

- [54] INTERACTIVE DEVICE FOR DATA INPUT INTO AN INSTRUMENT OF SMALL DIMENSIONS
- [75] Inventors: Christian Piguet; Jean-Félix Perotto, both of Neuchâtel, Switzerland
- [73] Assignee: Centre Electronique Horloger SA, Neuchâtel, Switzerland
- [21] Appl. No.: 968,917
- [22] Filed: Dec. 13, 1978
- [30] Foreign Application Priority Data
  - Dec. 29, 1977 [CH] Switzerland ..... 16178/77
  - Jul. 17, 1978 [CH] Switzerland ..... 7690/78
- [51] Int. Cl.<sup>3</sup> ..... G06F 3/14
- [52] U.S. Cl. .... 340/711; 340/365 C; 340/712; 340/718; 178/18
- [58] Field of Search ..... 340/712, 365 R, 365 C, 340/711, 718; 178/18

- 4,126,760 11/1978 Gordon ..... 178/18
- 4,149,029 4/1979 Pobjee ..... 178/18

FOREIGN PATENT DOCUMENTS

- 2505227 11/1975 Fed. Rep. of Germany .
- 2517769 10/1976 Fed. Rep. of Germany .

OTHER PUBLICATIONS

IBM Tech. Discl. Bull.; vol. 19, No. 7; 12/76; Niederreiter *Single Key Element Data Input*; pp. 2585-2586.

Primary Examiner—Marshall M. Curtis  
 Attorney, Agent, or Firm—Wender, Murase & White

[57] ABSTRACT

The device according to the invention comprises a sensor formed by a plurality of capacitive or resistive electrodes. The user searches the symbol to be selected by displacing his finger on the sensor while looking at a control display unit. Any position of the finger on the sensor causes the display of to at least one symbol within an alphanumeric group, these symbols appearing sequentially on the control display.

The device does not require any instruction for use nor any indicator marked on the instrument because its working principle is based on permanent visual feedback. The device is compatible with the dimensional requirements of portable instruments of small dimensions, e.g. timepieces.

[56] References Cited  
 U.S. PATENT DOCUMENTS

- 3,151,239 9/1964 Lecoart et al. .... 178/18
- 3,758,718 9/1973 Fletcher et al. .... 178/18
- 3,916,099 10/1975 Hlady ..... 178/18
- 4,005,400 1/1977 Engdahl ..... 178/18
- 4,013,835 3/1977 Eachus et al. .... 178/18
- 4,044,242 8/1977 Laesser ..... 340/365 R
- 4,055,726 10/1977 Turner et al. .... 178/18
- 4,070,649 1/1978 Wright, Jr. et al. .... 178/18
- 4,122,438 10/1978 Bird ..... 178/18

22 Claims, 16 Drawing Figures

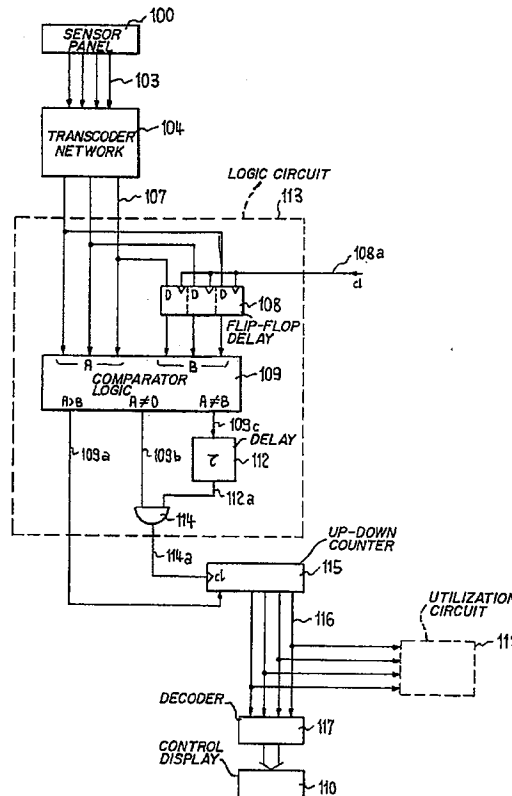


FIG. 1

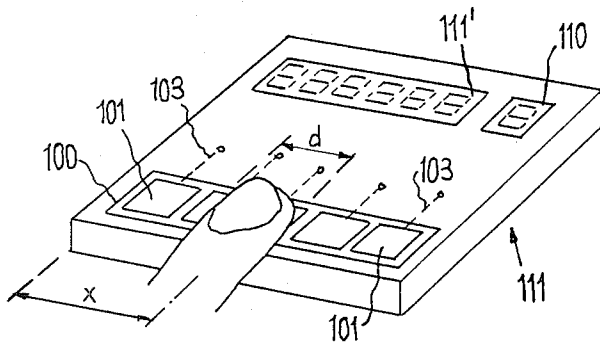


FIG. 2

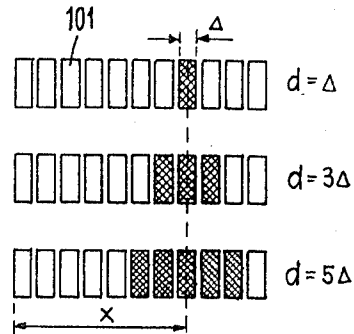


FIG. 3

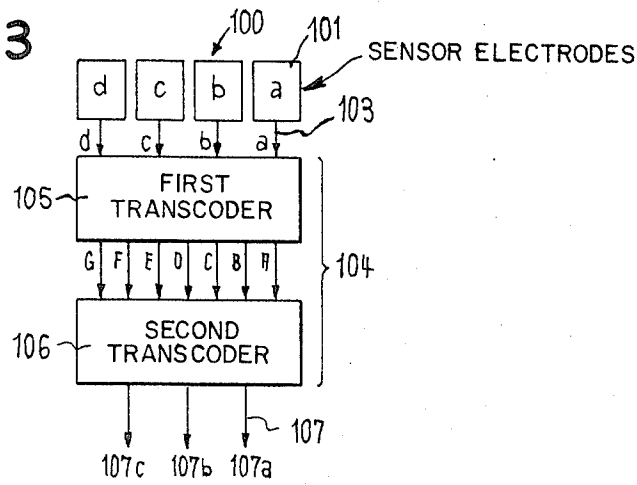


FIG. 5

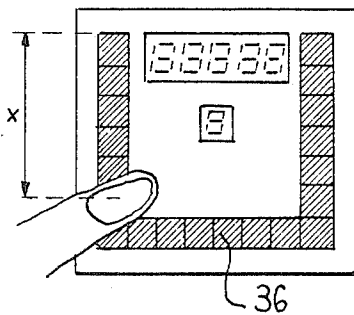


FIG. 6

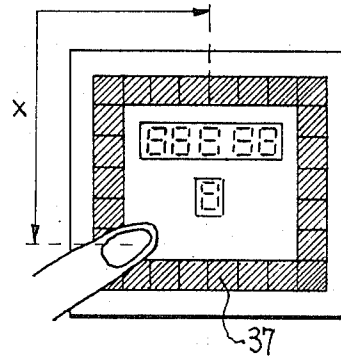


FIG. 4

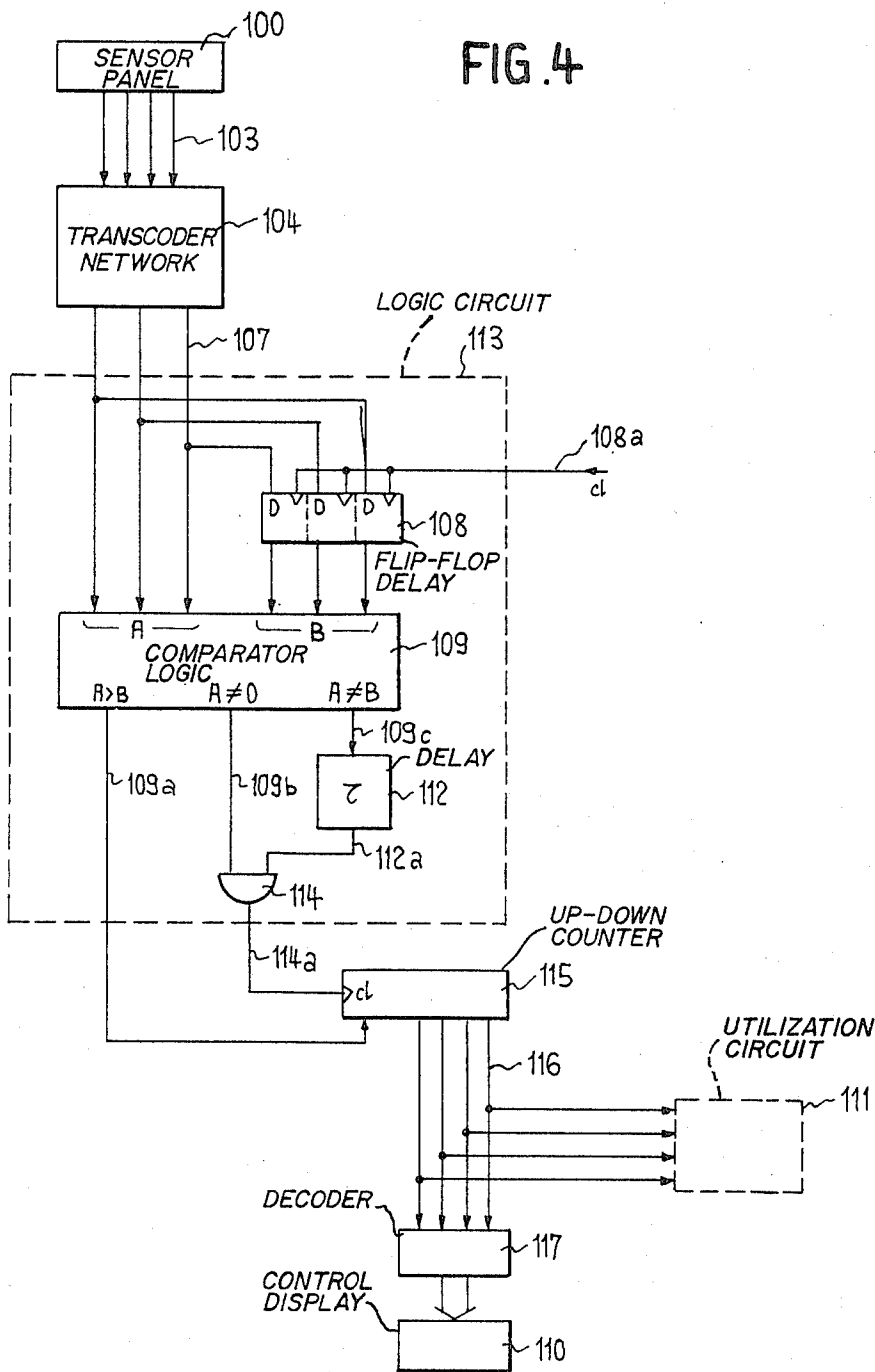


FIG. 7

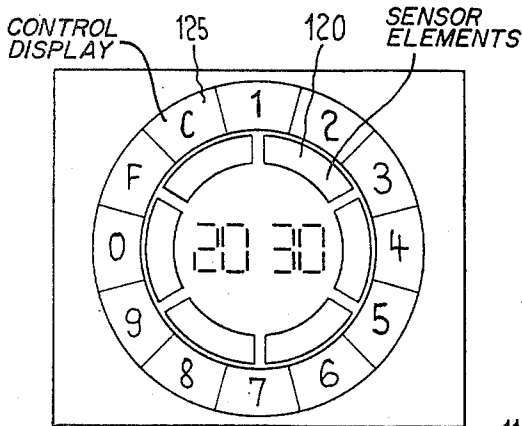


FIG. 8

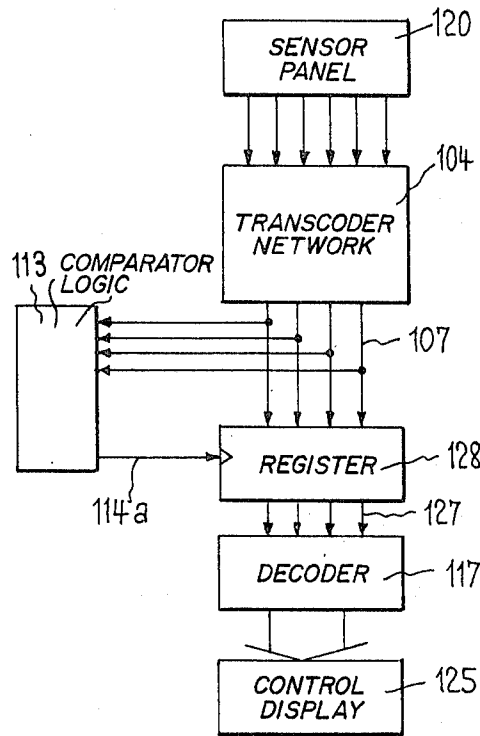
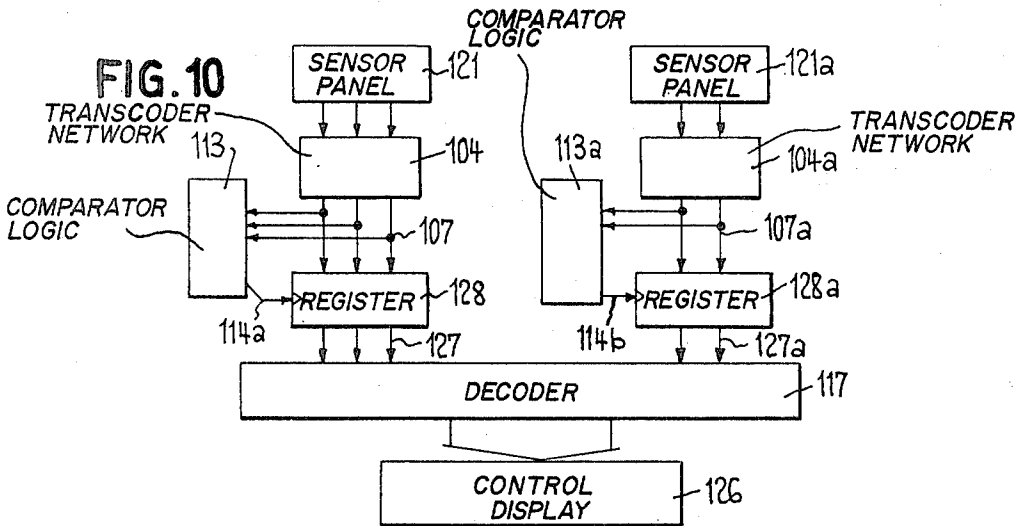
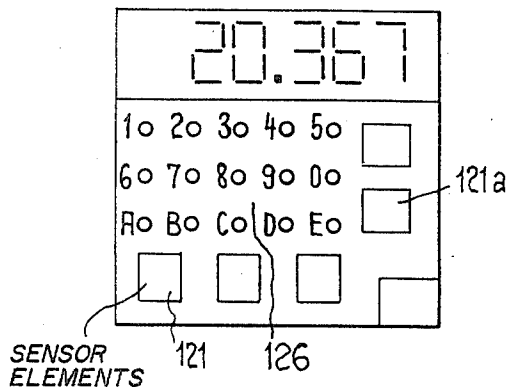
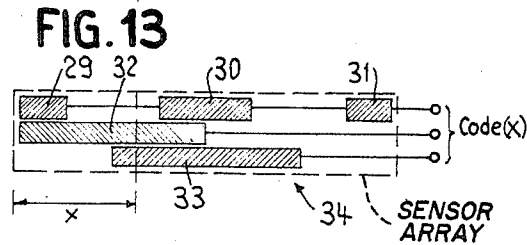
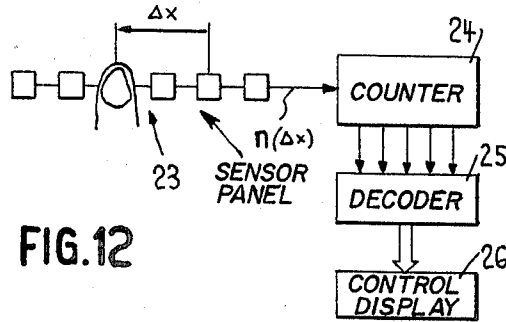
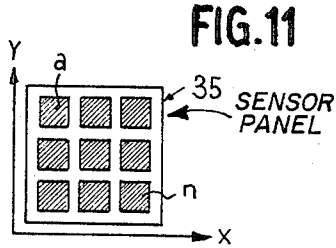


FIG. 9





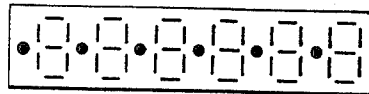
**FIG. 14**



**FIG. 15**



**FIG. 16**



# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.