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**Brown**

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(54) **OPTICAL HEADSET USER INTERFACE**

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(73) Assignee: **Plantronics, Inc.**, Santa Cruz, CA (US)

Gregory, Peter; Doria, Tom; Stegh, Chris; Su, Jim; SIP Communi-  
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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 103 days.

\* cited by examiner

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(74) *Attorney, Agent, or Firm*—Intellectual Property Law  
Office of Thomas Chuang

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

(57) **ABSTRACT**

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

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.

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

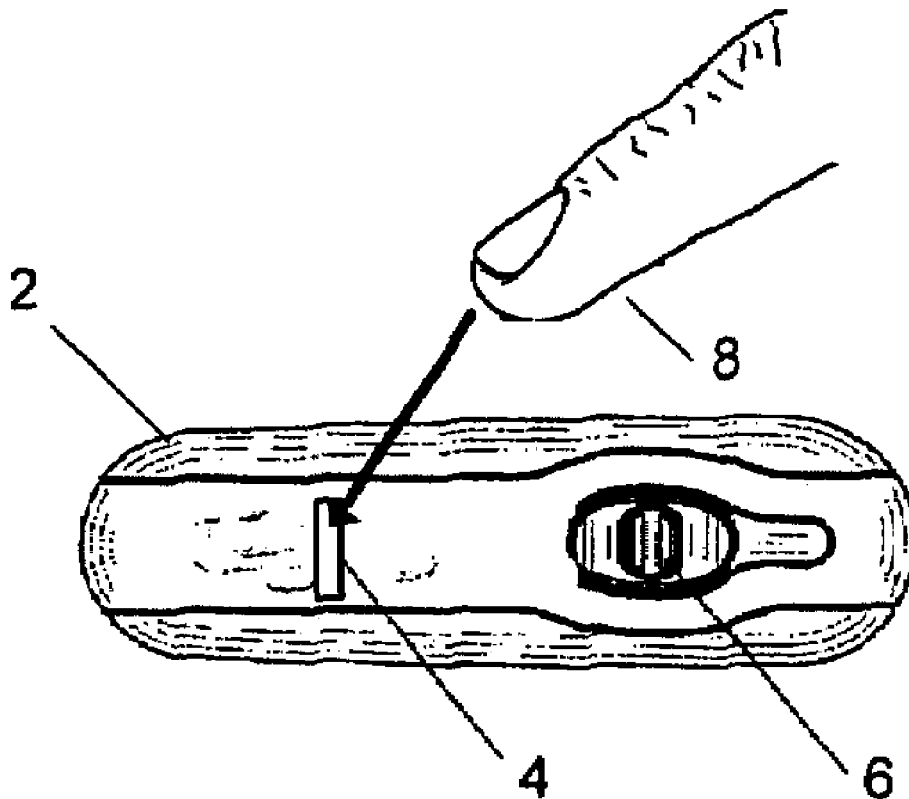
See application file for complete search history.

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**20 Claims, 5 Drawing Sheets**



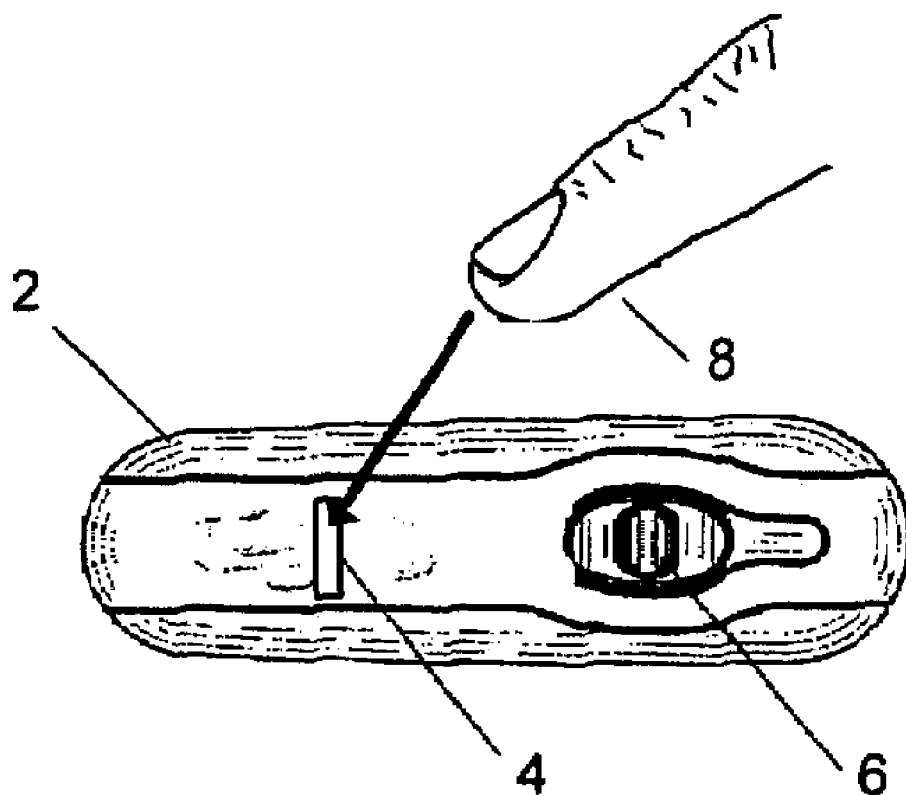


FIG. 1

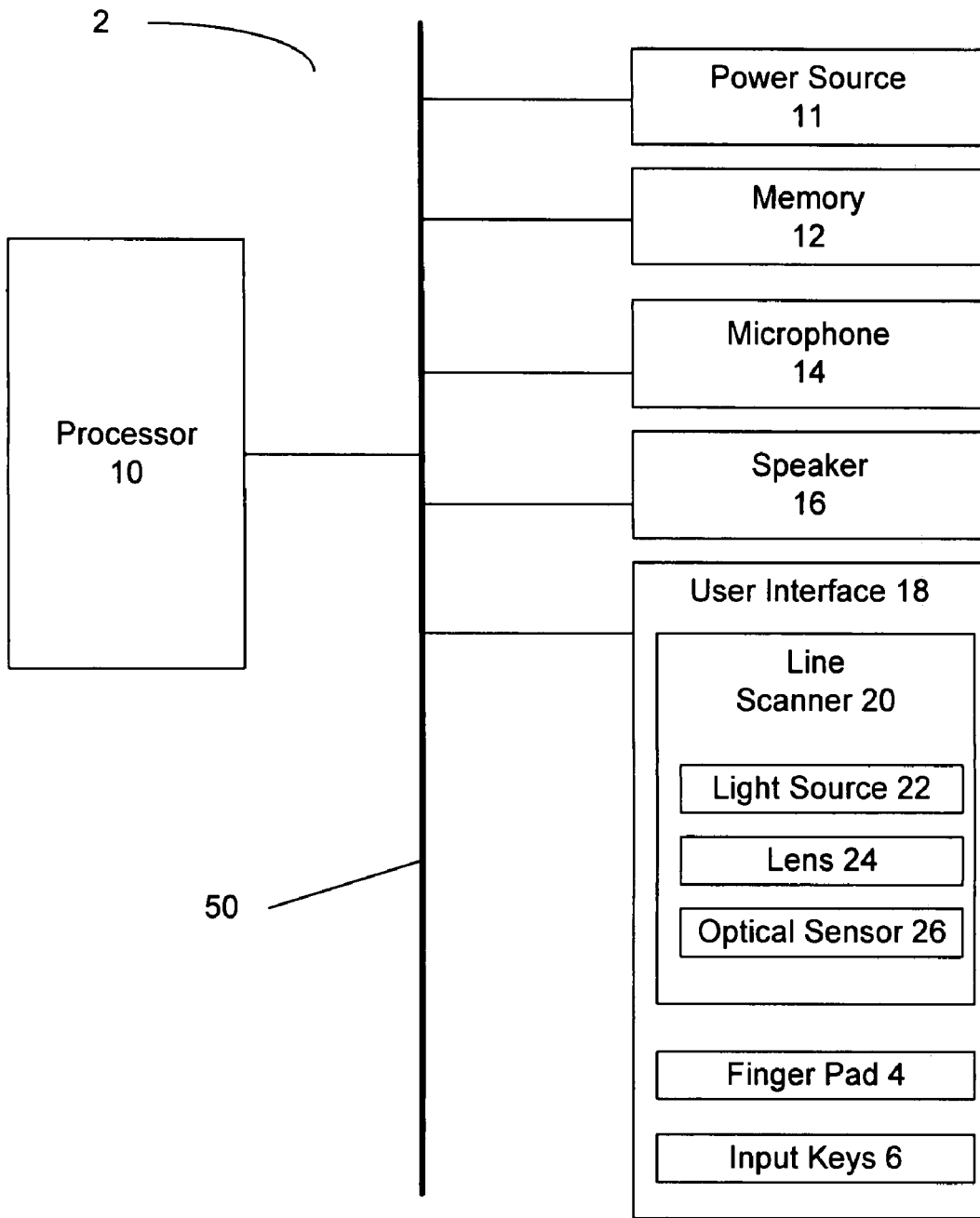


FIG. 2

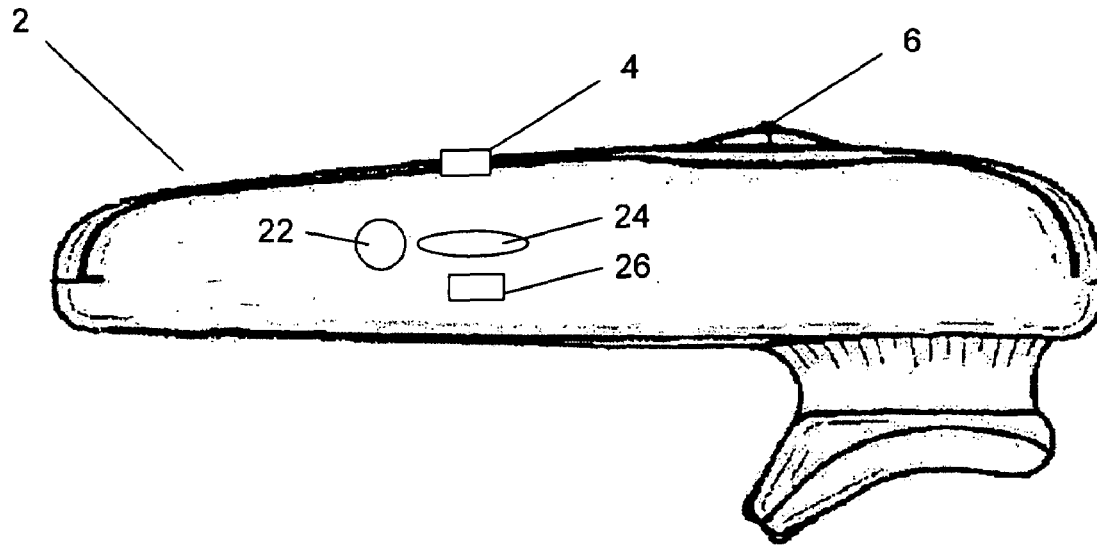


FIG. 3

### Line Scanner for Scrolling

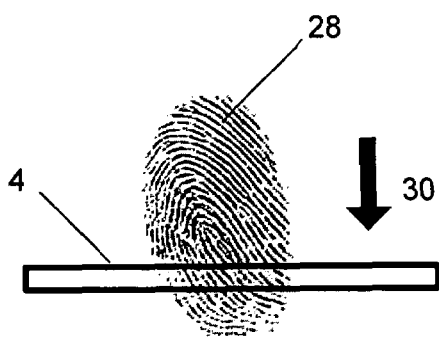


FIG. 4A

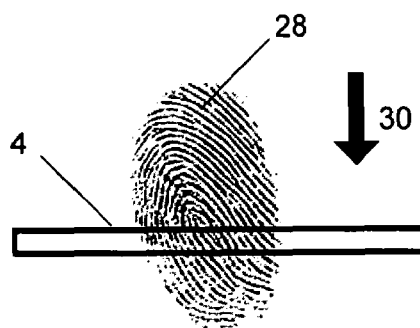


FIG. 4B



FIG. 4C



FIG. 4D

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