NON-VOLATILE MEMORY WITH EMBEDDED PROGRAMMABLE CONTROLLER

ABSTRACT OF THE DISCLOSURE

Computer systems may be provided with additional performance for demanding applications while adding little additional hardware. For example, a slave device for a host computer system combines an embedded programmable controller with non-volatile memory, local RAM, and interface logic. The host computer system treats the slave device as if it would be a hierarchical memory system such as a conventional disk drive on which it may store and retrieve files. Additionally, the host computer system may program the controller to perform operations on stored information, including image processing and/or data compression. The non-volatile memory may include a disk drive, writable CD-ROM, optical drive, or non-volatile solid state memory.

Fig.2A