Rotation Lock Handle

Shou-Jen Yang
Hewlett Packard Enterprise

Follow this and additional works at: http://www.tdcommons.org/dpubs_series

Recommended Citation
Yang, Shou-Jen, "Rotation Lock Handle", Technical Disclosure Commons, (November 30, 2016)
http://www.tdcommons.org/dpubs_series/333

This work is licensed under a Creative Commons Attribution 4.0 License.
This Article is brought to you for free and open access by Technical Disclosure Commons. It has been accepted for inclusion in Defensive Publications Series by an authorized administrator of Technical Disclosure Commons.
Rotation Lock Handle

Abstract

It can be difficult and time-consuming to install or remove circuit cards in computer systems. Disclosed is a rotation lock handle that can lock a PCI option card in place in a cage without use of a screw.

Description

This disclosure relates to the field of computer systems.

In computer systems, such as for example server systems, electronic cards such as PCI cards often are installed in and/or removed from a cage. Typically, for systems subject to shock or vibration in their environment, a screw is used to maintain a card in the proper position in the cage. However, the space in the cage can be quite limited, making it difficult for a person to access and hold the screw, and requires use of a tool.

A technique is disclosed that attaches a bracket to the card which serves as a handle to allow a user to easily and quickly install or remove the card without using tool and which fixes the card in position without using a screw.

According to the present disclosure, and as understood with reference to the Figure, a card 10 includes a handle/bracket 20. The bracket 20 rotates around a pivot point 25 and has a plunger 30 which engages either a "unlocked" slot 40 or a "locked" slot 50. During insertion of the card, the user lifts the plunger 50 from the "unlocked" slot 40 and rotates 60 the bracket 20 90 degrees into the "locked" slot 50 position, when the plunger 30 is released. The bracket 20 pushes up against the chassis wall to push the card into its mating slot in the cage 5. To remove the card 10, the process is reversed.

The disclosed technique advantageously eliminates the screw and the need for a tool such as a screwdriver to install and remove the card. It also provides more space for the user to grab the card, particularly when the card is located at a lower position in the cage. As such, it can accelerate the assembly process and enhance the stability of the card in its environment. The card cannot be inserted or removed with the handle in the wrong position, ensuring a proper installation.
Disclosed by Shou-Jen Yang, Hewlett Packard Enterprise