

- [54] **PORTABLE ELECTRONIC TRANSACTION DEVICE AND SYSTEM THEREFOR**
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- [73] Assignee: **Corpra Research, Inc., Rosemont, Pa.**
- [21] Appl. No.: **586,938**
- [22] Filed: **Mar. 7, 1984**
- [51] Int. Cl.⁴ **G06K 5/00**
- [52] U.S. Cl. **235/380; 235/492**
- [58] Field of Search **235/473, 492, 380**

ing” by Mark Mills, Jan. 1984 issue of BYTE Magazine, pp. 154-168.

“Smart Credit Cards: The Answer to Cashless Shopping” by Stephen B. Weinstein, Feb. 1984 issue of IEEE Spectrum Magazine, pp. 43-49.

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Attorney, Agent, or Firm—Caesar, Rivise, Bernstein & Cohen, Ltd.

[57] **ABSTRACT**

A portable electronic transaction device and a terminal therefor. The device comprises a central data processor, a fixed memory, an adaptable memory, optical means for transmitting and receiving information to and from the terminal and self-contained power source means, such as an on-board battery. The device is arranged to operate in either a stand-alone mode during which it monitors itself for abnormal conditions or in an operating mode during which it communicates with said terminal for the transmission of information therebetween. The device also includes cryptographic means for encrypting outgoing information and decrypting incoming information in accordance with cryptographic information stored in its memory. The cryptographic information is modified as a function of time by clock means in the device and/or a function of information transmitted to the device by the terminal or stored in the device. During the standby mode of operation the device monitors itself, whereas in its operational mode it communicates with the terminal. Power for the standby mode is provided, via the on-board battery. Power for the operation of the device in the operational mode is provided via photocells in the device which are arranged to receive light from lamp means in the terminal.

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,637,994	1/1972	Ellingboe	235/61.12
3,702,464	11/1972	Castrucci	340/173
3,814,841	6/1974	Ulicki	235/473
3,868,057	2/1975	Chavez	235/61.7
3,876,865	4/1975	Bliss	235/61.12
3,906,201	9/1975	Housman	235/492
3,906,460	9/1975	Halpern	340/172.5
3,934,122	1/1976	Riccitelli	235/61.7
3,971,916	7/1976	Moreno	235/61.7
4,001,550	1/1977	Schatz	235/61.7
4,092,524	5/1978	Moreno	235/419
4,102,493	7/1978	Moreno	235/419
4,138,058	2/1979	Atalla	235/473
4,211,919	7/1980	Ugon	235/487
4,277,837	7/1981	Stucliert	235/379
4,341,951	7/1982	Benton	235/379
4,405,829	9/1983	Rivest et al.	178/22.1
4,423,319	12/1983	Jacobsen	235/472
4,454,414	6/1984	Benton	235/380
4,460,965	7/1984	Trehn	235/379

OTHER PUBLICATIONS

“Memory Cards: A New Concept in Personal Comput-

34 Claims, 10 Drawing Figures

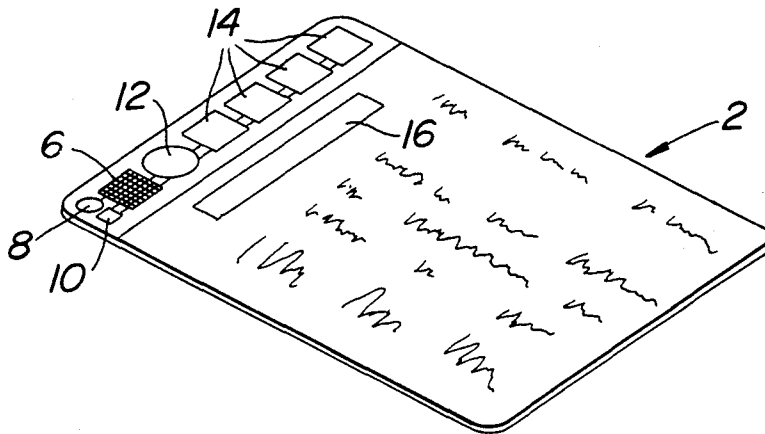


FIG. 1

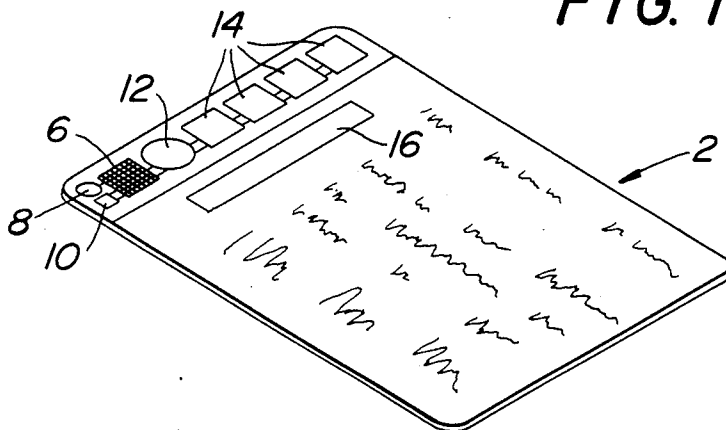
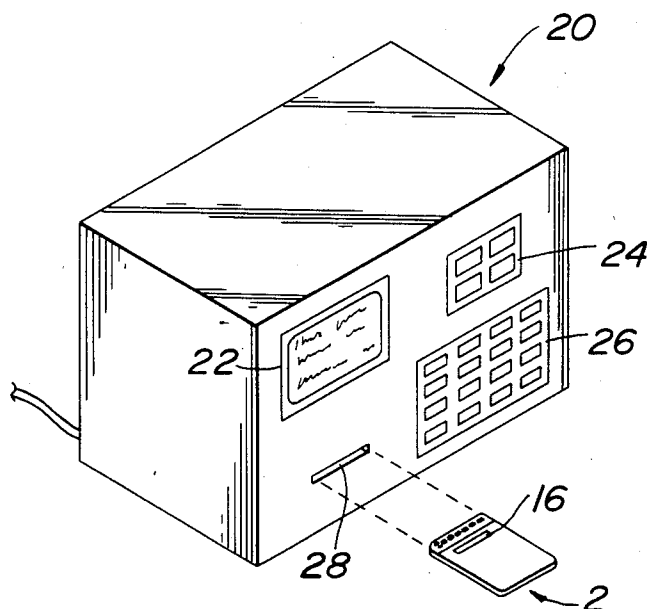


FIG. 2



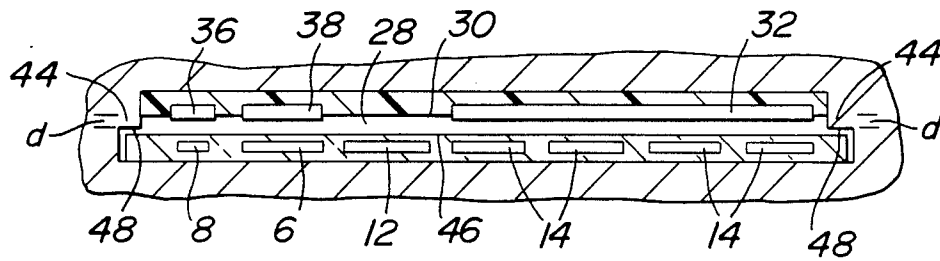
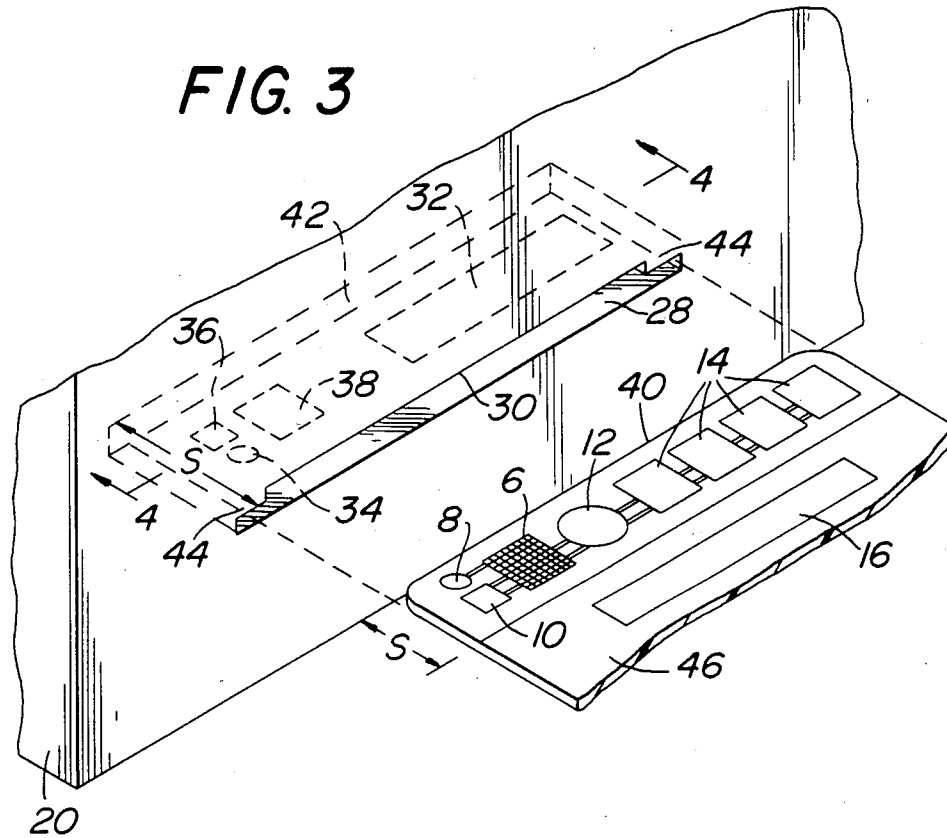


FIG. 5

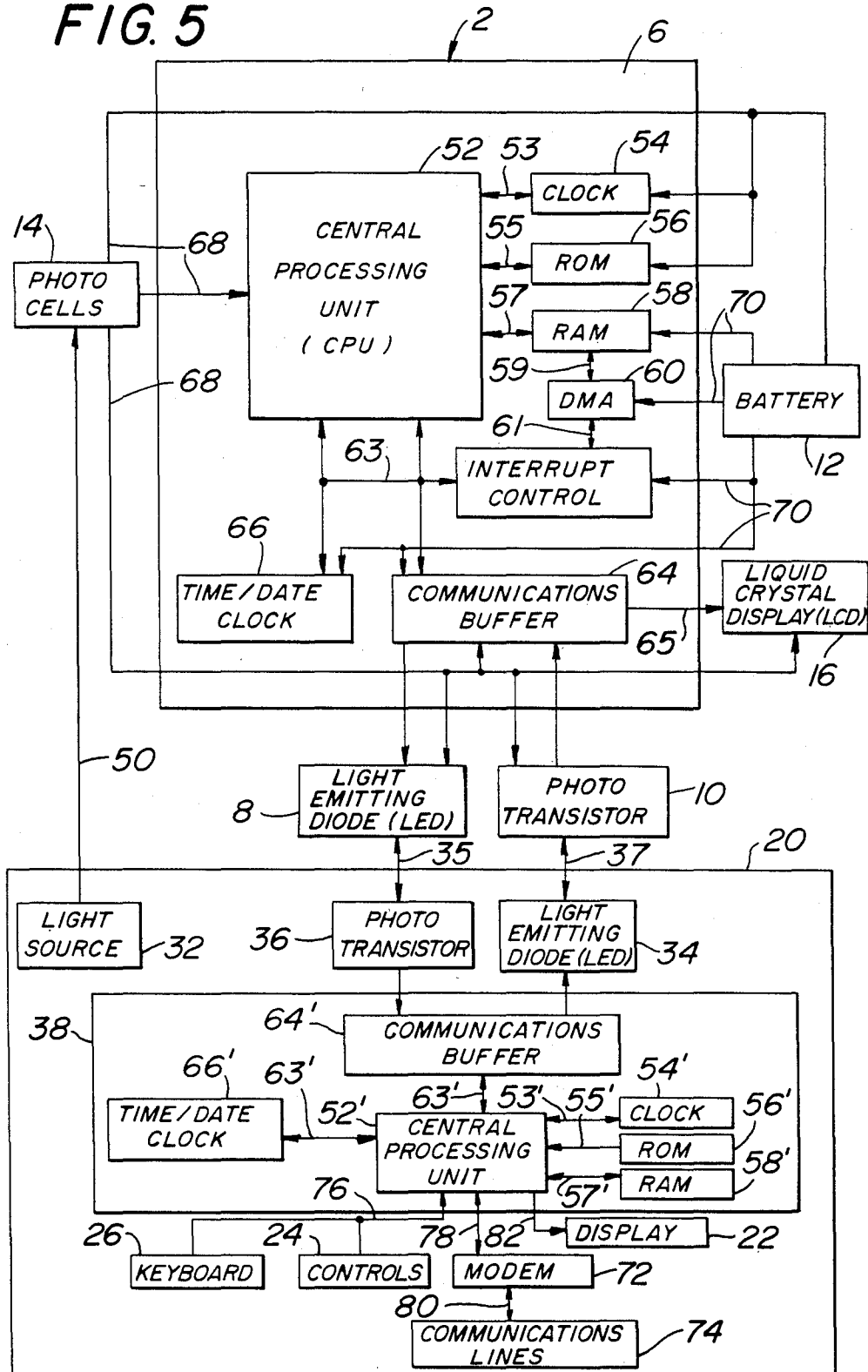
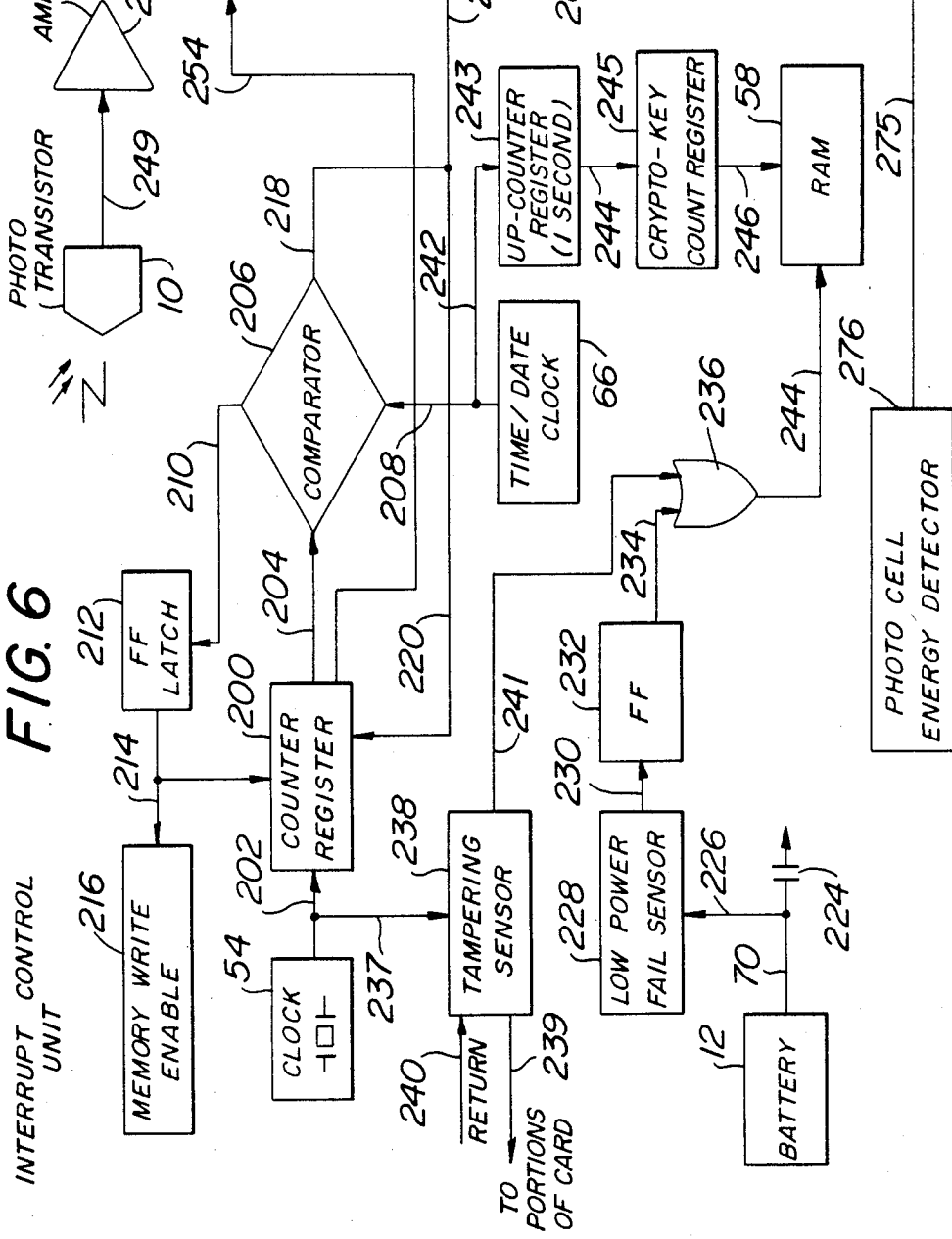


FIG. 6



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