

Kimura

DOCKF

[54] PORTABLE SECURE SEMICONDUCTOR MEMORY DEVICE

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- [21] Appl. No.: 498,848
- [22] Filed: Mar. 26, 1990

[30] Foreign Application Priority Data

- Mar. 31, 1989 [JP] Japan 1-77979 Mar. 31, 1989 [JP] Japan 1-77980
- [51] Int. Cl.⁵ G11B 23/28
- 380/25; 380/19; 235/380
- [58] Field of Search 380/3, 23, 25, 49; 235/380, 441, 382, 379, 492, 487

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,007,355	2/1977	Moreno	. 235/61
4,092,524	5/1978	Moreno	235/419
4,102,493	6/1978	Moreno	235/419
4,697,072	9/1987	Kawana	235/380
4,734,569	3/1988	Kawana et al	235/487
4,746,788	5/1988	Kawana	235/380
4,780,602	10/1988	Kawana et al	235/380
4,794,236	12/1988	Kawana et al	235/441
4,797,542	1/1989	Нага	235/380
4,845,351	7/1989	Hara et al	235/492
5,010,237	4/1991	Kawana	235/379
5,120,939	6/1992	Claus et al	235/382

US005237609A

5,237,609 **Patent Number:** [11]

Date of Patent: Aug. 17, 1993 [45]

FOREIGN PATENT DOCUMENTS

0114522	8/1984	European Pat. Off
0216298	4/1987	European Pat. Off
0286094	10/1988	European Pat. Off
2503423	10/1982	France.
53-6491	3/1978	Japan .
2154344	9/1985	United Kingdom .

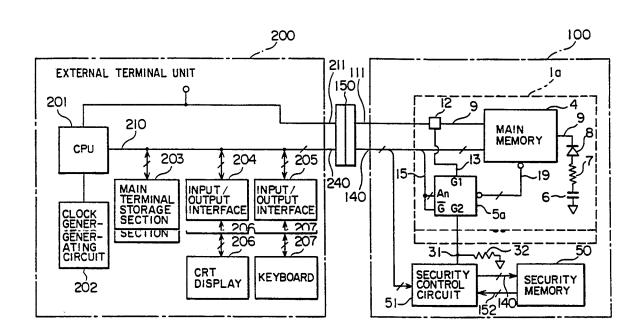
Primary Examiner-David Cain

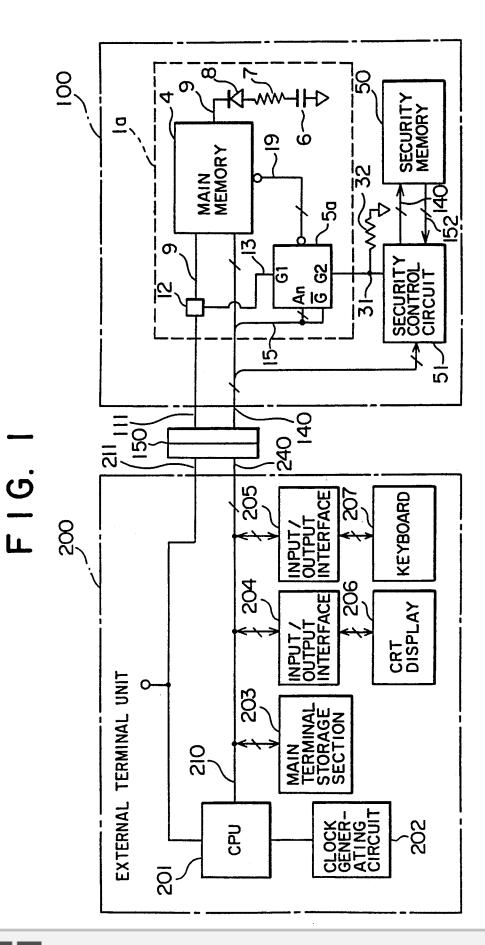
Attorney, Agent, or Firm-Leydig, Voit & Mayer

ABSTRACT [57]

A portable semiconductor memory device for interfacing with and exchanging information with an external terminal, said portable device having a security function for controlling access to a main memory. The main memory is adapted to exchange data with the external terminal by means of an interface bus which includes data lines, address lines and control lines. Access controls means in the portable unit is utilized to control access to the main memory. The unit also has a security memory comprising two sections. One section stores enciphered data which is read out to the external terminal, deciphered and returned to the unit as the first element used in a comparison. The second section of the security memory stores internal identification information. The two elements of identification information are provided to a comparator means which enables access to the main memory via the interface bus after a match is detected.

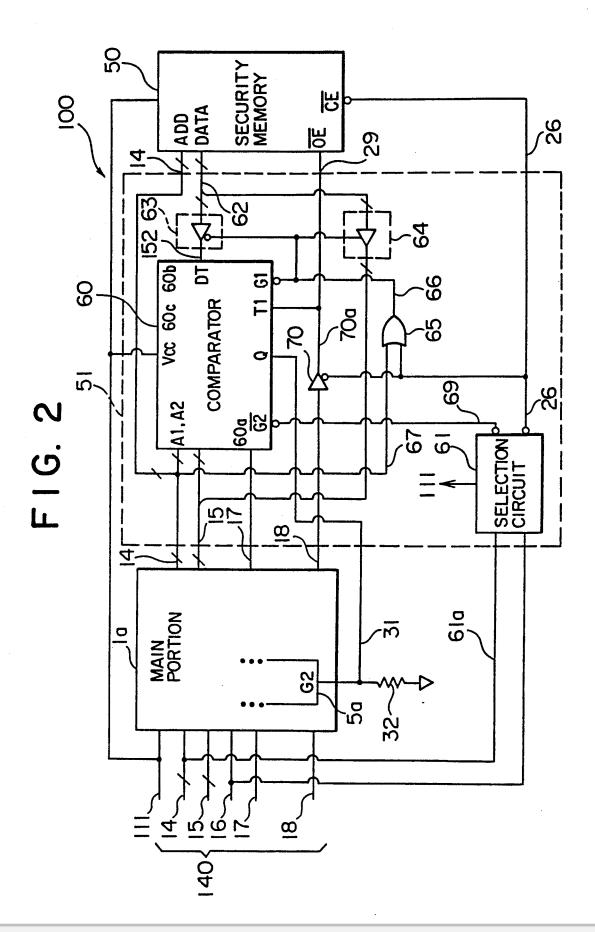
33 Claims, 6 Drawing Sheets





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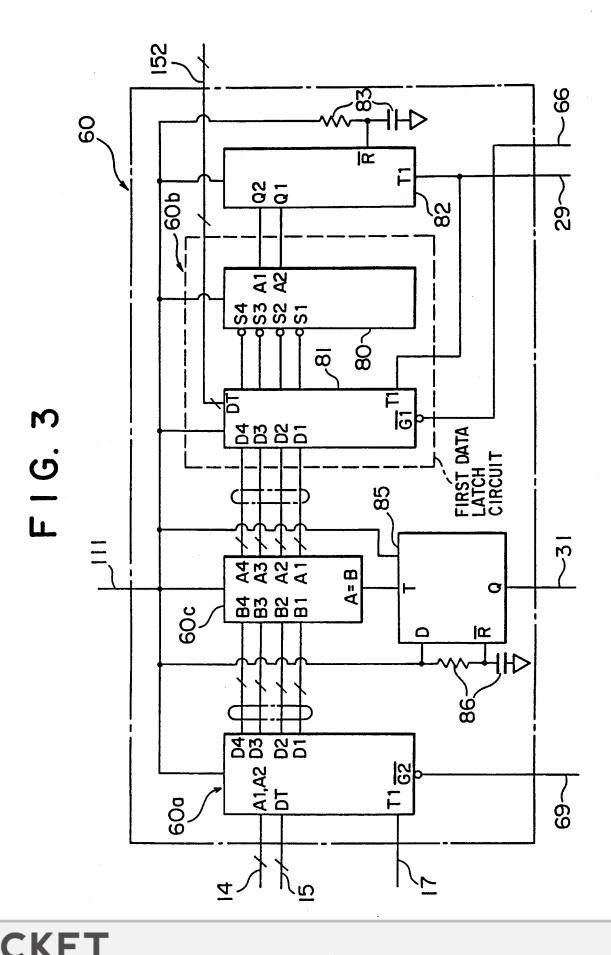
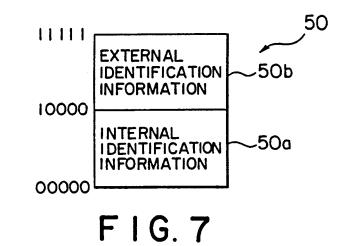
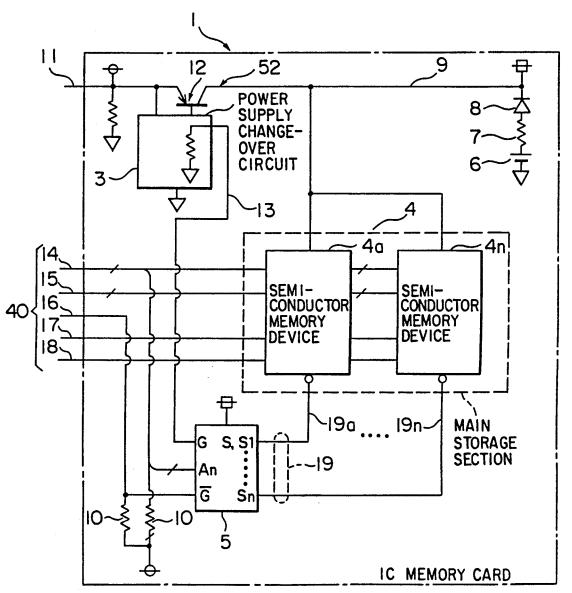


FIG. 4





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