

WHAT IS CLAIMED IS:

1. A storage device for medical products comprises
a cabinet,
a drawer assembly positioned in the cabinet, the drawer assembly including a plurality of storage spaces,
a plurality of storage containers, each storage container associated with one of the storage spaces,
an actuation assembly including an array of actuators, each of the actuators of the array being associated with a respective storage container, each of the actuators being independently actuable to secure or release the respective storage container with which the respective actuator is associated relative to the storage space, and
a manual release mechanism actuable by a user to over-ride the actuation assembly and independently release the storage containers from the storage spaces.
2. The storage device of claim 1, wherein the storage space includes an arm movable between a first position in which the arm secures the storage container and a second position in which the arm releases the storage container.
3. The storage device of claim 2, wherein the arm includes a hook that engages the storage container when the arm secures the storage container and disengages the storage container when the arm releases the respective storage container.
4. The storage device of claim 3, wherein the actuator of the actuation assembly is operable to move a respective arm between the first and second positions.
5. The storage device of claim 4, wherein the storage device further includes a detector to detect the position of the arm.
6. The storage device of claim 5, wherein each actuator has an associated sensor for detecting the position of an arm adjacent the respective actuator.
7. The storage device of claim 6, wherein each actuator comprises a solenoid actuated plunger that engages the arm when the solenoid is energized to thereby move the arm between the first and second positions.

8. The storage device of claim 7, wherein the control system compares the state of the solenoid to the signal from the detector to determine if the arm is properly positioned.

9. The storage device of claim 8, wherein the arm is formed to include a push rod which acts on the storage container as the arm is moved to the second position to cause the storage container to be moved in the storage space such that a portion of the storage container extends outwardly from the storage space.

10. The storage device of claim 9, wherein the storage container is operable as a light pipe and the actuation assembly is operable to illuminate the storage container when the storage container is released from the storage space.

11. The storage device of claim 10, wherein the release mechanism includes a security device to prevent the release mechanism from being actuated.

12. The storage device of claim 11, wherein the security device is a lock that is only moveable by operation of a key.

13. The storage device of claim 1, wherein the storage container conducts light and the actuation assembly is operable to illuminate the storage container when the storage container is released from the storage space.

14. The storage device of claim 13, wherein the release mechanism includes a security device to prevent the release mechanism from being actuated.

15. A storage device for medical products comprises
a control system,
a cabinet,
a drawer assembly positioned in the cabinet, the drawer assembly including a plurality of storage spaces,
a plurality of storage containers, each storage container associated with one of the storage spaces,
an actuation assembly including an array of actuators, each of the actuators of

the array being associated with a respective storage container, each of the actuators being independently actuable to secure or release the respective storage container with which the respective actuator is associated relative to the storage space, and

a manual release mechanism actuable by a user to over-ride the actuation assembly and independently release the storage containers from the storage spaces.

16. The storage device of claim 15, wherein the drawer assembly is removable from the cabinet.

17. The storage device of claim 16, wherein the drawer assembly is secured to the cabinet by an electrically actuable actuator.

18. The storage device of claim 17, wherein the manual release mechanism is secured to the drawer assembly, the manual release mechanism including a user interface that is manually operable to move the release mechanism to release the storage containers.

19. The storage device of claim 18, where movement of the user interface is transferred to cause longitudinal movement of a rod along a longitudinal axis of the rod.

20. The storage device of claim 19, wherein longitudinal movement of the rod is transferred to a link to cause rotational movement of a shaft about the longitudinal axis of the shaft.

21. The storage device of claim 20, wherein rotational movement of the shaft cause a link to engage a portion of the actuation assembly to cause the storage containers to be released independently of the actuators.

22. The storage device of claim 21, wherein the storage containers are configured to permit air to flow through the container, without permitting a user to access the contents of the storage container.

23. The storage device of claim 22, wherein the storage container includes a guard that comprises a number of vanes, the vanes spaced apart to allow air to flow through the guard and into a storage space of the storage container.

24. The storage device of claim 23, wherein the storage container includes a lower support surface, the lower support surface including at least one fenestration to permit air to flow through the lower support surface and into the storage space.

25. The storage device of claim 15, wherein the storage containers are configured to permit air to flow through the container, without permitting a user to access the contents of the storage container.

26. The storage device of claim 25, wherein the storage container includes a guard that comprises a number of vanes, the vanes spaced apart to allow air to flow through the guard and into a storage space of the storage container.

27. The storage device of claim 26, wherein the storage container includes a lower support surface, the lower support surface including at least one fenestration to permit air to flow through the lower support surface and into the storage space.

28. The storage device of claim 15, wherein the storage container includes a guard that comprises a number of vanes, the vanes spaced apart to allow air to flow through the guard and into a storage space of the storage container.

29. The storage device of claim 15, wherein the storage container includes a lower support surface, the lower support surface including at least one fenestration to permit air to flow through the lower support surface and into the storage space.

30. The storage device of claim 15, wherein the control system is operable to monitor the storage conditions of an inventory item stored in the device and to determine if the inventory has been compromised.

31. The storage device of claim 30, wherein the storage device includes sensors to monitor environmental conditions and the control system utilizes sensor data to determine if the inventory has been compromised.

32. The storage device of claims 30-31, wherein the control system monitors to determine if a particular inventory item has been absent from a storage location to determine if a particular inventory item has been compromised.

33. The storage device of claims 30-31, wherein the control system monitors to determine if a particular inventory item has been absent from a storage location to determine if a particular inventory item has been compromised, and wherein if an inventory item has been compromised, the control system may change the status of the stored inventory to a quarantine status.

34. The storage device of claim 30-31, wherein the control system monitors to determine if a particular inventory item has been absent from a storage location to determine if a particular inventory item has been compromised, and wherein if an inventory item has been compromised, the control system may change the status of the stored inventory to a quarantine status, and wherein the control system is operable to report the quarantine status to an appropriate supervisory authority.

35. The storage device of any of claims 1-31, wherein the storage device is operable to illuminate a storage container in a particular color that corresponds to the type of inventory stored in the storage container.

36. A storage device for medical products comprises
a cabinet,
a drawer assembly positioned in the cabinet, the drawer assembly including a plurality of storage spaces,
a plurality of storage containers, each storage container associated with one of the storage spaces,
an actuation assembly including an array of actuators, each of the actuators of the array being associated with a respective storage container, each of the actuators being independently actuatable to secure or release the respective storage container with which the respective actuator is associated relative to the storage space, and
a manual release mechanism actuatable by a user to over-ride the actuation assembly and independently release the storage containers from the storage spaces.

37. The storage device of claim 36, wherein the storage device comprises a plurality of drawer assemblies, each drawer assembly including a plurality of storage spaces, each drawer further comprising a separate manual release mechanism to release only the storage containers or the respective drawer.

38. The storage device of claim 37, wherein each manual release mechanism is spring biased to a position that prevents the storage containers of the drawer from being manually released.

39. The storage device of claim 38, wherein the manual release may be manual moved to a released position and locked in the released position.

40. The storage device of claim 39, wherein each manual release includes a handle that is normally inaccessible to a user.

41. The storage device of claim 40, wherein the handles are positioned behind a cover that is secured to the cabinet by a lock that requires a security interface to be actuated to release the lock.

42. The storage device of claim 35, wherein the manual release mechanism is spring biased to a position that prevents the storage containers of the drawer from being manually released.

43. The storage device of claim 35, wherein the manual release may be manual moved to a released position and locked in the released position.

44. The storage device of claim 35, wherein each manual release includes a handle that is normally inaccessible to a user.

45. The storage device of claim 44, wherein the handle is positioned behind a cover that is secured to the cabinet by a lock that requires a security interface to be actuated to release the lock.

46. The storage device of claim 45, wherein the cabinet includes a catch and the lock includes an actuator that moves into engagement with the catch when the lock is moved to a locked position.

47. The storage device of claim 35, wherein the cabinet includes a diversion resistant feature that is configured to prevent illicit access to an actuator to circumvent the

actuation assembly.

48. The storage device of claim 47, wherein the diversion resistant feature is integrated into the storage container.

49. The storage device of claim 48, wherein the diversion resistant feature is barrier formed on a portion of the storage container.

50. The storage device of claim 49, wherein the storage container includes a retainer configured to be engaged by latch that is moved by an actuator to secure the storage container, the barrier comprising a wing formed adjacent the retainer.

51. The storage device of claim 49, wherein the storage container includes a retainer configured to be engaged by latch that is moved by an actuator to secure the storage container, the barrier comprising a plurality of ribs formed on the bottom of the storage container.

52. The storage device of claim 49, wherein the storage container includes a retainer configured to be engaged by latch that is moved by an actuator to secure the storage container, the barrier comprising a latch block formed on the storage container.

53. The storage device of claim 49, wherein the storage container includes a retainer configured to be engaged by latch that is moved by an actuator to secure the storage container, the barrier comprising a rib formed on a cap of the container.