canister of compressed air or the battery pack can be used to open the damper. Battery or compressed air bottle is an expensive and complex. An advantage of the battery or the compressed air bottle is that the damper cannot remain in the open position, if the fuse of the damper has been triggered.

SUMMARY

[0004] This summary is provided to introduce a selection of concepts in a simplified form that are further described below in the detailed description. This summary is not intended to identify key features or essential features of the
claimed subject matter, nor is it intended to be used to limit the scope of the claimed subject matter.

[0005] In accordance with a first aspect of the embodiment, a hvac damper control is described. In an example, an apparatus comprises a hvac damper having an open position and a closed position; a manual actuator, wherein in a manual use of the manual actuator, the manual actuator is configured to open the hvac damper to the open position and close the damper to the closed position. The apparatus comprises an actuator coupled to the manual actuator, wherein the actuator is configured to open and close the hvac damper by being connected to the manual actuator. When the actuator is connected to propulsion, the actuator is configured to drive itself to the open position, wherein the actuator is configured to lock to the manual actuator.

[0005a] In accordance with a second aspect of the embodiment, a method is described. The method comprises opening and closing a hvac damper to an open position and to a closed position, by an actuator coupled to a manual actuator, by connecting the actuator to the manual actuator. The method further comprises connecting the actuator to propulsion. The method further comprises driving, by the actuator, the actuator to the open position, wherein the actuator is configured to lock to the manual actuator.

[0006] In other examples, a method, a hvac damper, and a hvac system are discussed along with the features of the apparatus.

CLAIMS

1. An apparatus, comprising:
a hvac damper having an open position and a closed position;

a manual actuator, wherein in a manual use of the manual actuator, the manual actuator is configured to open the hvac damper to the open position and close the damper to the closed position,

an actuator coupled to the manual actuator, wherein the actuator is configured to open and close the hvac damper by being connected to the manual actuator;

when the actuator is connected to propulsion, the actuator is configured to drive itself to the open position, wherein the actuator is configured to lock to the manual actuator.

2. The apparatus of claim 1, wherein the actuator is configured to be activated by connecting the actuator to propulsion after a power of the propulsion has been down, and wherein the actuator is configured to drive itself to the open position without a user interaction.

3. The apparatus of any preceding claim, the manual use is configured to be switched off, when the actuator is configured to lock to the manual actuator.

4. The apparatus of any preceding claim, wherein the actuator comprises a motor configured to open and close the hvac damper.

5. The apparatus of any preceding claim, wherein the actuator includes a spring configured to return the actuator to the closed position without the propulsion.

6. The apparatus of any preceding claim, wherein the hvac damper includes at least one blade configured to close a ventilation duct in the closed position and open the ventilation duct in the open position.

7. The apparatus of any preceding claim, further including a lever of the actuator; or

further including a lever of the manual actuator.

8. The apparatus of claim 7, wherein the lever includes a coupling, such as a projection, configured to lock the lever of the actuator to the lever of the manual actuator.

9. The apparatus of claim 7, wherein the lever includes a coupling, such as a knob, configured to release the manual actuator from the actuator; or

wherein the coupling includes a pin configured to lock the lever of the manual actuator to the lever of the actuator; or

wherein the pin is powered by a spring, pneumatics, electricity, or hydraulic.

10. The apparatus of claim 7, wherein the levers are configured to be locked to each other for locking the actuator to the manual actuator.

11. The apparatus of any preceding claim, further including a shaft connecting the actuator to the lever; or

further including a shaft connecting the manual actuator to the at least one blade.

12. The apparatus of any preceding claim, further including a detector configured to detect whether the damper is in the open position or closed position; or

further including a controlled apparatus configured to control the actuator.

13. The hvac damper comprising the apparatus of claim 1.

14. A hvac system comprising the hvac damper of claim 13.

15. A method comprising:

opening and closing a hvac damper to an open position and to a closed position, by an actuator coupled to a manual actuator, by connecting the actuator to the manual actuator;

connecting the actuator to propulsion; and

driving, by the actuator, the actuator to the open position, wherein the actuator is configured to lock to the manual actuator.