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(12) **United States Patent**
Brown

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(54) **OPTICAL HEADSET USER INTERFACE**

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(51) **Int. Cl.**
G06K 7/14 (2006.01)

(52) **U.S. Cl.** **235/454**; 379/428.02; 455/73

(58) **Field of Classification Search** 235/454;
379/428.02

See application file for complete search history.

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Primary Examiner—Daniel A Hess

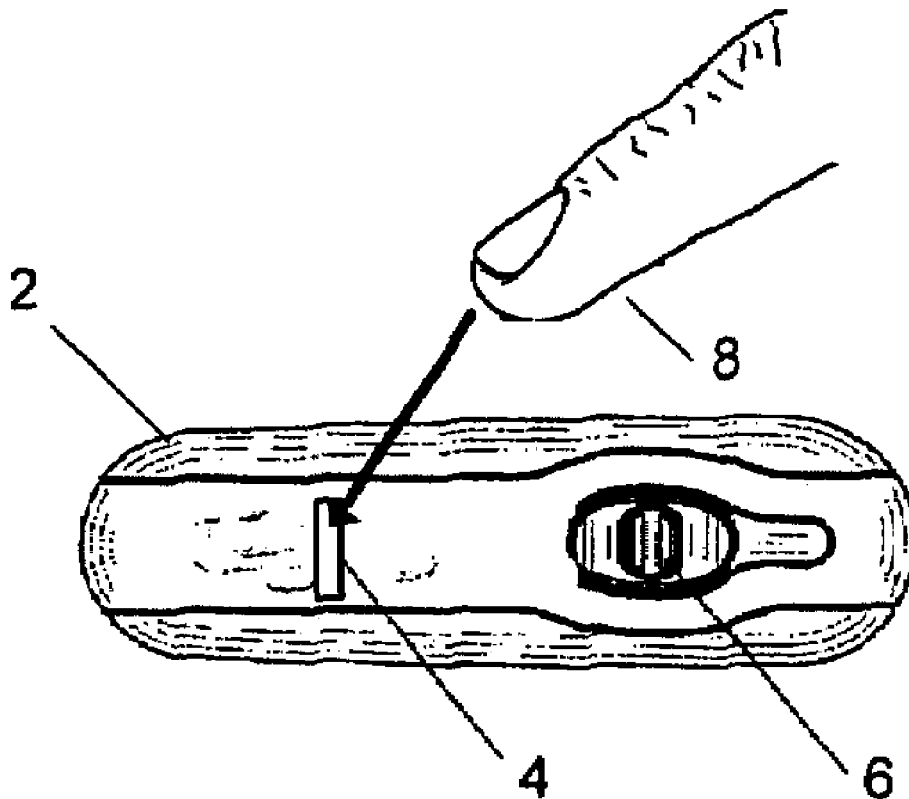
Assistant Examiner—Laura Gudorf

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(57) **ABSTRACT**

A headset includes a finger pad on an exterior of the headset on which a finger of a headset wearer is placed. The headset includes an optical line scanner which scans the finger pad and outputs a series of successive images of the finger placed on the finger pad. A headset processor processes the output of the optical line scanner to detect relative motion of the finger on the finger pad or detect tapping of the finger on the finger pad.

20 Claims, 5 Drawing Sheets



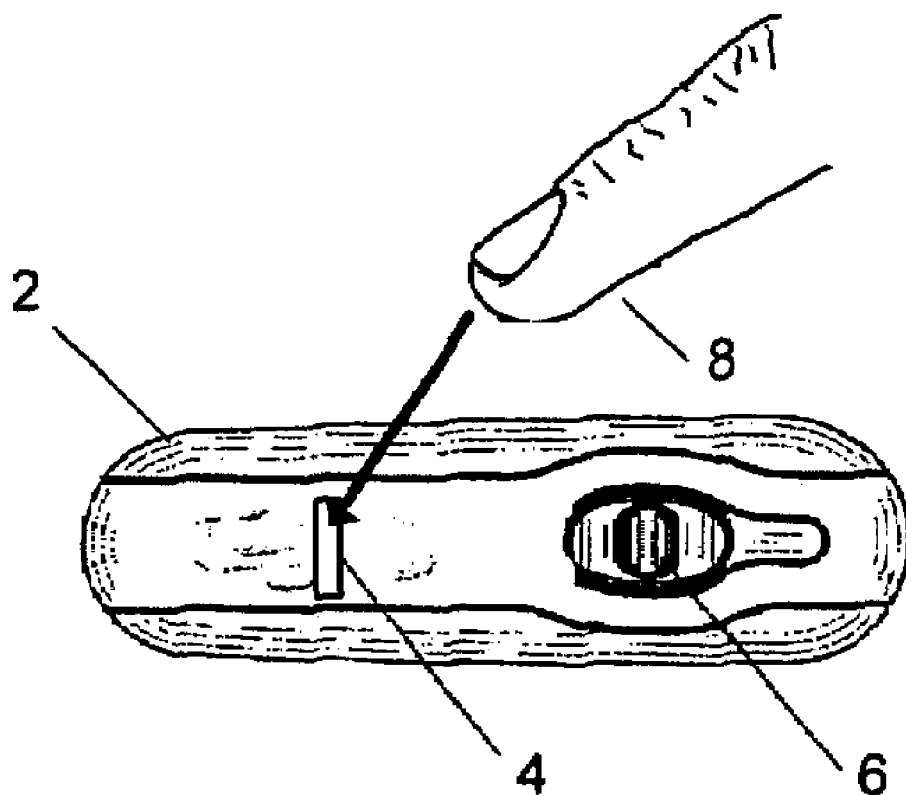


FIG. 1

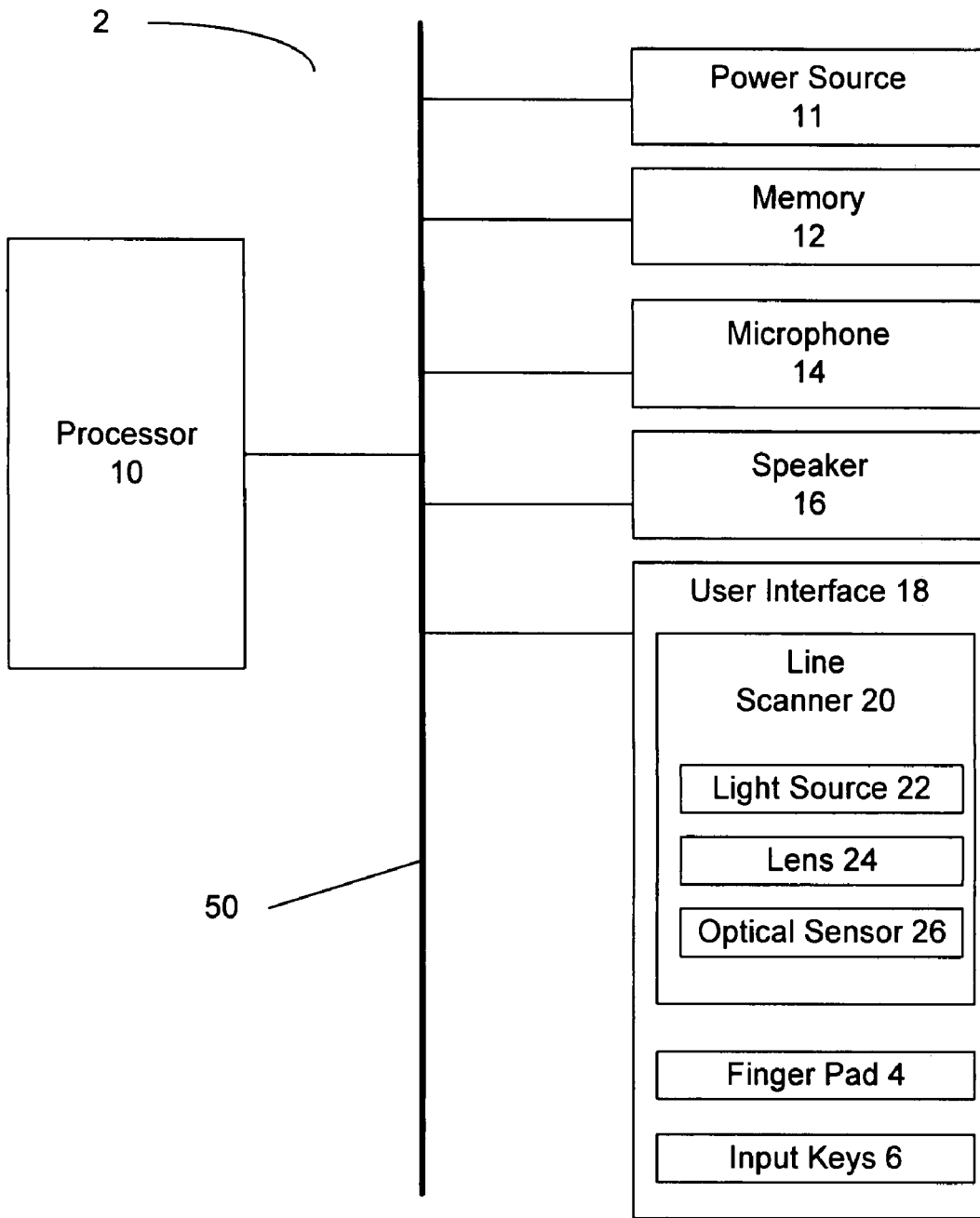


FIG. 2

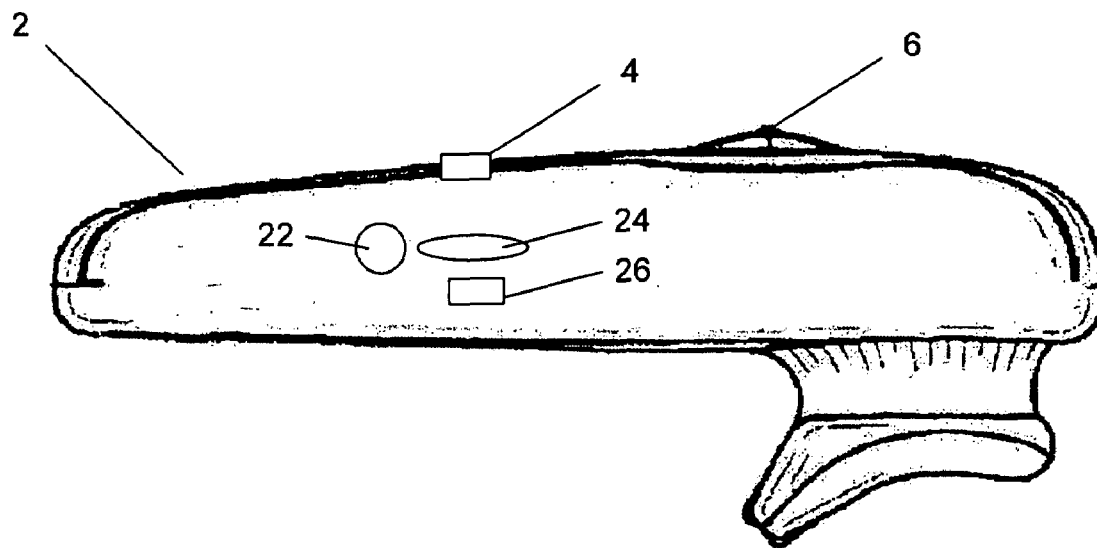


FIG. 3

Line Scanner for Scrolling

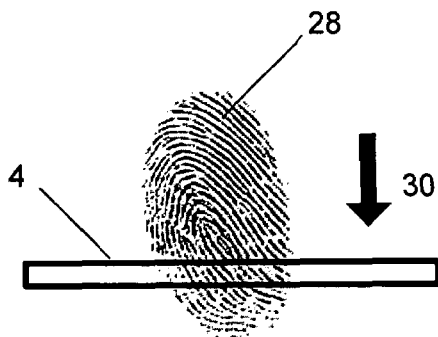


FIG. 4A

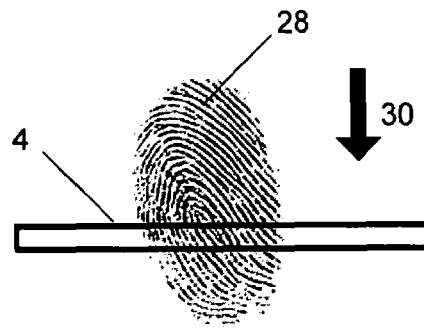


FIG. 4B



FIG. 4C



FIG. 4D

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