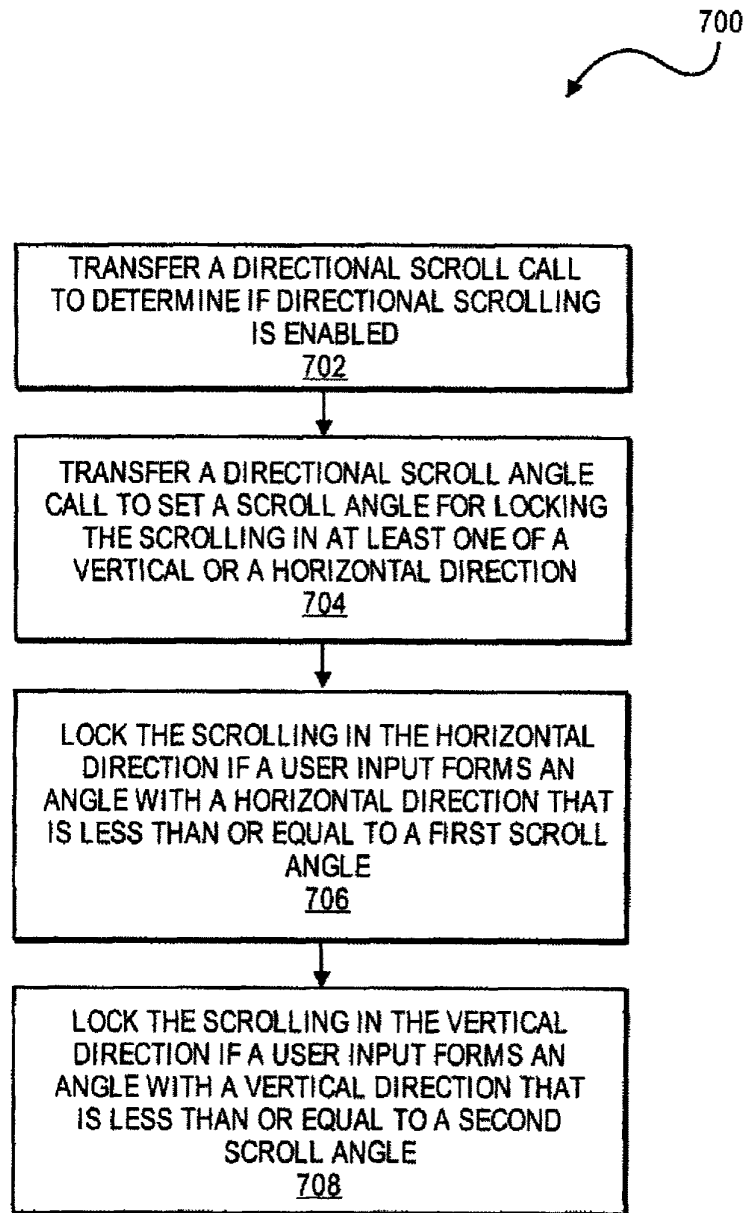


FIG. 6D

**FIG. 7**

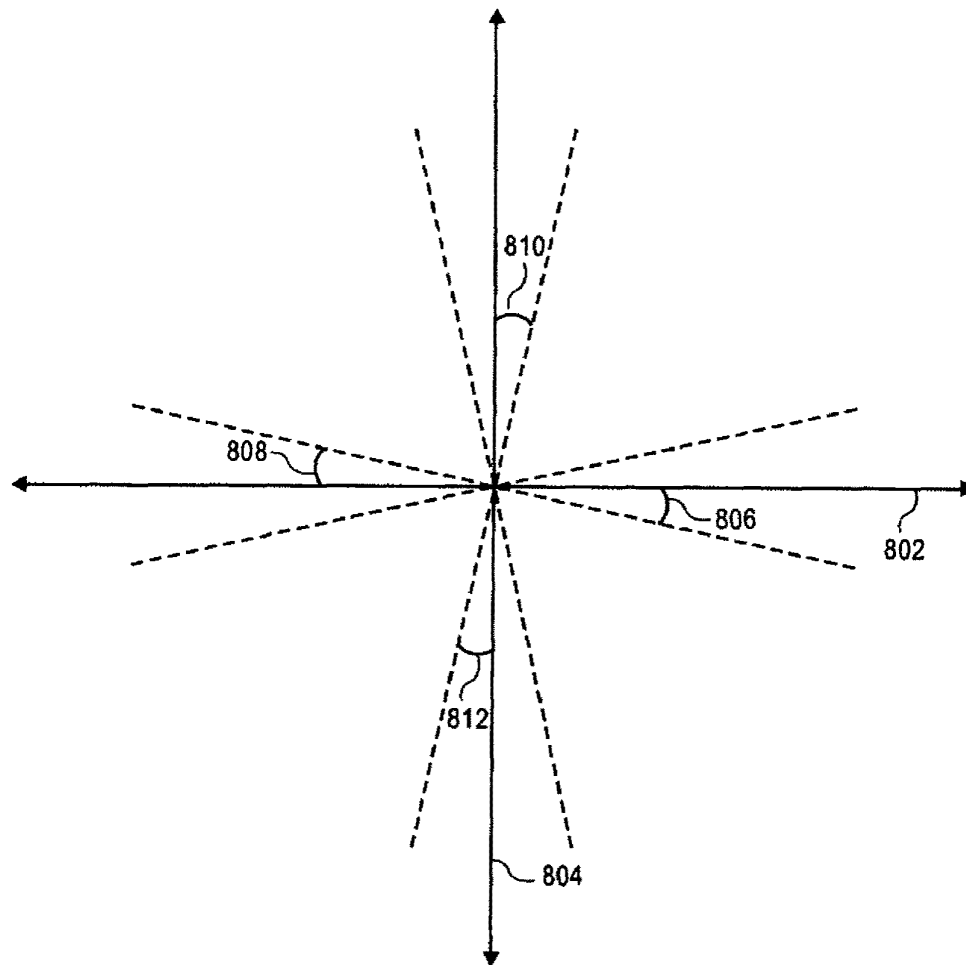


FIG. 8

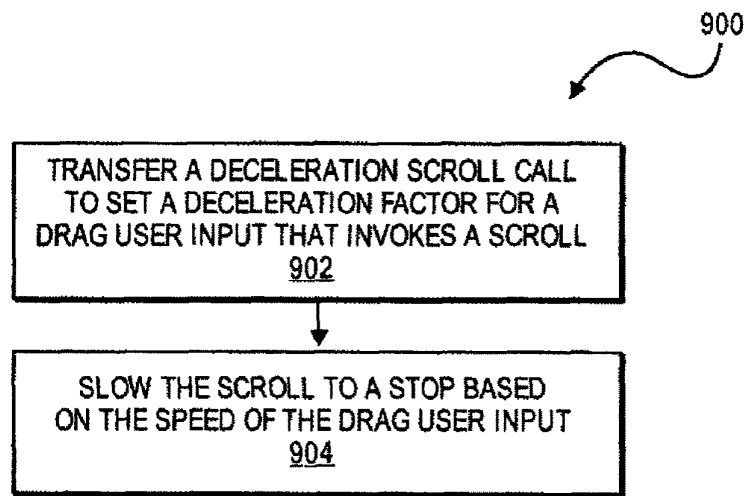


FIG. 9

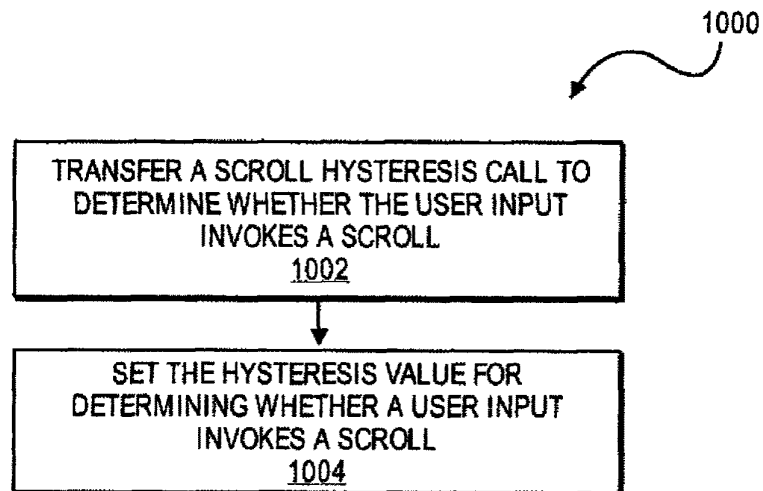


FIG. 10

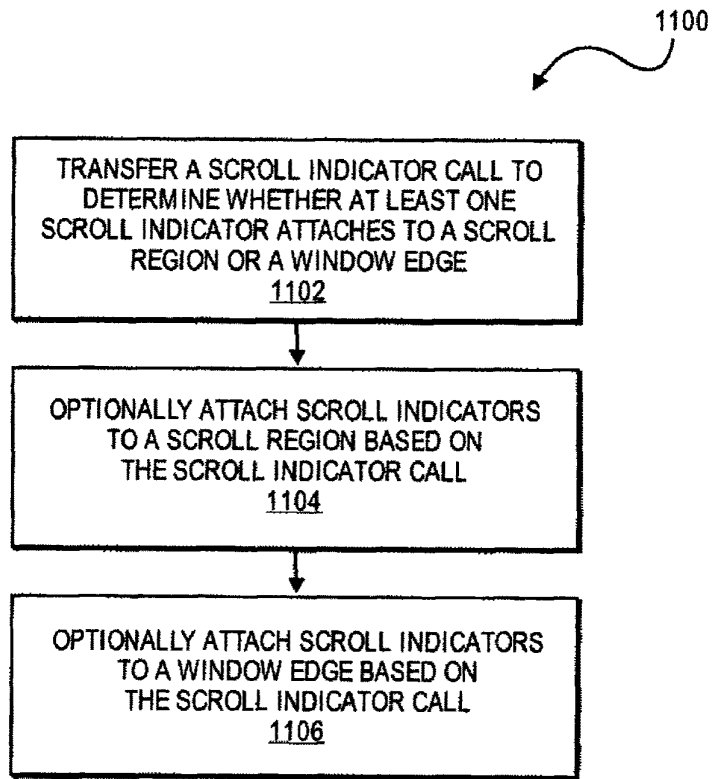


FIG. 11

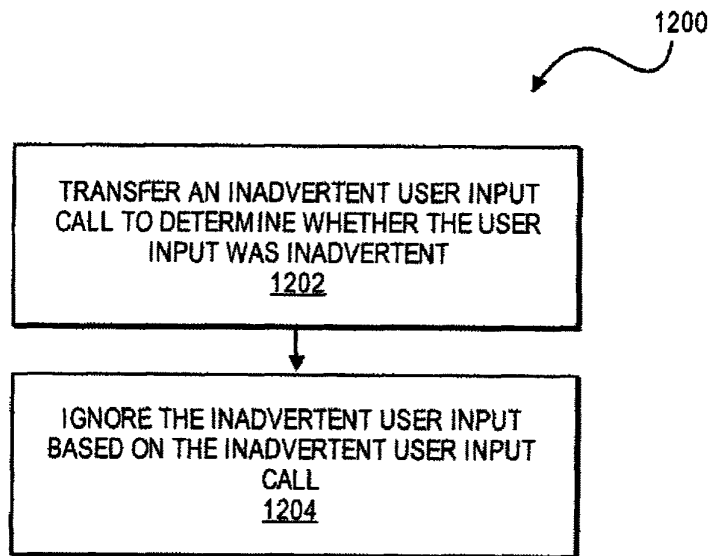


FIG. 12

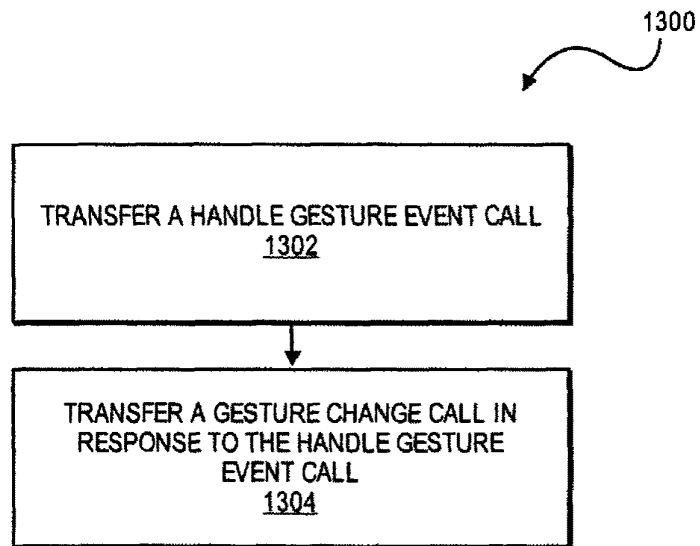


FIG. 13

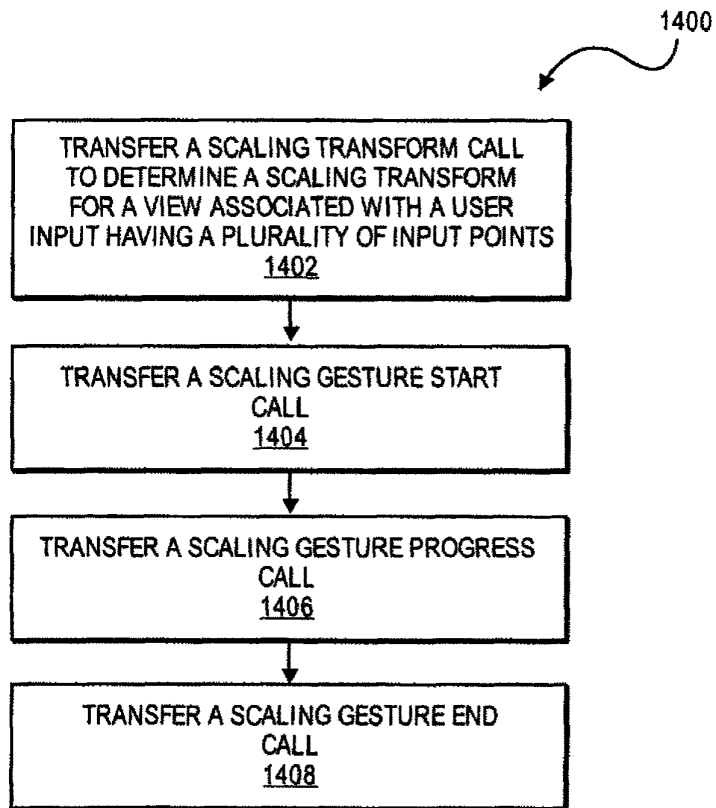


FIG. 14

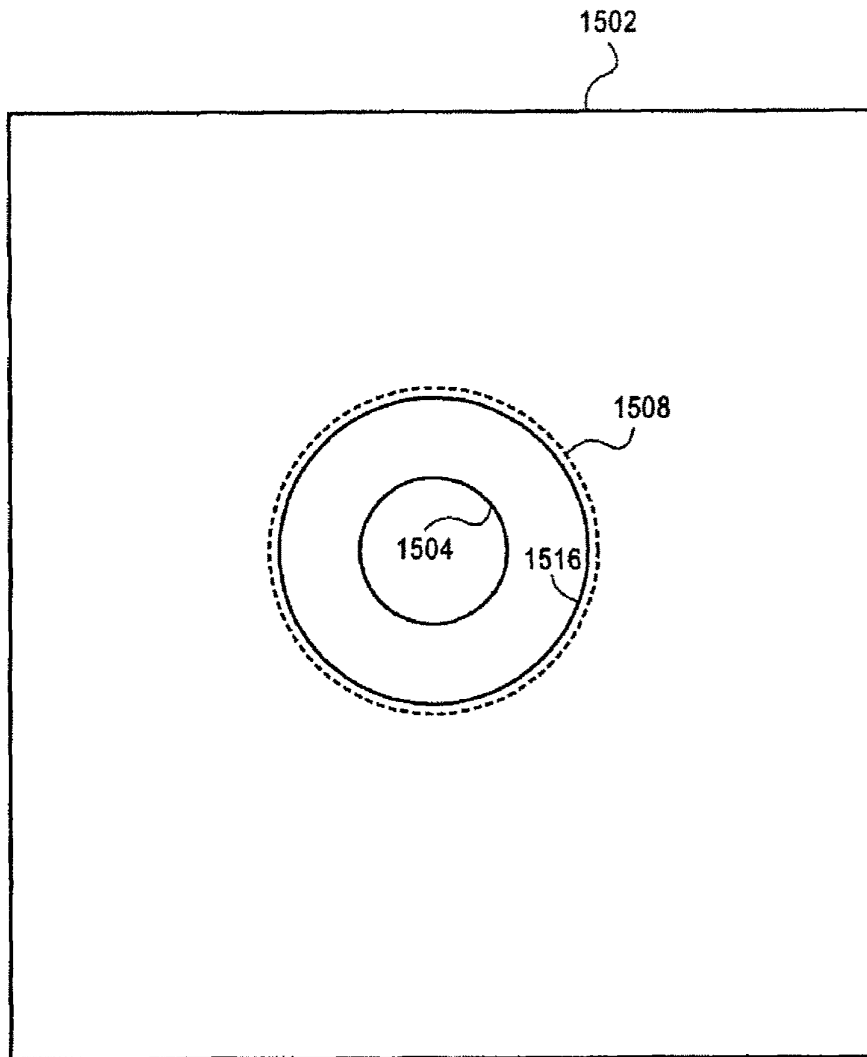
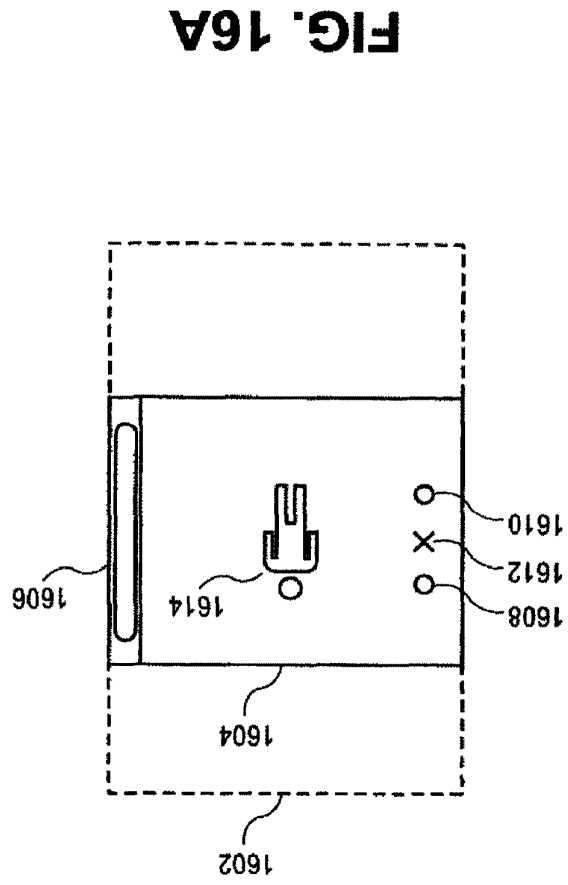
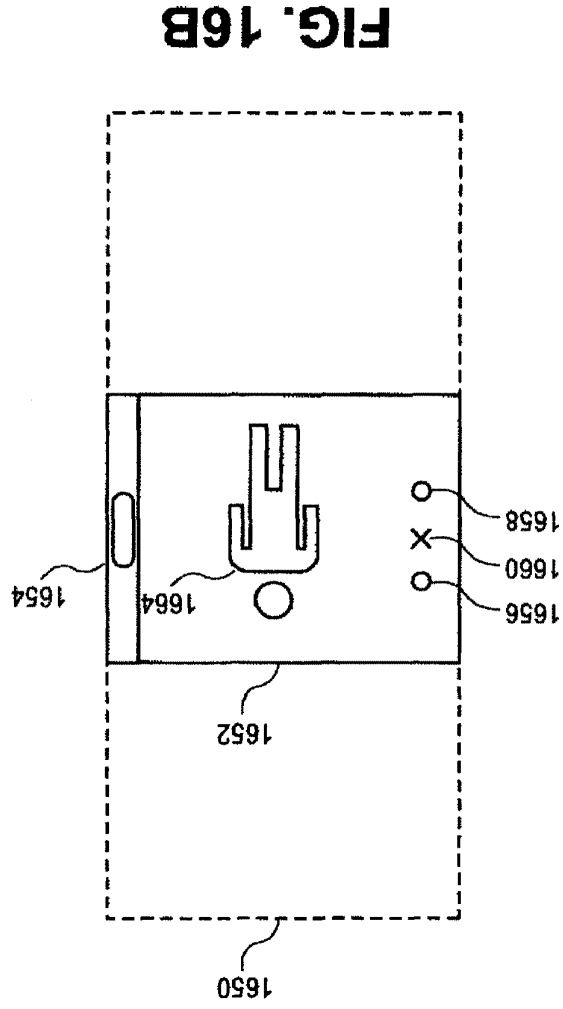


FIG. 15



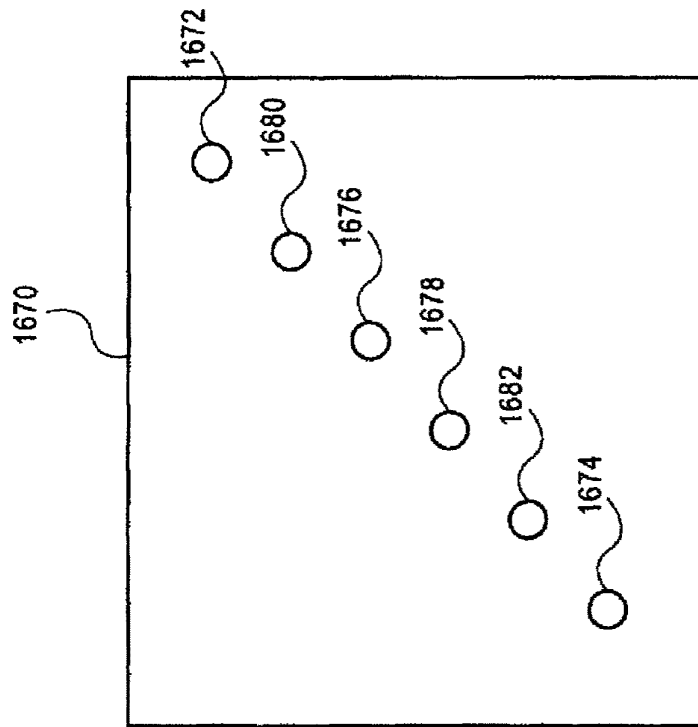


FIG. 16C

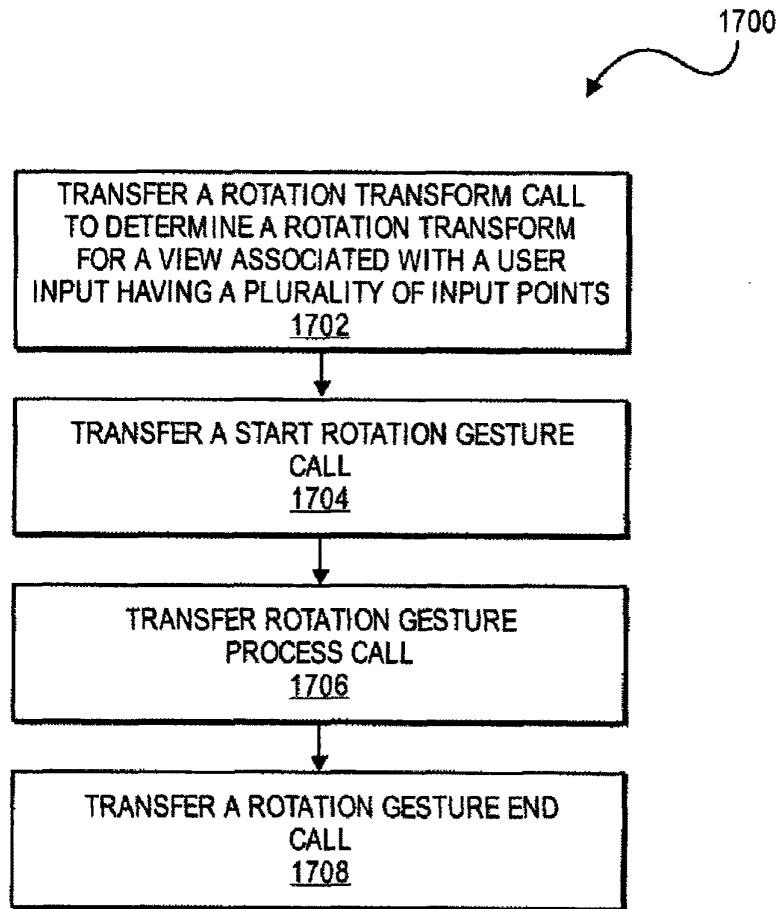


FIG. 17

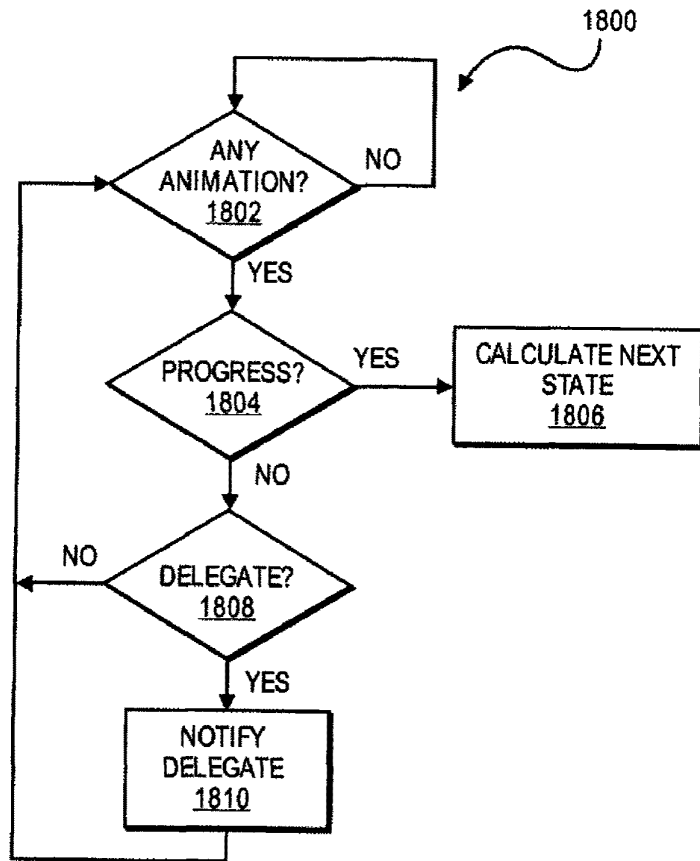


FIG. 18

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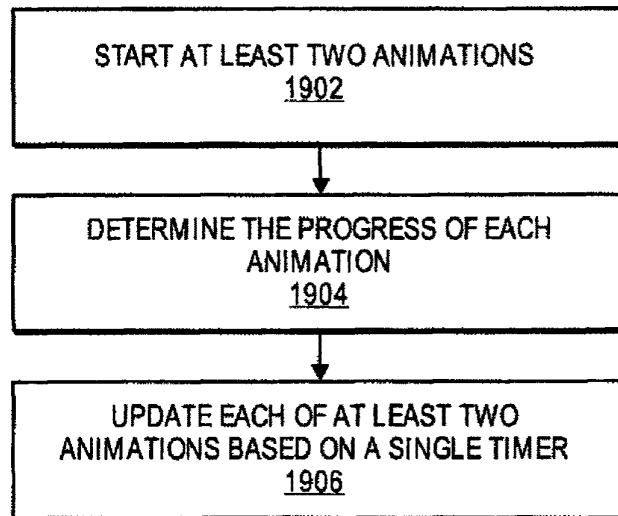


FIG. 19

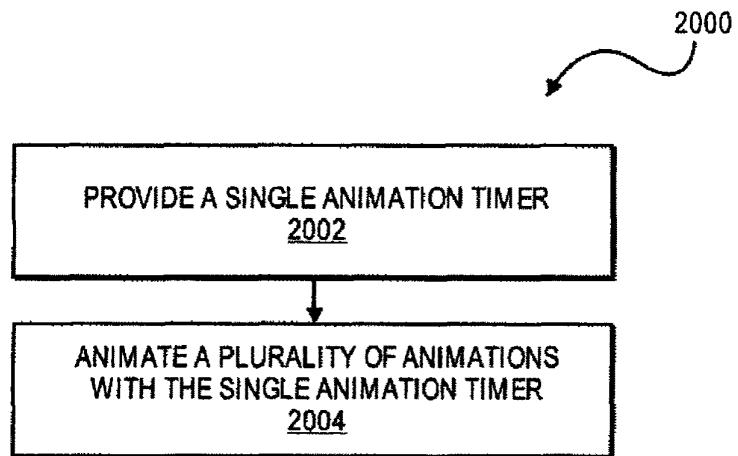
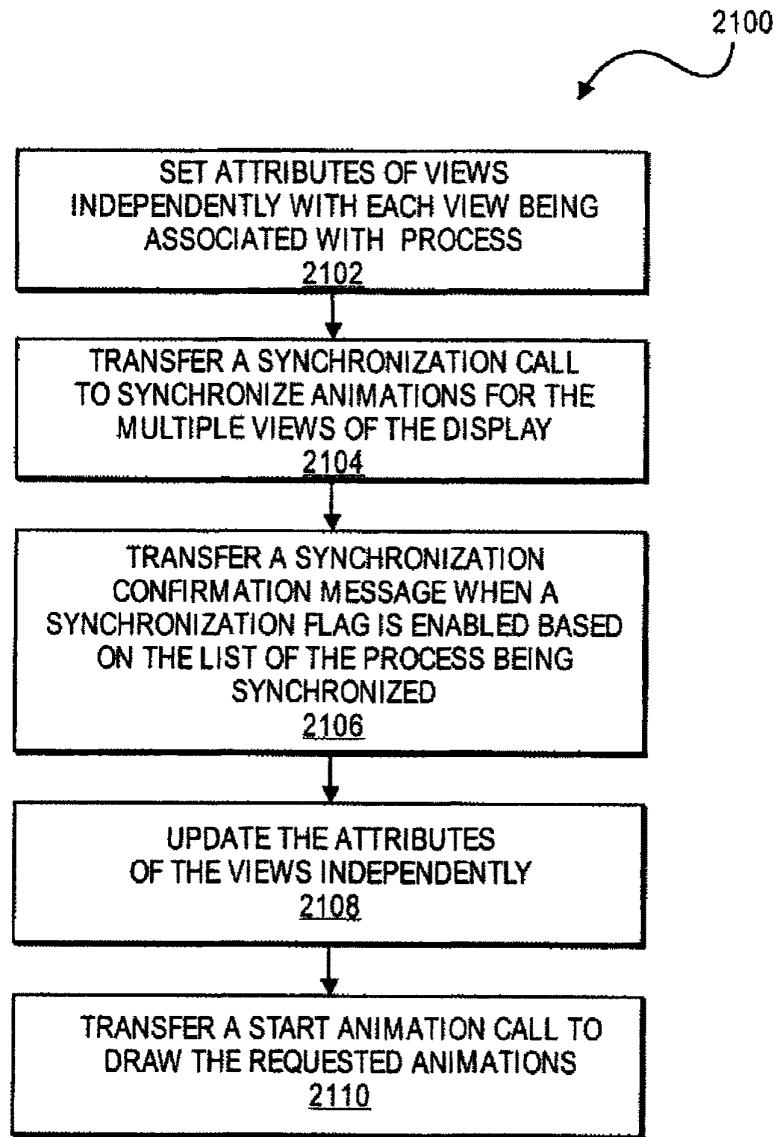


FIG. 20

**FIG. 21**

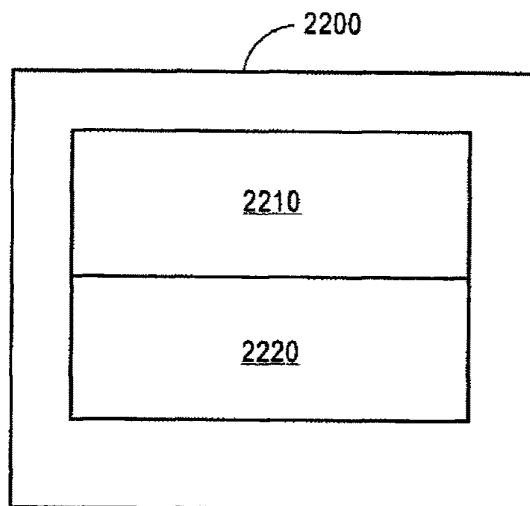


FIG. 22A

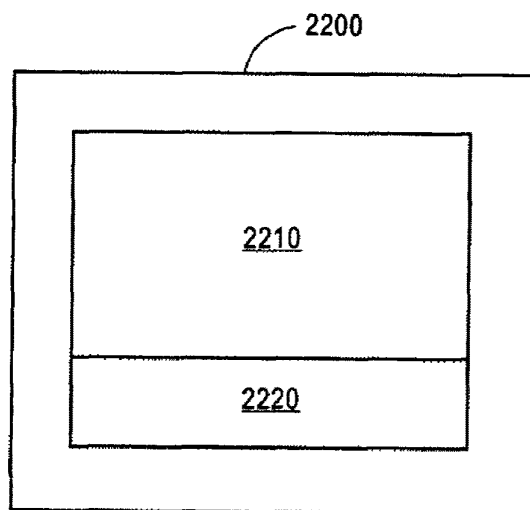
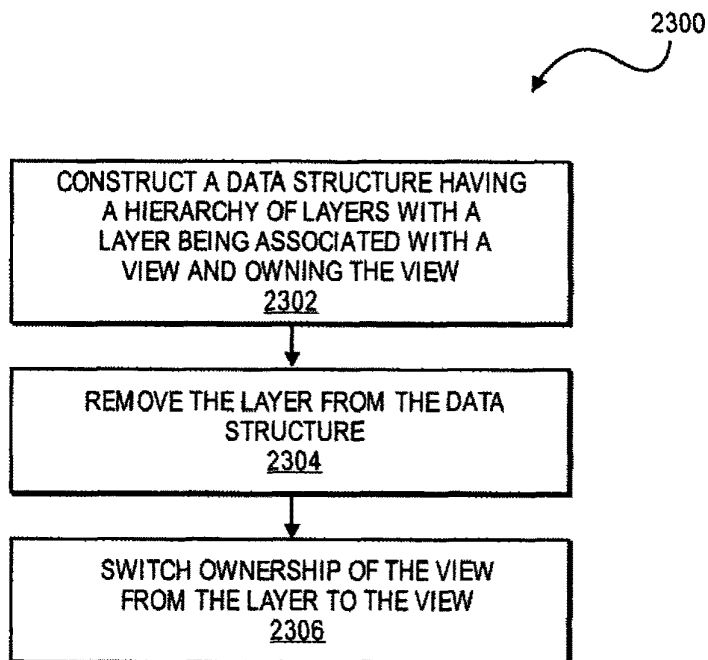
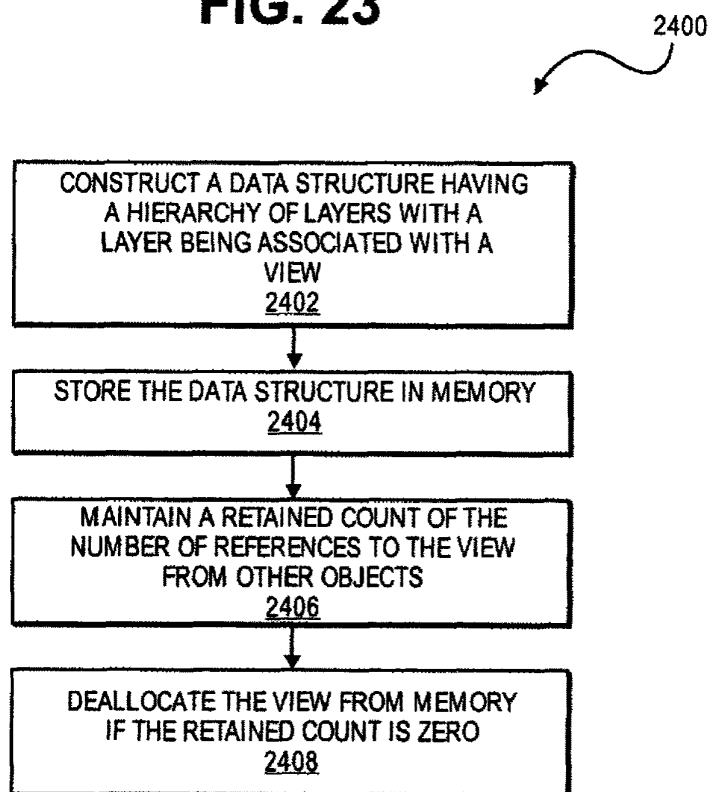


FIG. 22B

**FIG. 23****FIG. 24**