[0006] However, unlike the returning process, the currently implemented check-out process for checking tools out from the toolboxes relies on user's familiarity with the tools and the storage locations of the tools within the drawers. That is, if the user is not familiar with the tools and the tool storage location, more time is spent searching for the tool and there is a higher risk of the user checking out incorrect tools.

[0007] Accordingly, there is a need for an improved system that prevents the users from checking out incorrect tools while reducing the time spent for checking the tools out of the toolboxes.

Summary

[0007a] In a first aspect, the present disclosure provides an inventory control system comprising: an object storage device including a plurality of compartments, each compartment including a plurality of storage locations for storing objects; a display device configured to display information about the object storage device; and one or more processors configured to: establish a description database of objects configured for storage in the inventory control system; retrieve object keywords corresponding to objects stored in the plurality of storage locations of one of the plurality of compartments; generate a text block based on the retrieved object keywords; and display, on the display device, a representation of the plurality of compartments of the object storage device with the text block applied to the one of the plurality of compartments. ; and identify a most frequently used object of the one of the plurality of compartments based on the description database, wherein the text block is generated to include a keyword corresponding to the most frequently used object.

[0007b] In a second aspect, the present disclosure provides a method comprising: storing objects in an object storage device including a plurality of compartments, each compartment including a plurality of storage locations for storing objects; storing a description database of objects configured for storage in the inventory control system; retrieving object keywords corresponding to objects stored in the plurality of storage locations of one of the plurality of compartments; generating a text block based on the retrieved object keywords; receiving user input, at the object storage device, that corresponds to a request for access to an object stored in the one of the plurality of compartments; displaying, on a display device, a representation of the plurality of

compartments of the object storage device with the text block applied to the one of the plurality of compartments; and identifying a most frequently used object of the one of the plurality of compartments based on the description database, wherein the text block is generated to include a keyword corresponding to the most frequently used object.

Brief Description of Drawings

[0007b] Figure 1 illustrates an exemplary automated tool control (ATC) system according to example aspects of the subject technology.

[0007c] Figure 2 illustrates an exemplary automated tool control system according to example aspects of the subject technology.

[0007d] Figures 3A and 3B illustrate various exemplary tool control storage devices.

[0007e] Figure 4A shows a detailed view of one drawer of the tool control storage device 106 in an open position.

[0007f] Figure 4B shows a perspective view of an imaging subsystem in the tool control storage device 106 according to an embodiment.

[0007g] Figures 5A–5B illustrate exemplary graphical user interfaces (GUI) for the currently implemented tool check-out process.

[0007h] Figures 6A–6C illustrate exemplary GUI for the currently implemented tool check-out process.

[0007i] Figure 7 illustrates an exemplary GUI for the tool check-out process according to the subject technology.

[0007j] Figure 8 conceptually illustrates an exemplary electronic system with which some implementations of the subject technology can be implemented.

Description

[0008] In the following detailed description, numerous specific details are set forth by way of examples in order to provide a thorough understanding of the relevant teachings. However, it should be apparent to those skilled in the art that the present teachings may be

[0009] practiced without such details. In other instances, well known methods, procedures, components, and/or circuitry have been described at a relatively high-level, without detail, in order to avoid unnecessarily obscuring aspects of the present teachings.

[0010] To address the issues described in the Background, automated tool control systems have been developed which visually assist users in checking tools out from toolboxes.

[0011] Reference now is made in detail to the examples illustrated in the accompanying drawings and discussed below.

[0012] FIG. 1 illustrates an exemplary automated tool control (ATC) system 100 according to example aspects of the subject technology. The ATC system 100 includes a computing device 102, a database 104, tool control storage devices 106A, 106B, and 106C (hereinafter collectively referred to as "tool control storage devices 106"), and a network 108. In some aspects, the ATC system 100 can have more or fewer computing devices (e.g., 102), databases (e.g., 104), and/or tool control storage devices (e.g., 106A, 106B, and 106C) than those shown in FIG. 1.

[0013] The computing device 102 can represent various forms of processing devices that have a processor, a memory, and communications capability. The processor may execute computer instructions stored in memory. The computing device 102 is configured to communicate with the database 104 and the tool control storage devices 106 via the network 108. By way of non-limiting examples, processing devices can include a desktop

CLAIMS

What is Claimed Is:

1. An inventory control system comprising:

an object storage device including a plurality of compartments, each compartment including a plurality of storage locations for storing objects;

a display device configured to display information about the object storage device; and

one or more processors configured to:

establish a description database of objects configured for storage in the inventory control system;

retrieve object keywords corresponding to objects stored in the plurality of storage locations of one of the plurality of compartments;

generate a text block based on the retrieved object keywords; and

display, on the display device, a representation of the plurality of compartments of the object storage device with the text block applied to the one of the plurality of compartments; and

identify a most frequently used object of the one or the plurality of compartments based on the description database, wherein the text block is generated to include a keyword corresponding to the most frequently used object.

2. The inventory control system of claim 1, wherein the plurality of compartments are a plurality of drawers.

3. The inventory control system of claim 1, wherein the display, on the display device, of the representation of the plurality of compartments of the object storage device reflects relative locations and sizes of the respective compartments.

4. The inventory control system of claim 1, wherein the text block is applied to the one of the plurality of compartments by being overlaid on ~~the~~ a display ~~of~~ associated with the one of the plurality of compartments.

5. The inventory control system of claim 1, wherein the text block is generated based on user input to an administrative application.

6. The inventory control system of claim 1, wherein the text block is generated automatically based on a number of instances of a keyword in the retrieved object keywords.

7. The inventory control system of claim 1, wherein the display device is further configured to receive input from users to access stored objects.

8. The inventory control system of claim 1, wherein a number of the drawers to be displayed and a text box for entering text to be displayed in the text block overlaid upon corresponding drawer are displayed as a table.

~~9. The inventory control system of claim 1, wherein the processor is further configured to:~~

~~identify a most frequently used object of the one of the plurality of compartments based on the description database,~~

~~wherein the text block is generated to include a keyword corresponding to the most frequently used object.~~

~~10.~~9. A method, comprising:

storing objects in an object storage device including a plurality of compartments, each compartment including a plurality of storage locations for storing objects;

storing a description database of objects configured for storage in the inventory control system;

retrieving object keywords corresponding to objects stored in the plurality of storage locations of one of the plurality of compartments;

generating a text block based on the retrieved object keywords;

receiving user input, at the object storage device, that corresponds to a request for access to an object stored in the one of the plurality of compartments;

displaying, on a display device, a representation of the plurality of compartments of the object storage device with the text block applied to the one of the plurality of compartments; and

identifying a most frequently used object of the one of the plurality of compartments based on the description database, wherein the text block is generated to include a keyword corresponding to the most frequently used object.

~~11.~~10. The method of claim ~~10~~9, wherein the plurality of compartments are a plurality of drawers.

~~12.~~11. The method of claim ~~10~~9, wherein the display, on the display device, of the representation of the plurality of compartments of the object storage device reflects relative locations and sizes of the respective compartments.

~~13.~~12. The method of claim ~~10~~9, wherein the text block is applied to the one of the plurality of compartments by being overlaid on ~~the~~ a display ~~of~~ associated with the one of the plurality of compartments.

~~14.~~13. The method of claim ~~10~~9, wherein the text block is generated based on user input to an administrative application.

~~15.~~14. The method of claim ~~10~~9, wherein the text block is generated automatically based on a number of instances of a keyword in the retrieved object keywords.

~~16.~~15. The method of claim ~~10~~9, wherein a number of the drawers to be displayed and a text box for entering text to be displayed in the text block overlaid upon corresponding drawer are displayed as a table.

~~17. The method of claim 10, further comprising the step of:~~

~~identifying a most frequently used object of the one of the plurality of compartments based on the description database,~~

~~wherein the text block is generated to include a keyword corresponding to the most frequently used object.~~