

(12) **United States Patent**
Elliott

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(54) **SECURITY SYSTEM FOR VIDEO GAME SYSTEM WITH HARD DISK DRIVE AND INTERNET ACCESS CAPABILITY**

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(*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 50 days.

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(51) **Int. Cl.⁷** **A63F 13/12; A63F 13/00**
(52) **U.S. Cl.** **463/43; 463/41**
(58) **Field of Search** 463/42, 41, 40, 463/43, 44, 29, 1; 380/2, 4, 21, 25, 28, 30, 43, 44, 54, 59, 223, 231, 232, 239, 241, 279, 282, 285; 705/1, 5, 26, 27, 51, 52, 54, 57, 59

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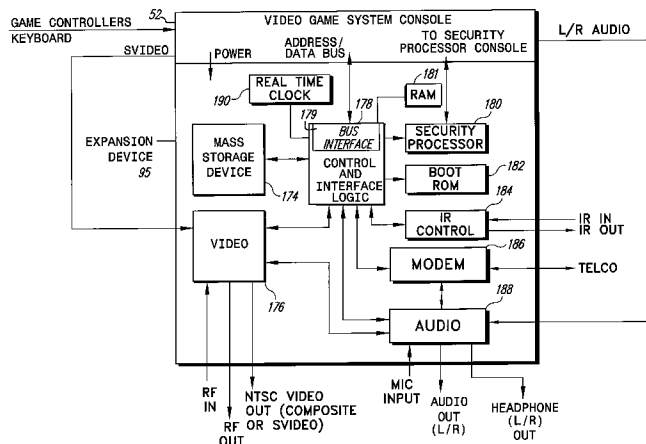
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(57) **ABSTRACT**

An existing video game system is modified to include additional communication and storage capability via a modem and hard disk drive. In accordance with one embodiment of the present invention, the primary system security features are incorporated into a video game system expansion device having a hard disk drive. The security system does not rely on the relatively insecure video game system. The present exemplary embodiment focuses security control in a disk drive/mass media controlling engine which is physically disposed within the expansion device housing as close as possible to the hard disk drive and the downloaded video games and other data it is designed to protect. Security features are incorporated into, for example, a disk drive controlling processing engine to provide security features which extend far beyond simplistic password systems which have heretofore been utilized in conjunction with disk drive controllers. In accordance with an exemplary embodiment of the present invention, the disk controller also incorporates an encrypting engine which encrypts in accordance with a highly secure encrypting algorithm. A further level of security is provided in the illustrative embodiments by partitioning the hard drive into various partitions whose security/accessibility is tightly controlled. Each application program, e.g., a video game, has a predetermined number of private partitions, including a read only encrypted partition.

99 Claims, 26 Drawing Sheets



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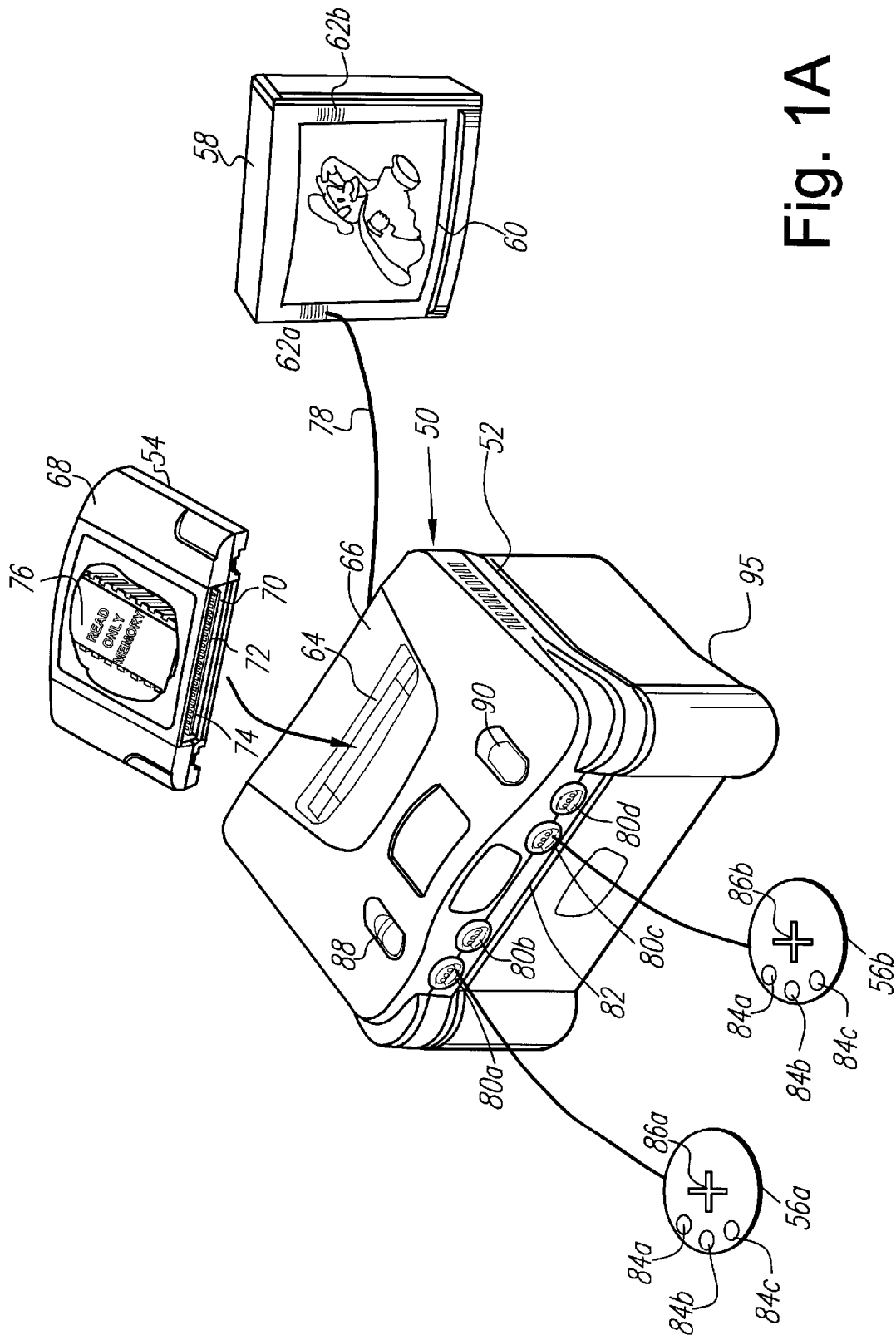


Fig. 1A

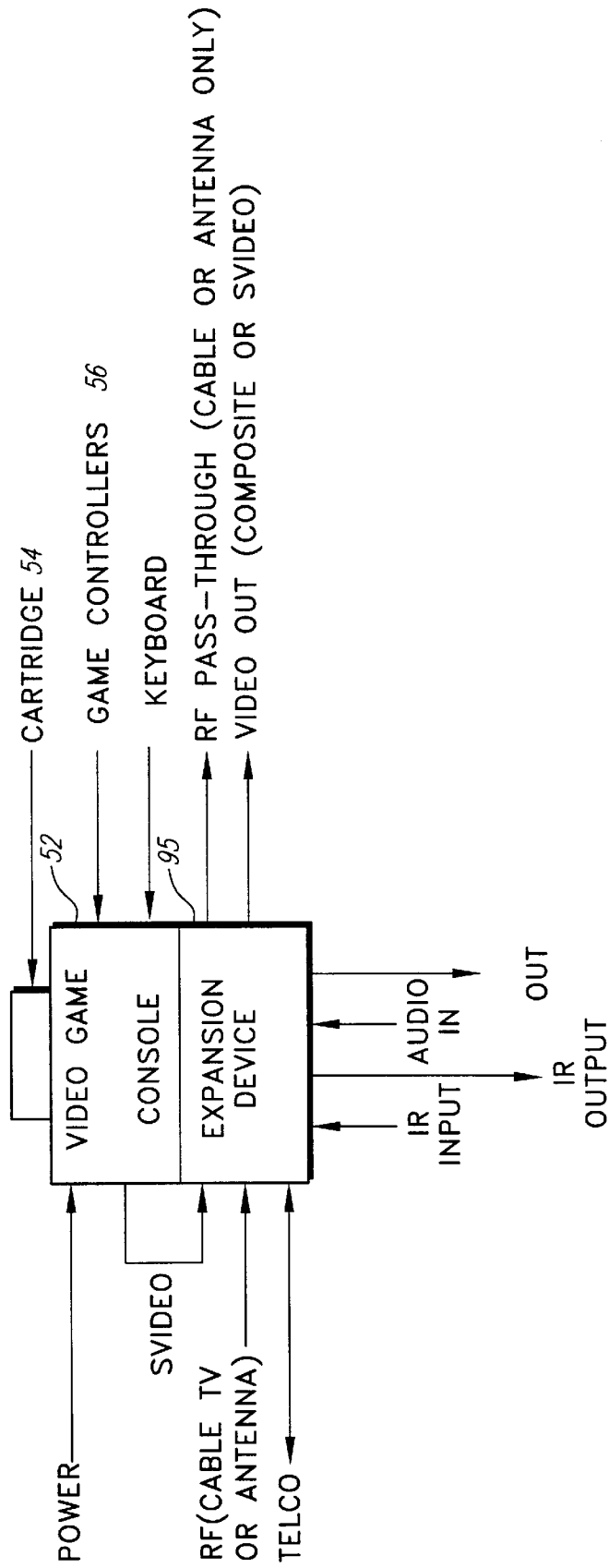


Fig. 1B

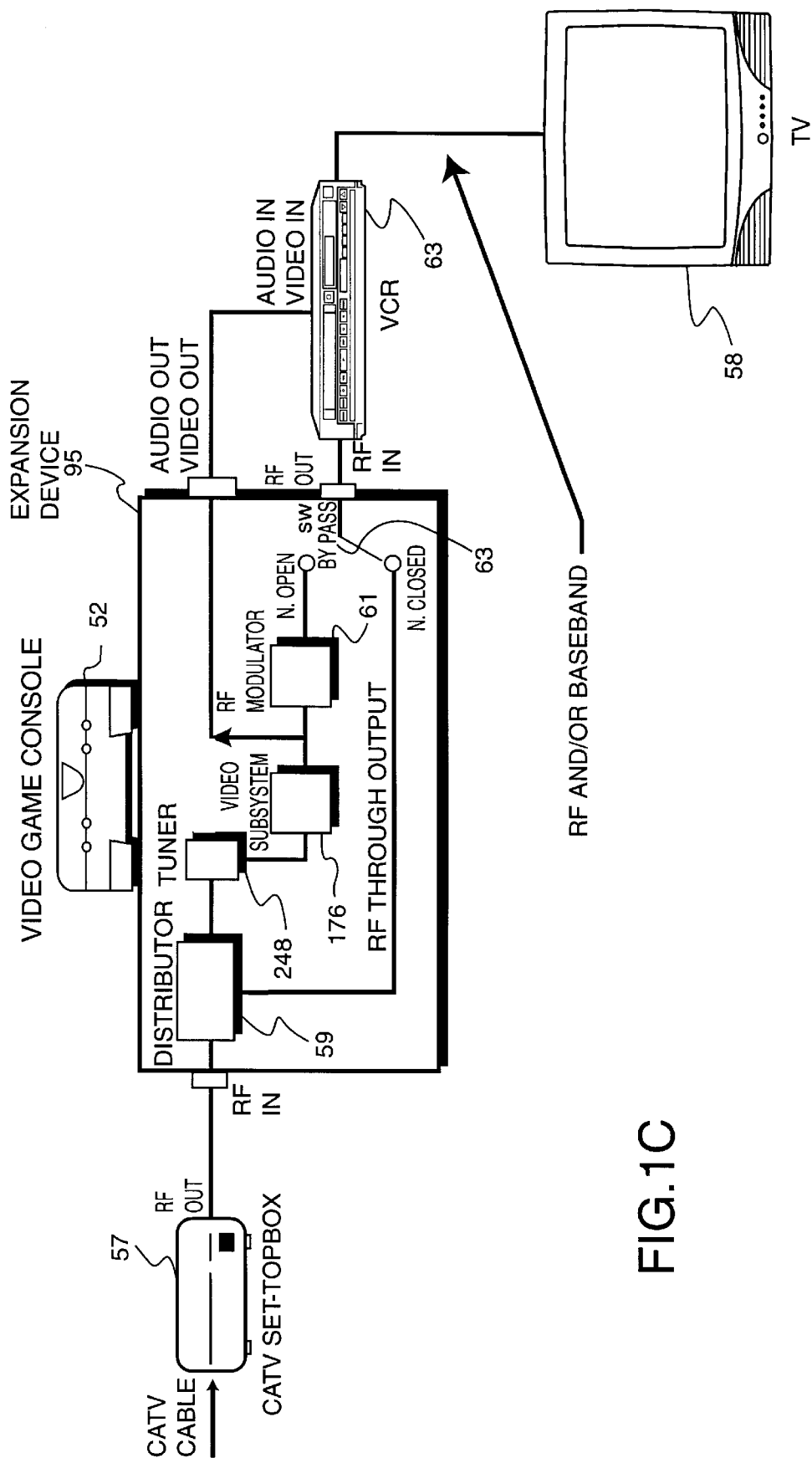


FIG.1C

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