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SYSTEM AND METHOD FOR SECURING MULTIPLE ITEMS OF EQUIPMENT

TECHNICAL FIELDS

The present disclosure relates in general to securing multiple items of equipment, and more particularly to
5 securing items of equipment to prevent theft of such equipment or the contents thereof.

BACKGROUND

As the value and use of information continues to
10 increase, individuals and businesses seek additional ways to process and store information. One option available to users is information handling systems. An information handling system generally processes, compiles, stores, and/or communicates information or data for business, personal, or
15 other purposes thereby allowing users to take advantage of the value of the information. Because technology and information handling needs and requirements vary between different users or applications, information handling systems may also vary regarding what information is handled, how the
20 information is handled, how much information is processed, stored, or communicated, and how quickly and efficiently the information may be processed, stored, or communicated. The variations in information handling systems allow for information handling systems to be general or configured for
25 a specific user or specific use such as financial transaction processing, airline reservations, enterprise data storage, or global communications. In addition, information handling systems may include a variety of hardware and software components that may be configured to process, store, and
30 communicate information and may include one or more computer systems, data storage systems, and networking systems.



Information handling systems often include one or more peripheral devices communicatively coupled thereto. In general, a peripheral device may include an item of hardware that is coupled to an information handling system in order to expand its capability or function. A peripheral device may include internal devices internal to an information handling system chassis or case, and may include external devices external to an information handling system chassis or case. A peripheral device may also include, without limitation, a storage device (e.g., CD-ROM, CD-RW, CD-R, DVD-ROM, DVD-RW, DVD-R, USB storage device, tape drive, floppy disk, hard disk drive, disk array controller), an input device (e.g., keyboard, pointing device, microphone, image scanner, webcam, barcode reader), and/or an output device (e.g., printer, sound card, speakers, graphics card, monitor, docking station).

In many environments, it may be desirable to prevent theft of information handling systems, peripherals, and/or the various contents thereof. For example, it may be desirable to secure such items of equipment in offices, shops, computer labs, libraries, and/or other locations in which an item of equipment may be the object of an opportunist theft. Accordingly, items of equipment are often secured by means of a lock, e.g., a Kensington[®] lock (also known as a Kensington[®] Security Slot or K-slot). A lock is generally secured in place with a key or other suitable device. The lock is often coupled to one end of a cable, and the end of the cable opposite the lock may contain a small loop and/or other coupling device allowing the cable to be coupled to a permanent object (e.g., a table and/or other similar equipment).

In many instances it may be desirable to secure an item of equipment, as well as other items of equipment associated

with it. For example, an imaging device (e.g., printer and/or copier) may include one or more trays for holding paper and/or another recording medium. For example, as depicted in FIGURE 1, an imaging device 100 may include one or more trays 102. Because replacement of imaging device 100 may be costly and/or cumbersome, imaging device 100 may be secured by means of lock 104a. Lock 104a may be coupled to cable 106a, which may in turn be secured to a permanent object. In addition, similar locks 104b-104d may be used to secure trays 102, preventing their removal from imaging device 100. Securing of trays 102 may be desired to not only prevent theft of trays 102 themselves, but also contents thereof, e.g. paper and/or other recording medium. Security of recording medium in a tray may be particularly desirable in situations where the recording medium itself may have particular characteristics that might lead to fraud or financial loss greater than the cost of the medium itself (e.g., company letterhead, blank checks, or prescription forms).

However, as shown in FIGURE 1, using traditional approaches for securing multiple items of associated equipment, such as imaging device 100 and its associated trays 102, requires a lock 104 for each item of equipment 100, 102 to be secured. The use of multiple locks may be undesirable, due to costs of acquiring multiple locks, and due to the complexity of maintaining multiple keys to secure the multiple locks.

SUMMARY

In accordance with the teachings of the present disclosure, the disadvantages and problems associated with securing multiple items of equipment been substantially
5 reduced or eliminated.

In accordance with one embodiment of the present disclosure, a system for securing an imaging device and one or more recording medium trays associated with the imaging device may include an imaging device chassis, a lock
10 configured to engage with the imaging device chassis, a cable, and at least one recording medium tray. The cable may have a first end coupled to the lock and a second end configured to couple to a substantially immobile object to secure the imaging device chassis to the substantially
15 immobile object. The at least one recording medium tray may be configured to receive the cable to secure the at least one tray in the imaging device chassis when the lock is engaged with the imaging device chassis.

In accordance with another embodiment of the present disclosure, a method for securing an imaging device and recording medium trays associated with the imaging device is provided. In a chassis having an imaging device and at least one tray, a lock may be engaged with the chassis and coupled to a first end of a cable. The cable may be passed through a
20 portion of the at least one recording medium tray. The second end of the cable may be coupled to a substantially immobile object to secure the imaging device and the at least one recording medium tray.

In accordance with a further embodiment of the present disclosure, a method for securing multiple items of equipment is provided. A first item of equipment may be engaged to a lock and the lock may be coupled to the first end of a cable. The cable may be passed through a portion of at least one
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second item of equipment. The second end of the cable may be coupled to a substantially immobile object to secure the first item of equipment and the at least one second item of equipment.

5 In accordance with an additional embodiment of the present disclosure, a system for securing multiple items of equipment may include a lock and a cable. The lock may be configured to engage with a first item of equipment. The cable may have a first end and a second end. The first end
10 may be coupled to the lock. The cable may configured to pass through at least one second item of equipment and the second end may be configured to couple to a substantially immobile object to secure the first item of equipment at the at least one second item of equipment.

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BRIEF DESCRIPTION OF THE DRAWINGS

A more complete understanding of the present embodiments and advantages thereof may be acquired by referring to the following description taken in conjunction with the accompanying drawings, in which like reference numbers indicate like features, and wherein:

FIGURE 1 illustrates an imaging device including a system for securing the imaging device and its associated trays using traditional approaches;

FIGURE 2 illustrates an example imaging device including a system for securing the imaging device and its associated trays, in accordance with the present disclosure; and

FIGURES 3A and 3B illustrate a tray for use with an imaging device, as depicted in FIGURE 2, in accordance with the present disclosure.

DETAILED DESCRIPTION

Preferred embodiments and their advantages are best understood by reference to FIGURES 2 and 3, wherein like numbers are used to indicate like and corresponding parts.

5 For the purposes of this disclosure, an information handling system may include any instrumentality or aggregate of instrumentalities operable to compute, classify, process, transmit, receive, retrieve, originate, switch, store, display, manifest, detect, record, reproduce, handle, or
10 utilize any form of information, intelligence, or data for business, scientific, control, entertainment, or other purposes. For example, an information handling system may be a personal computer, a PDA, a consumer electronic device, a network storage device, or any other suitable device and may
15 vary in size, shape, performance, functionality, and price. The information handling system may include memory, one or more processing resources such as a central processing unit (CPU) or hardware or software control logic. Additional components or the information handling system may include one
20 or more storage devices, one or more communications ports for communicating with external devices as well as various input and output (I/O) devices, such as a keyboard, a mouse, and a video display. The information handling system may also include one or more buses operable to transmit communication
25 between the various hardware components.

 For the purposes of this disclosure, "equipment" may include any item of equipment for which an owner, administrator, and/or user of which may desire to secure from theft, including theft of the equipment itself and/or the
30 contents thereof. Equipment may include an information handling system, any peripherals associated with an information handling system, and/or any removable component

of an information handling system or peripheral (e.g., recording medium tray associated with an imaging device).

For the purposes of this disclosure, a peripheral device may include an item of hardware that is coupled to an
5 information handling system in order to expand its capability or function. A peripheral device may include internal devices internal to a chassis or case housing an information handling system, and may include external devices external to a chassis or case housing an information handling system. A
10 peripheral device may also include, without limitation, a storage device (e.g., CD-ROM, CD-RW, CD-R, DVD-ROM, DVD-RW, DVD-R, USB storage device, tape drive, floppy disk, hard disk drive, disk array controller), an input device (e.g., keyboard, pointing device, microphone, image scanner, webcam,
15 barcode reader), and/or and output device (e.g., printer, sound card, speakers, graphics card, monitor, docking station).

FIGURE 2 illustrates an example imaging device 200 including a system for securing imaging device 200 and its
20 associated trays 202, in accordance with the present disclosure. As depicted in FIGURE 2, imaging device chassis 201 may include imaging device 200 and one or more trays 202. Imaging device 200 may include any device, system or apparatus (e.g., a printer, copier, and/or facsimile
25 machine), used alone and/or in combination with one or more information handling systems to print images (e.g., text and/or pictures) on a recording medium (e.g., paper, transparencies, and/or any other suitable medium) using an imaging medium (e.g., toner, ink, and/or other suitable
30 medium). Imaging device 200 may include, without limitation, a toner-based imaging device or an inkjet imaging device.

Each tray 202 may be any device, system or apparatus configured to hold a recording medium and interface with

imaging device 200 to deliver and/or feed recording medium to imaging device 200 for imaging thereupon. In certain embodiments, one or more of trays 202 may be configured to slidably interface with chassis 201, such that the particular tray 202 resembles a drawer that may slide in and out of chassis 201. As depicted in greater detail with respect to FIGURES 3A and 3B, one or more of trays 202 may include a slotted member 208 configured to receive a cable 206 associated with a lock 204.

As shown in FIGURE 2, lock 204 may interface with imaging device 202 and/or chassis 201. Lock 204 may comprise any device, apparatus or system configured to secure imaging device 202 and/or chassis 201 when used in association with cable 206. In some embodiments, lock 204 may comprise a mechanical fastening device which may be released from and/or engaged with imaging device 202 and/or chassis 201 with a key and/or combination. In the same or alternative embodiments, imaging device 202 and/or chassis 201 may include a slotted member, groove, receptacle, and/or other device configured to receive lock 204. In a particular embodiment, lock 204 may comprise a Kensington® lock and imaging device 202 and/or chassis 201 may include a Kensington® security slotted member configured to receive lock 204, in accordance with Kensington® Security Slot Specifications from Kensington Computer Products Group.

Lock 204 may be coupled to a cable 206. Cable 206 may be configured at an end opposite of lock 204 to couple to a substantially permanent or immovable object. Thus, in operation, imaging device 202 may be secured from theft by virtue of its coupling via lock 204 and cable 206 to a substantially permanent or immovable object.

As further shown in FIGURE 2, cable 206 may be coupled with one or more of slotted members 208 of trays 202 to

secure trays 202 and/or the contents of trays 202 from theft. For example, cable 206 may be passed through one or more slotted members 208 such that trays 202 may not be removed from chassis 201 when lock 204 is engaged with imaging device
5 200 and/or chassis 201. In the same or alternative embodiments, chassis 201 may include one or more openings 210. Each of openings 210 may be configured such that a slotted member 208 may pass through such opening 210 and to the outside of chassis 201 when the tray 202 associated with
10 such slotted member 208 is engaged in chassis 201. Accordingly, in such embodiments, cable 206 may engage with slotted member 208 and chassis 201 to prevent movement of slotted member 208 into the inside of chassis 201, and thus, prevent removal of tray 202 from chassis 201.

15 Although FIGURE 2 depicts imaging device chassis 201 having four trays 202, imaging device chassis may include any suitable number of trays 202. In addition, although FIGURE 2 depicts lock 204 and cable 206 used to secure a imaging device 200 and its associated trays 202, methods and systems
20 similar to those depicted in FIGURE 2 may be utilized to secure any other suitable equipment. For example, lock 204 and cable 206 may be used to secure an information handling system and its associated components. In such an embodiment, the information handling system may be configured to receive
25 lock 204, and one or more of the components associated with the information handling system (e.g., monitor, external hard drives and/or other peripherals) may include a device similar or identical to slotted member 208 in order to receive cable 206, thus allowing security of the information handling
30 system and its associated components.

FIGURES 3A and 3B illustrate a tray 202 for use with imaging device 200, as depicted in FIGURE 2, in accordance with the present disclosure. As discussed above, each tray

may include a slotted member 208 configured to receive cable 206 to secure tray 202 and/or its contents. As depicted in FIGURES 3A and 3B, slotted member 208 may be movable or retractable with respect to the remainder of tray 202.

5 Accordingly, when is it desired to secure a tray 202, its associated slotted member 208 may be moved to a position allowing it to pass through opening 210 of chassis 201. However, if it is not desired to secure a tray 202, slotted member 208 may be retracted for aesthetic purposes.

10 Using the methods and systems disclosed herein, problems associated with securing multiple items of equipment may be improved, reduced or eliminated. For example, the methods and systems disclosed may allow for multiple items of equipment to be secured using one lock, thus potentially
15 obviating the need for a separate lock for each item of equipment, thereby potentially reducing cost.

Although the present disclosure has been described in detail, it should be understood that various changes, substitutions, and alterations can be made hereto without
20 departing from the spirit and the scope of the disclosure as defined by the appended claims.

WHAT IS CLAIMED IS:

1. A system for securing an imaging device and one or more recording medium trays associated with the imaging
5 device, comprising:

an imaging device chassis;

a lock configured to engage with the imaging device chassis; and

10 a cable having a first end coupled to the lock and a second end configured to couple to a substantially immobile object to secure the imaging device chassis to the substantially immobile object; and

at least one recording medium tray configured to receive the cable to secure the at least one tray in the imaging
15 device chassis when the lock is engaged with the imaging device chassis.

2. A system according to Claim 1, wherein the lock comprises a Kensington lock.

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3. A system according to Claim 1, wherein each of the at least one of the recording medium trays includes a slotted member configured to receive the cable therethrough to secure the at least one recording medium tray in the imaging device
25 chassis when the lock is engaged with the imaging device chassis.

4. A system according to Claim 3, wherein the imaging device chassis further comprises at least one opening
30 configured to receive at least one slotted member associated with the at least one recording medium tray, such that the at least one slotted member, the imaging device chassis, and the

cable operate to secure the at least one recording medium tray in the imaging device chassis.

5 5. A system according to Claim 3, wherein the at least one slotted member is movable relative to its associated recording medium tray.

10 6. A method for securing an imaging device and recording medium trays associated with the imaging device, comprising:

 in a chassis having an imaging device and at least one tray, engaging a lock with the chassis;
 coupling the lock to a first end of a cable;
 passing the cable through a portion of the at least one recording medium tray; and
15 coupling the second end of the cable to a substantially immobile object to secure the imaging device and the at least one recording medium tray.

20 7. A method according to Claim 6, wherein the lock comprises a Kensington lock.

25 8. A method according to Claim 6, wherein passing the cable through a portion of each of the at least one recording medium trays comprises passing the cable through a slotted member configured to receive the cable therethrough.

30 9. A method according to Claim 8, wherein the chassis further comprises at least one opening configured to receive at least one slotted member associated with each of the at least one recording medium trays, such that the at least one slotted member, the chassis, and the cable operate to secure

the at least one recording medium tray in the imaging device chassis.

10. A method according to Claim 8, wherein the at least
5 one slotted member is movable relative to its associated recording medium tray.

11. A chassis comprising:
an imaging device; and
10 at least one recording medium tray;
wherein:
the chassis is configured to engage with a lock to secure the imaging device; and
the at least one recording medium tray is configured to
15 receive a cable coupled to the lock to secure the at least one recording medium tray when the lock is engaged with the chassis.

12. A chassis according to Claim 11, wherein the
20 chassis is configured to engage with a Kensington lock to secure the imaging device.

13. A chassis according to Claim 11, wherein the at least one recording medium tray includes a slotted member
25 configured to receive the cable therethrough to secure the at least one tray in the chassis when the lock is engaged with the chassis.

14. A chassis according to Claim 13, wherein the
30 chassis further comprises at least one opening configured to receive at least one slotted member associated with the at least one recording medium tray, such that the at least one

slotted member, the chassis, and the cable operate to secure the at least one recording medium tray in the chassis.

15. A chassis according to Claim 13, wherein the at
5 least one slotted member is movable relative to its associated recording medium tray.

16. A method for securing multiple items of equipment, comprising:

10 engaging a first item of equipment to a lock;
coupling the lock to a first end of a cable;
passing the cable through a portion of at least one second item of equipment; and

coupling the second end of the cable to a substantially
15 immobile object to secure the first item of equipment and the at least one second item of equipment.

17. A method according to Claim 16, the lock comprising a Kensington lock.

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18. A method according to Claim 16, wherein passing the cable through a portion of the at least one second item of equipment comprises passing the cable through a slotted member configured to receive the cable therethrough.

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19. A method according to Claim 18, wherein the at least one slotted member is movable relative to its associated second item of equipment.

20. A system for securing multiple items of equipment, comprising:

a lock configured to engage with a first item of equipment; and

5 a cable having a first end and a second end, the first end coupled to the lock, the cable configured to pass through at least one second item of equipment, and the second end configured to couple to a substantially immobile object to secure the first item of equipment at the at least one second
10 item of equipment.

21. A system according to Claim 20, the lock comprising a Kensington lock.

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