

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

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(54) **MODAL DISPLAY, SMOOTH SCROLL GRAPHIC USER INTERFACE AND REMOTE COMMAND DEVICE SUITABLE FOR EFFICIENT NAVIGATION AND SELECTION OF DYNAMIC DATA/OPTIONS PRESENTED WITHIN AN AUDIO/VISUAL SYSTEM**

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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 411 days.

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(57) **ABSTRACT**

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The efficient and intuitive presentation, navigation, and selection of AV information in a graphical user interface (GUI) displayed on a display apparatus of an AV system. Related AV information is organized as items within lists that correspond to various navigable fields of a status bar of the GUI during the GUI interactive mode. A highlighted navigable field of the status bar displays its list of related AV information and the items of the list are scrolled through the navigable field by a user causing a scrolling cylinder of a navigation and selection device to move in a scroll. A different field of the status bar may be selected by the user moving the scrolling cylinder in a lateral movement. Activation of the selection mechanism of the navigation and selection device will cause an AV device to be controlled in accordance with the currently displayed AV options.

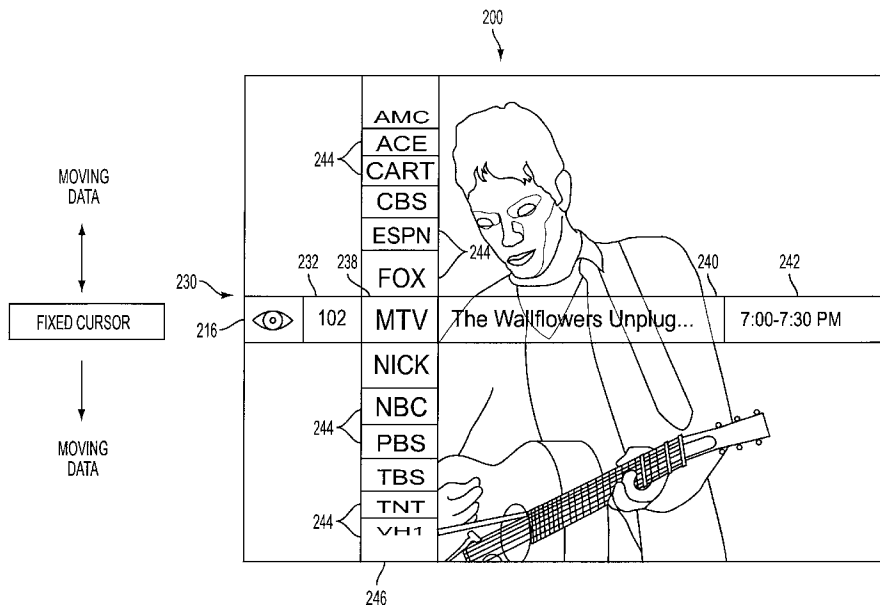
(51) **Int. Cl.**⁷ **G09G 5/00**
(52) **U.S. Cl.** **345/720; 725/40; 725/56**
(58) **Field of Search** **345/719-722, 345/853-855, 727-729, 830, 841-843, 810; 725/37-61**

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28 Claims, 19 Drawing Sheets



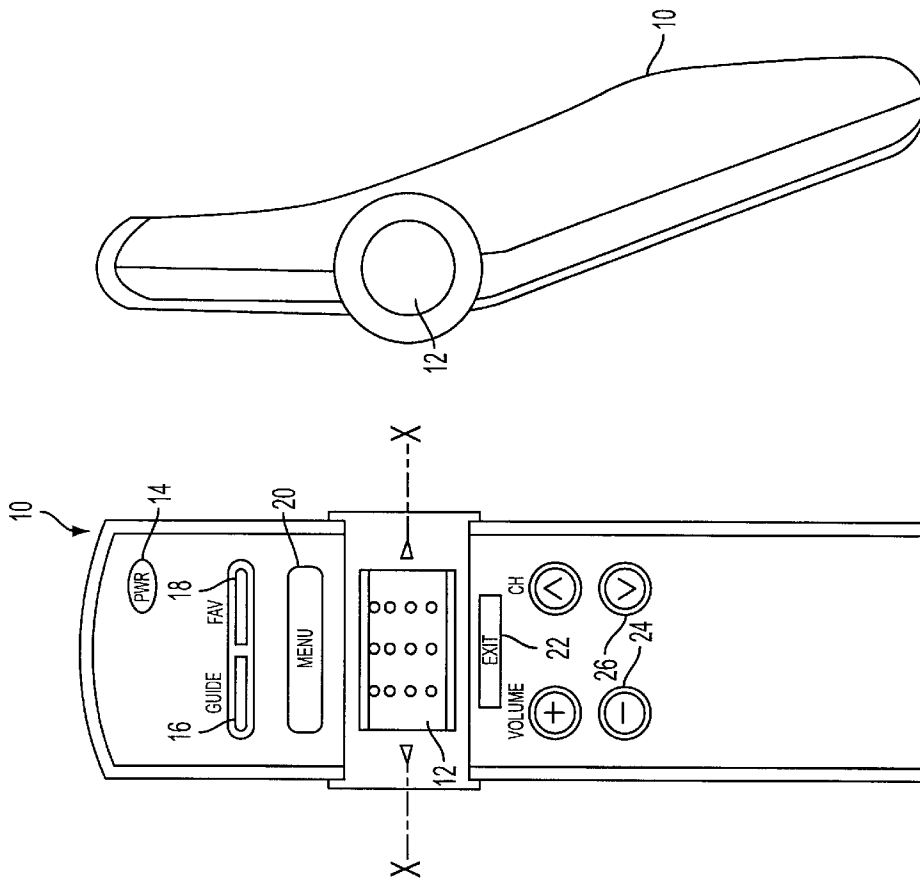


FIG. 1B

FIG. 1A

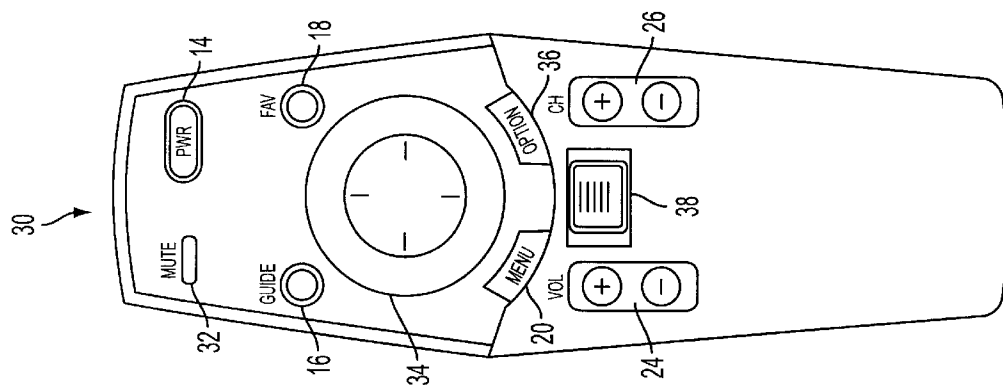


FIG. 2A

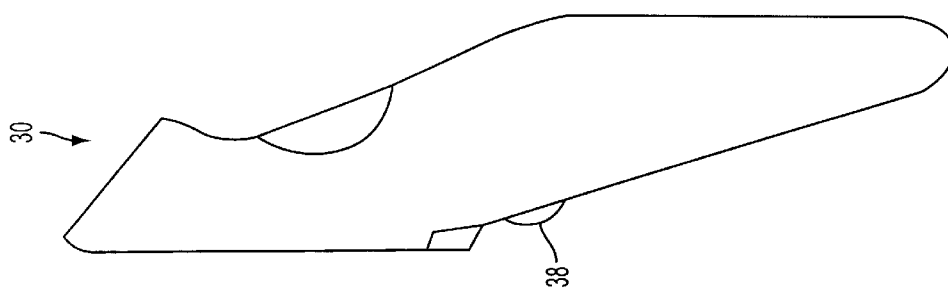


FIG. 2B

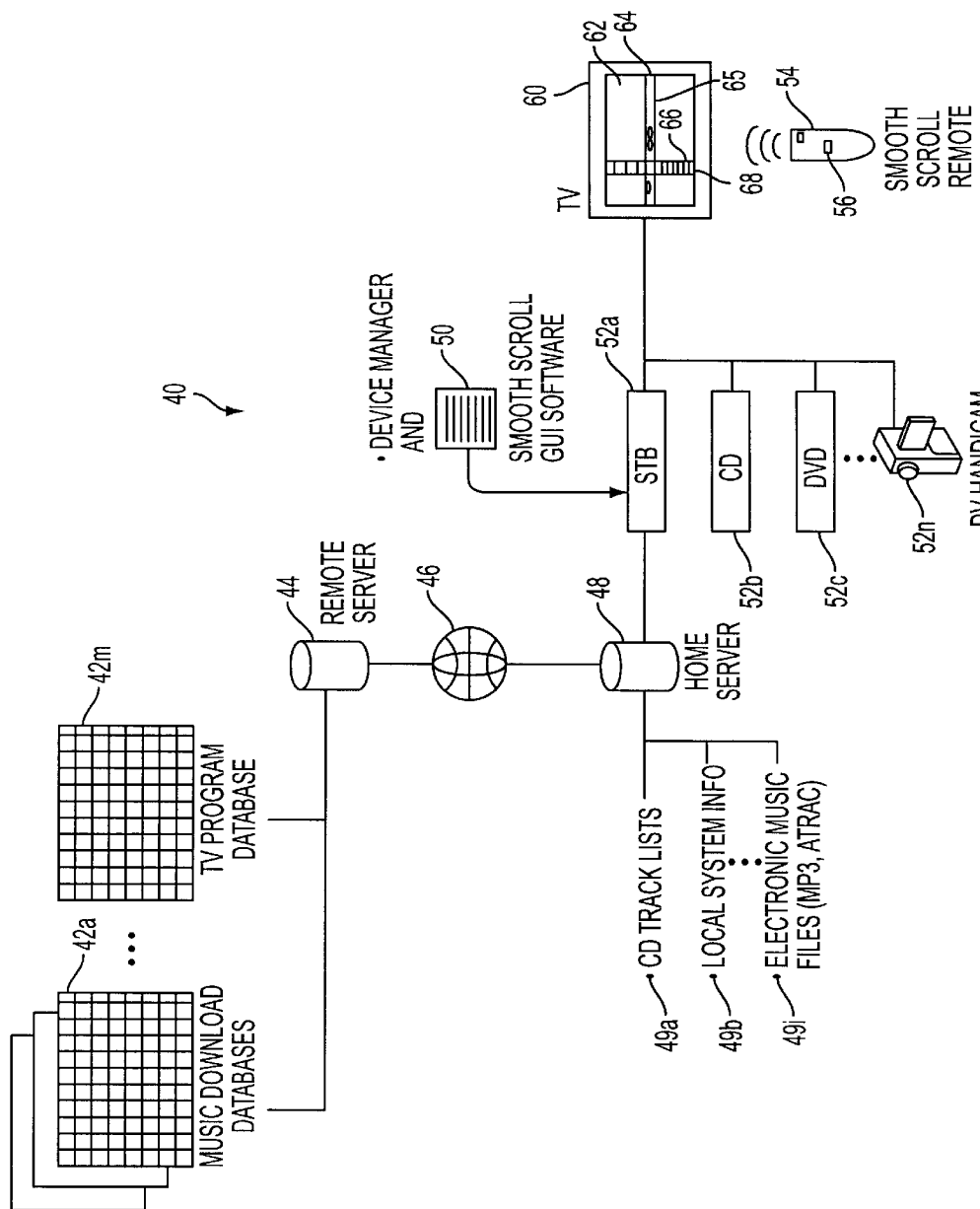


FIG. 3

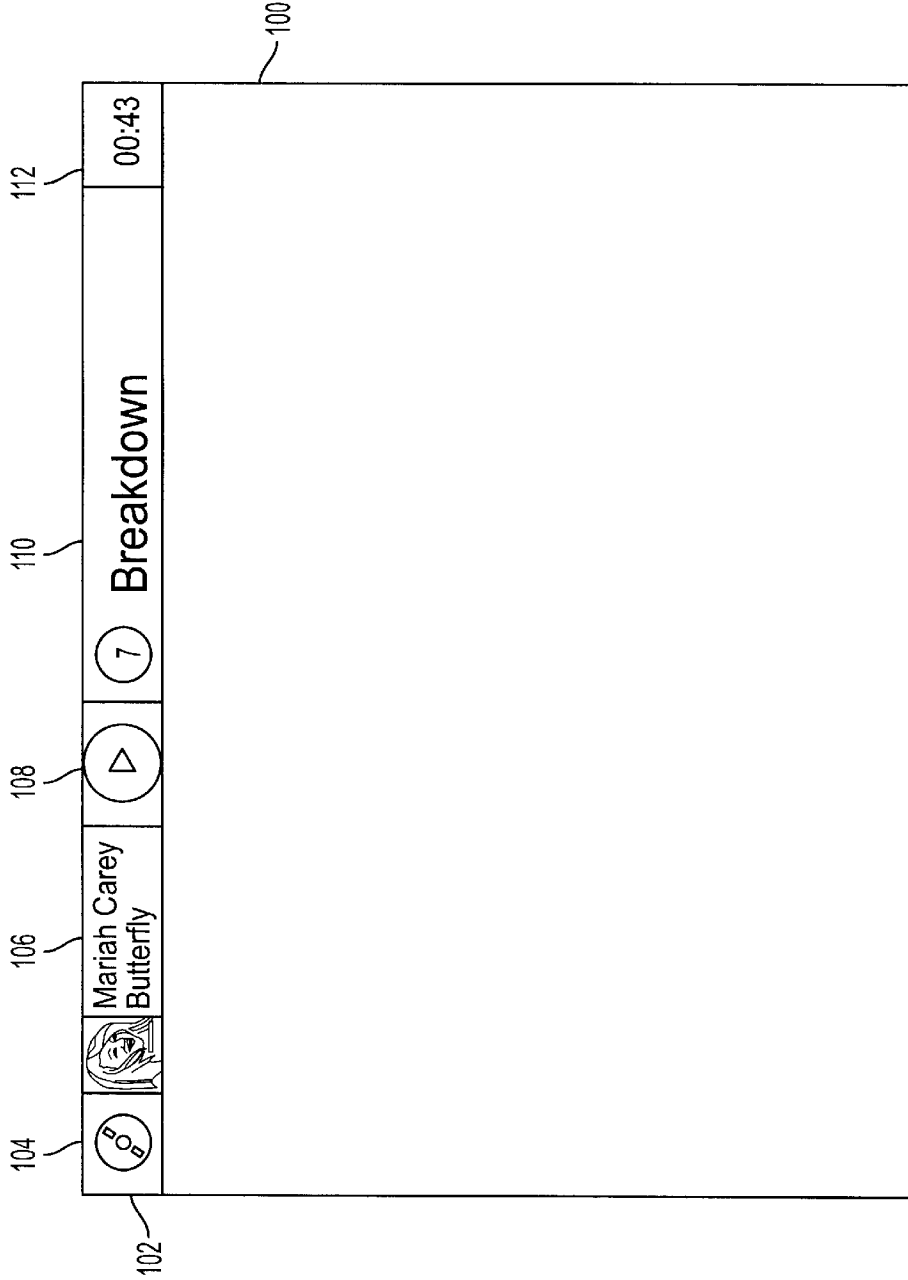


FIG. 4

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