7. The system of claim **1**, wherein:

the cover is configured to be disposed near a glazing area;

the active material component enables the cover to be deployed and retracted with a vehicle glazing area; and

the active material component further comprises at least one of (i) a grip configured to hold the cover to the glazing area, and the active material attached to the grip, wherein the active material, when activated, causes the grip to engage the cover and glazing area; and/or (ii) a pin configured to hold the cover to the glazing area, and the active material attached to the pin.

8. The system of claim **1**, wherein the active material is selected from the group consisting of shape memory alloys, electroactive polymers, ionic polymer metal composites, piezoelectric materials, shape memory polymers, active ceramics, baroplastics, magnetorheological materials, electrorheological fluids, composites of the foregoing active materials with non-active materials, and combinations comprising at least one of the foregoing active materials.

9. The system of claim **1**,

further comprising a scroll comprising the active material component; and

wherein the cover is flexible, configured as a barrier selected from the group consisting of security barrier, protective barrier, privacy barrier, sound barrier, thermal barrier, light barrier, fluid barrier, weather barrier, and combinations comprising at least one of the foregoing barriers; and

wherein the active material, when activated, deploys the cover from the scroll across at least a portion of the desired area.

10. The system of claim **9**, wherein the cover further comprises a bi-stable metal strip configured to provide structural integrity and rigidity when the cover is deployed, and to be flexible when the cover is in the scroll.

11. The system of claim **9**, further comprising a retention mechanism attached near an end of the cover, wherein the retention mechanism comprises rods configured to engage sides of an area to be covered, and a spring configured to hold the rods in the desired engagement as the cover deploys from the scroll.

12. The system of claim **9**, wherein the scroll comprises

a tube;

a first end and a second end, wherein the first end and/or the second end are configured to be rotationally attached to an object; and

a SMM spring and a second spring disposed within the tube and connected to the tube at one side and to the object at another side, wherein when the SMM spring is activated, the tube rotates and deploys the cover; and

wherein the cover is disposed around the tube.

13. The system of claim **12**, wherein the second spring is selected from the group consisting of a bias spring and a second SMM spring.

14. The system of claim **12**, wherein the scroll is disposed in a vehicle.

15. The system of claim **1**,

further comprising an active material actuator assembly comprising a shaft with an extension located concentric with a cylindrical housing, wherein a plurality of the active material components are connected to the extension; and

wherein the cover is in operational communication with the active material actuator assembly.

16. The cover system of claim **15**, wherein the active material components are configured for sequential activation.

17. The system of claim **1**, wherein the active material component is in operable communication with an input shaft, wherein the input shaft is in operable communication with an output shaft, and wherein the output shaft is configured to deploy and retract the cover.

18. The system of claim **1**, wherein the active material component is in operable communication with a flywheel, and wherein the active material component is configured to provide angular momentum to the flywheel to deploy the cover.

19. The system of claim **1**, further comprising a ratchet mechanism comprising the active material component, wherein the ratchet mechanism is configured to perform at least one action selected from the group consisting of lift a dead weight, stretch a linear spring, wind-up a torsional spring, and combinations comprising at least one of the foregoing actions; and wherein the ratchet mechanism is configured such that once an action is performed, the ratchet mechanism can be releasably latched, and wherein release of the latch allows full stroke in a single action to deploy the cover.

20. The system of claim **1**, wherein the cover is selected from the group consisting of sunshades, sound barrier, thermal barrier, fluid barrier, weather barrier, privacy partition, security partition, protective partition, as well as combinations comprising at least one of the foregoing covers.

21. The system of claim **1**, further comprising

a first element slidably engaged with a second element, wherein the first element and the second element are connected to a frame;

wherein the active material is connected to the first element and the second element such that activation of the active material creates relative motion between the first element and the second element.

22. The system of claim **1**, wherein the first element is a conduit and the second element is a rod located into an open end of the conduit.

23. The system of claim **1**, further comprising rods operably connected together and connected to the cover, wherein the active material is connected to the rods such that when activated, the active material causes the rods to move in a scissor motion.

24. The system of claim **1**, wherein the active material is selected from the group consisting of ER fluids and MR compositions, and, wherein, in an activated state, the active material is capable of maintaining the covers in a particular state of deployment.

25. The system of claim **1**, wherein the active material is selected from the group consisting of ER fluids and MR compositions, and, wherein, in an activated state, the active material is capable of controlling deployment of the cover.

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