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**Leung**

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(54) **PROTECTIVE CIRCUIT FOR PROTECTING HARD DISK DATA**

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 531 days.

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(57) **ABSTRACT**

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(52) **U.S. Cl.** ..... **714/42; 714/5; 714/7; 714/23; 714/36**

(58) **Field of Search** ..... **714/5, 7, 23, 36, 714/42**

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A protective circuit for protecting hard disk data comprises: a first HD coupling device connected to a hard disk port of motherboard; a second HD coupling device connected to a hard disk; a HD signal processor coupled to the first HD coupling device, the second HD coupling device, and a microprocessor respectively; a random access memory (RAM) connected to the microprocessor; a nonvolatile semiconductor memory having program codes for converting a read/write instruction of the hard disk port on the motherboard with respect to the hard disk from a main data space to a virtual data space thereof; and the microprocessor for running program codes. The protective circuit can copy the data in the main data space to the virtual data space in the case that the data stored in the virtual data space are corrupted.

**5 Claims, 4 Drawing Sheets**

