

CLAIMS

1. An automated inventory control system comprising:
a storage device including a plurality of storage locations for storing objects;
an access control device configured to receive user credentials for access to the storage device;
a data storage configured to store configurable parameters associated with the storage device in a plurality of languages, and information corresponding to respective users of the storage device including an assigned language;
wherein, in response to the access control device receiving user credentials by the access control device, the storage device is configured to obtain configurable parameters from the data storage.
2. The automated inventory control system of claim 1, wherein the configurable parameters from the data storage are in the assigned language corresponding to the user.
3. The automated inventory control system of claim 1, wherein the configurable parameters include text files, audio files, and video files in a plurality of languages.
4. The automated inventory control system of claim 1, further comprising:
a display associated with the storage device,
wherein the configurable parameters includes display information comprising one or more of: work instructions, tool selection, safety guidelines, torque settings, system and tool status alerts, or warnings, and
wherein, after the access control device receives user credentials from the user, the storage device is configured to display the display information in the assigned language corresponding to the user.
5. The automated inventory control system of claim 1, wherein the access control device includes one or more of: an RFID proximity sensor, a magstripe card scanner, a barcode scanner, a camera, or a biometric sensor.

6. The automated inventory control system of claim 2, wherein the data storage stores text strings, audio files, and video files in a plurality of language directories each associated with a different language.

7. The automated inventory control system of claim 1,
wherein the information corresponding to respective users of the storage device further includes an assigned unit of measurement, and

in response to the access control device receiving user credentials from a user, the storage device is configured to obtain configurable parameters from the data storage in the assigned unit of measurement of the information corresponding to the user.

8. The automated inventory control system of claim 1,
wherein the storage device is further configured to obtain configurable parameters from the data storage based on one or more of: a work order associated with the user, one or more tools associated with the work order or with the user, or a second user associated with the user.

9. The automated inventory control system of claim 1, the storage device is one of a tool locker, a tool crib, or a secure storage device.

10. The automated inventory control system of claim 1, further comprising one or more sensing systems configured to detect presence or absence of the objects.

11. The automated inventory control system of claim 10, wherein the one or more sensing systems includes one or more of:

one or more cameras configured to obtain images of the plurality of storage locations,
one or more RF sensors configured to detect RFID tags,
one or more electrical connections configured to connect to respective objects,
one or more scales configured to detect weights of respective objects,
an array of contact sensors configured to detect a shape of an object,
one or more ultrasonic sensors, each comprising an emitter configured to emit sound waves and a detector configured to detect sound waves, or

one or more magnetic inductive sensors configured to detect metallic objects.

12. The automated inventory control system of claim 1, further comprising:
one or more network connections configured to connect the data storage to the storage device and one or more other storage devices,
wherein the data storage is physically remote from one or more of the storage device and the one or more other storage devices, and
wherein the data storage is configured to transmit the configurable parameters in the assigned language corresponding to the user to each of the storage device and the one or more other storage devices.

13. A method for an automated inventory control system, comprising the steps of:
storing an object in a storage location of a storage device;
assigning a language, of a plurality of languages, to a user of the storage device;
storing, in a data storage, configurable parameters associated with the storage device in a plurality of languages, and information corresponding to respective users of the storage device including an assigned language;
receiving, with an access control device, user credentials for access to the storage device;
in response to receiving user credentials of the user, obtaining configurable parameters from the data storage.

14. The method of claim 13, wherein the configurable parameters from the data storage are in the assigned language corresponding to the user.

15. The method of claim 13, further comprising the step of:
displaying, on a display associated with the storage device, display information in the assigned language corresponding to the user,
wherein the display information comprises one or more of: work instructions, tool selection, safety guidelines, torque settings, system and tool status alerts, or warnings.

16. The method of claim 13, further comprising the step of:
receiving, at the storage device, information reflecting one or more of: a work order associated with the user, one or more tools associated with the work order or with the user, or a second user associated with the user, and
obtaining configurable parameters from the data storage based on received information.

17. A non-transitory computer-readable medium storing executable instructions for carrying out a process comprising the steps of:
associating a language, of a plurality of languages, to a user of a storage device;
storing, to a data storage, configurable parameters associated with the storage device in a plurality of languages, and information corresponding to respective users of the storage device including an assigned language;
receiving, from an access control device, user credentials for access to the storage device;
in response to receiving user credentials of the user, obtaining configurable parameters from the data storage.

18. The non-transitory computer-readable medium of claim 17, wherein the configurable parameters from the data storage are in the assigned language corresponding to the user.

19. The non-transitory computer-readable medium of claim 17, the process further comprising the step of:
in response to receiving user credentials of the user, configuring the storage device to display text strings, audio files, and video files, stored in the storage device, according to a language directory associated with the assigned language of the user.

20. The non-transitory computer-readable medium of claim 17, the process further comprising the steps of:
associating a unit of measurement to a user of a storage device;

in response to receiving user credentials of the user, configuring the storage device to display values according the unit of measurement associated with the user.