

[54] DATA SECURITY SYSTEM EMPLOYING AUTOMATIC TIME STAMPING MECHANISM

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[57] ABSTRACT

A data security system employing an automatic time-

stamping mechanism for stamping a current time code in a data storage area or register associated with each storage section of a memory or an auxiliary storage device, such that each data read or write in a memory storage section updates the time code device. For every storage section of a memory, there is a time stamp storage element associated with it. Similarly, there is a time stamp storage element associated with every data channel. Whenever a storage section of memory is read from or written into the time stamp in the form of a unique binary number from a clock, indicating the current time of day and the date, is inserted into the time stamp storage element associated with that memory storage section. Examination of the contents of each time stamp storage element enables determination of when the last read or write in a storage section occurred. A full memory address register is used to read or write data in the memory while only special high order bits of the memory address register are used to read or write the time stamp storage element associated with the memory storage section. The system provides a mechanism which automatically marks blocks of data with a time code as they are read from or written into memory and such mechanism cannot be bypassed by program means.

8 Claims, 26 Drawing Figures

