February 22, 2018

New plastic holder design to fix the hard disk drive

Tim Ko
Hewlett Packard Enterprise

New plastic holder design to fix the hard disk drive

Abstract

Every computing systems have different approaches to fix the hard drive disk. The new idea is a plastic part which only needs one screw to fix the hard drive disk in the system firmly. It also provides a convenient way for the customer to install/remove the whole drive from the system.

Description

This disclosure relates to the field of computers. Such as server systems.

A technique is disclosed that facilitates to develop the hard drive disk fix in a computer system.

In many computer systems, for example, industrial standard server systems, Hard disk drive (sometimes abbreviation is hard drive, HDD, ETC…) is a common hardware device which used to store the huge data. This new idea is advantageous to fix the hard drive disk in the system firmly with only one screw.

Prior computer system usually use four screws to fix the hard drive in the system. The screws can provide extremely robust support if the system endures the high G-level shock and vibration. However, for the computer system such as server or storage computing system, more hard disk drives installation in the system, more screw and time wasted.

According to the present disclosure, and as understood with reference to the figures, the new idea is a plastic part 10, which has a screw hole 21 can fix with the hard drive disk 30 together by screw. Plastic rib 22 can replace the role of the screw to insert into the hard drive disk 30. In view 50A, show the installation of the plastic part 10 and hard drive disk30 into subassembly. There is another hook feature 23 which can provide the user to fix the subassembly into the computer system.

In view 50B, when the subassembly is installed into the system, the hook can snap with the concave cutout 24 of the system. The whole hard drive disk is in place and well fixed in the system.

The disclosed new plastic holder design can technique advantageously not only save the screws Q'ty but also the install/uninstall duration time, which can help the company to save the money. This new design idea also provides the flexibility to allow it to be used elsewhere in the system.