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(12) United States Patent Jung et al.

(54) METHOD OF STORING DATA IN A NON-VOLATILE MEMORY AND APPARATUS THEREFOR

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Nov. 29, 2005

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(57) ABSTRACT

Provided is a method of storing data in a non-volatile memory, including generating and storing logs including data to be stored and an address of the non-volatile memory in response to a data-writing request, and comparing addresses of the logs and storing data corresponding to the same page by the unit of page in a corresponding area of the non-volatile memory. The method makes it possible to minimize delay in storing data, reduce the number of accesses to the non-volatile memory and uniformly write data in the whole non-volatile memory, thereby minimizing a response time of the non-volatile memory and increasing the lifetime of the non-volatile memory.

13 Claims, 9 Drawing Sheets

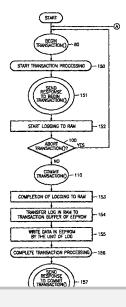
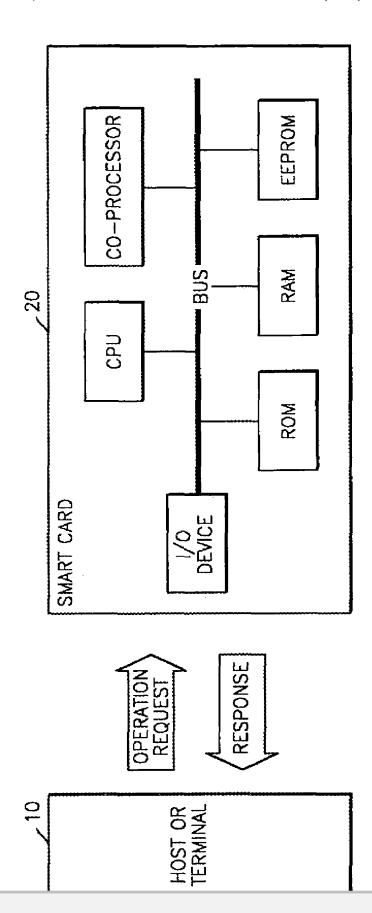




FIG.





9 CARD APPLET CRYPTOGRAPHIC MODULE 64 NATIVE INTERFACE ည SMART CARD OPERATING SYSTEM 63 UTILITY DEVICE DRIVERS • • • • • **≥**/± CARD APPLET MEMORY MANAGEMENT MODULE , 62 JAVA VIRTUAL MACHINE CARD APPLET 40 TRANSACTION MANAGEMENT MODULE 5 CARD

FIG. 2

FIG. 3

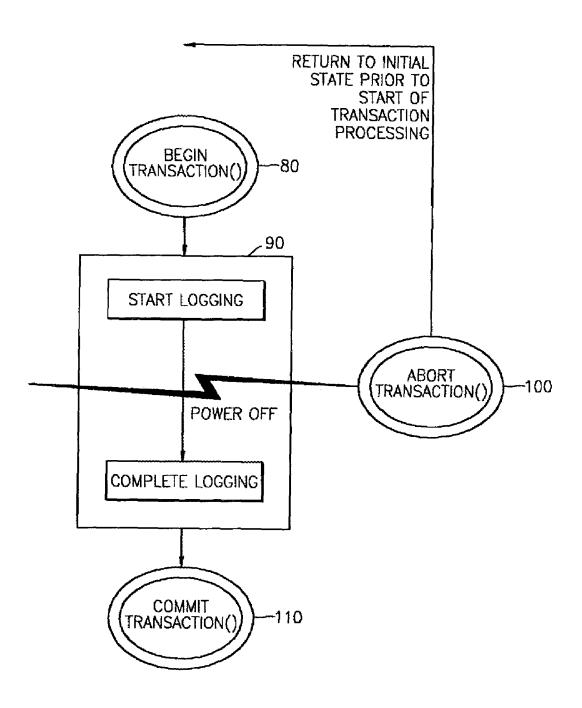
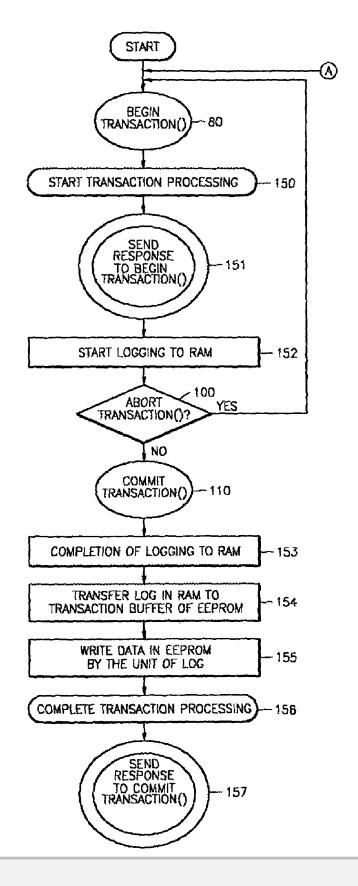




FIG. 4A



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