Claims

1. A classified lock storage system for container twist-locks, the classified lock storage system configured to store a plurality of classified twist-locks in an organised and traceable manner, the classified lock storage system comprising:
    a classified lock store having a capacity to store the plurality of classified twist-locks, wherein the classified lock store comprises a plurality of storage locations each of which configured to temporarily store one classified twist-lock from the plurality of classified twist-locks;
    one or more storage input stations through which twist-locks can be put into the classified lock storage system;
    one or more storage output stations through which twist-locks can be removed from the classified lock storage system; and
    a classified lock transportation system usable to move twist-locks around the classified lock storage system.

2. The classified lock storage system of claim 1, wherein the classified lock storage system is configured to maintain an inventory of stored classified twist-locks according to the classification of twist-lock stored in each storage location.

3. The classified lock storage system of claim 1, wherein the classified lock storage system is configured to maintain a record of the type and/or model of twist-lock stored in a particular storage location.

4. The classified lock storage system of claim 1, classified lock transportation system is configured to, in use, receive classified twist-locks from the one or more storage input stations and deliver the classified twist-locks to the classified lock store for storage in one of the storage locations and/or is configured to, in use, retrieve classified twist-locks from the classified lock store and to deposit the classified twist-locks at the one or more storage output stations.

5. The classified lock storage system of claim 4, wherein classified twist-locks are receivable at one of the one or more storage input stations from a corresponding lock classification system and/or at one of the one or more storage input stations from a container pinning system.

6. A container lock management system comprising:
    one or more container pinning systems; and
    the classified lock storage system according to claim 1.

7. The container lock management system of claim 6, wherein the container lock management system comprises a lock classification system.

8. The container lock management system of claim 6, wherein the container lock management system comprises one or more universal lock carriers.

9. A method for managing a twist-lock in a classified lock storage system, the method comprising:
    retrieving, from an input station, a universal lock carrier loaded with a classified twist-lock;
    transporting the universal lock carrier to a classified lock store;
    identifying a free storage location in the classified lock store and assigning the storage location to the universal lock carrier; and
    placing the universal lock carrier in the storage location.

10. The method of claim 9, wherein retrieving the universal lock carrier loaded with the classified twist-lock comprises retrieving the universal lock carrier from a container pinning system or a lock classification system.

11. The method of claim 9, wherein the method comprises generating data representing an association between the universal lock carrier and a classification of the twist-lock, wherein the data is generated based on, or from, data representing an association between the classification and the twist-lock loaded on the universal lock carrier.

12. The method of claim 11, wherein the data is generated based on a unique identifier linked with the universal lock carrier.

13. A method for managing a twist-lock in a classified lock storage system, the method comprising:
    retrieving, using data representing an association between a storage location and a universal lock carrier placed therein and data representing an association

between the universal lock carrier and a classification of a twist-lock, the universal lock carrier from the storage location;

transporting the universal lock carrier to an output station; and

depositing the twist-lock loaded on the universal lock carrier at the output station.

14. The method of claim 13, wherein retrieving the universal lock carrier is in response to a request for one or more twist-locks having the classification of the twist-lock.

15. The method of claim 13, wherein depositing the twist-lock at the output station may comprises delivering the twist-lock to a container pinning system for use in pinning operations.