attended. A user may access the store room, have to door inadvertently close behind them, and be locked in if the lock means is in the active condition. This is considered generally as undesirable.

[0006] It is also generally undesirable for lock suppliers and installers to hold any more stock than they need to operate their business profitably. They generally prefer to stock locks that are suitable for multiple environments. Providing adjustability in the function of the lock assembly can be difficult if there is limited space within the housing. This is particularly the case for short backset mortice locks as the space between the front wall and rear wall is generally less than 50mm.

[0007] A reference herein to a patent document or other matter which is given as prior art is not to be taken as an admission that that document or matter was, in Australia, known or that the information it contains was part of the common general knowledge as at the priority date of any of the claims.

SUMMARY OF INVENTION

[0008] According to one aspect of this invention there is provided a short backset mortice lock assembly for use with a door including a housing having a front wall and a rear wall with the front wall spaced from the rear wall by less than 50mm, a latchbolt including a head that is movable relative to the housing between an extended position whereby the head extends out a from the front wall and a retracted position where the head is substantially retracted within the housing, an actuator that is operable to move the latchbolt from the extended position to the retracted position, a lock means for controlling operation of the actuator which is adjustable between an active condition whereby the actuator is rendered inoperable to an inactive condition whereby the actuator is rendered operable, the lock means including a slide detent that slides relative to the housing between a first position and a second position when the lock means adjusts between the inactive condition and the active condition, a selector means that is adjustable between an operable condition and an inoperable condition at the front wall, when the selector means is operable movement of the latchbolt to the retracted position prevents the lock means remaining in the active condition, the selector means being associated with the slide detent so that the selector means includes a selector member that engages the slide detent when the selector means is

operable and the latchbolt is moved to the retracted position and the selector member moves in substantially the same direction as the latchbolt moves when the selector means adjusts between the operable condition and the inoperable condition.

[0009] The selector member may interact with the slide detent in any suitable manner and the slide detent may include a lug which the selector member engages to move the slide detent between the second position and the first position and the selector member does not engage the lug when the selector means is inoperable. It is further preferred that the selector means includes a selector axis about which the selector member pivots when the latchbolt moves from the extended position to the retracted position. The selector axis is preferably substantially perpendicular to the direction of movement of the latchbolt. It is further preferred that the selector axis moves relative to the housing when the selector means adjusts between the operable condition and the inoperable condition.

[00010] It is preferred that the selector means includes a switch that engages the selector member, the switch that is adjustable relative to the housing when adjusting the selector means between the operable condition and the inoperable condition. It is further preferred that the selector means includes a switch biasing means so as to render the switch bi-stable, whereby the selector means is urged to adopt either the operable condition or inoperable condition.

[00011] It is preferred that the housing includes a side wall with the switch being substantially aligned with said side wall. The housing preferably includes a base and a cover attached to the base, said side wall forming part of the base. The housing preferably includes a base plate and the side wall of the base includes an aperture to accommodate the switch, the base plate being attached to the base so as to occlude the aperture in the side wall of the base. The base is preferably formed with a rebate to accommodate the base plate. The housing preferably includes a cover plate which is attached to the cover, the cover being formed with a rebate to accommodate the cover plate. It is preferred that the rebate of the cover and base occupy no less than 30% of an outer surface of the cover and base respectively. It is preferred that the base and cover are formed from a cast zinc alloy, and the base plate and cover plate are formed from stainless steel. The use of stainless steel provides greater resistance to attack on the hosing from drilling than with the cast zinc alloy.

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A short backset mortice lock assembly for use with a door including a housing having a front wall and a rear wall with the front wall spaced from the rear wall by less than 50mm, a latchbolt including a head that is movable relative to the housing between an extended position whereby the head extends out from the front wall and a retracted position where the head is substantially retracted within the housing, an actuator that is operable to move the latchbolt from the extended position to the retracted position, a lock means for controlling operation of the actuator which is adjustable between an active condition whereby the actuator is rendered inoperable to an inactive condition whereby the actuator is rendered operable, the lock means including a slide detent that slides relative to the housing between a first position and a second position when the lock means adjusts between the inactive condition and the active condition, a selector means that is adjustable between an operable condition and an inoperable condition at the front wall, when the selector means is operable movement of the latchbolt to the retracted position prevents the lock means remaining in the active condition, the selector means being associated with the slide detent, so that the selector means includes a selector member that engages the slide detent when the selector means is operable and the latchbolt is moved to the retracted position and the selector member moves in substantially the same direction as the latchbolt moves when the selector means adjusts between the operable condition and the inoperable condition.

2. A short backset mortice lock assembly according to claim 1 wherein the slide detent includes a lug which the selector member engages to move the slide detent between the second position and the first position and the selector member does not engage the lug when the selector means is inoperable.

3. A short backset mortice lock assembly according to claim 1 or 2 wherein the

selector means includes a selector axis about which the selector member pivots when the latchbolt moves from the extended position to the retracted position.

4. A short backset mortice lock assembly according to claim 3 wherein the selector axis is substantially perpendicular to the direction of movement of the latchbolt.

5. A short backset mortice lock assembly according to claim 3 or 4, wherein the selector axis moves relative to the housing when the selector means adjusts between the operable condition and the inoperable condition.

6. A short backset mortice lock assembly according to any one of the preceding claims wherein the selector means includes a switch that engages the selector member, the switch is adjustable relative to the housing when adjusting the selector means between the operable condition and the inoperable condition.

7. A short backset mortice lock assembly according to claim 6 wherein the selector means includes a switch biasing means so as to render the switch bi-stable, whereby the selector means is urged to adopt either the operable condition or inoperable condition.

8. A short backset mortice lock assembly according to claim 6 or 7 wherein the housing includes a side wall with the switch being substantially aligned with said side wall.

9. A short backset mortice lock assembly according to claim 8 wherein the housing includes a base and a cover attached to the base, said side wall forming part of the base.

10. A short backset mortice lock assembly according to claim 9 wherein the housing includes a base plate and the side wall of the base includes an aperture to accommodate the switch, the base plate being attached to the base so as to occlude the aperture in the side wall of the base.

11. A short backset mortice lock assembly according to claim 10 wherein the base is formed with a rebate to accommodate the base plate.

12. A short backset mortice lock assembly according to any one of claims 9 to 11 wherein the housing includes a cover plate which is attached to the cover, the cover being formed with a rebate to accommodate the cover plate.

13. A short backset mortice lock assembly according to claim 12 wherein the rebate of the cover and base occupy no less than 30% of an outer surface of the cover and base respectively.

14. A short backset mortice lock assembly according to claim 13 wherein base and cover are formed from a cast zinc alloy, and the base plate and cover plate are formed from stainless steel.

15. A short backset mortice lock assembly according to any one of claims 9 to 12 wherein the front wall forms part of the base and includes at least one aperture through which the switch can be adjusted.

16. A short backset mortice lock assembly according to claim 15 wherein said at least one aperture includes a first aperture and a second aperture whereby depressing the switch through the first aperture renders the selector means operable, and depressing the switch through the second aperture renders the selector means inoperable.

17. A short backset mortice lock assembly according to any one of claims 6 to 16 including a face plate that attaches to the front wall of the housing hindering access to the switch.

18. A short backset mortice lock assembly according to any one of the preceding claims wherein the latchbolt includes a body to which the head is attached, the body engaging with the selector means when adjusting between the operative condition and the inoperative condition.

19. A short backset mortice lock assembly according to claim 18 wherein the body includes a surface over which the selector member slides when the latchbolt moves from the extended position to the retracted position.

20. A short backset mortice lock assembly according to any one of the preceding claims wherein the rear wall includes a pair of recesses, the slide detent having a sprung detent which locates in either one of said recess when the slide detent adopts the first position or second position.

21. A lock set for use with a door including a short backset mortice lock assembly according to any one of the preceding claims, outer door furniture and inner door furniture for installation on an inner side of the door and an outer side of the door which interacts with the actuator when installed, and at least one cylinder lock assembly which interacts with the lock means.