Claims:

1. A prosthetic heart valve, comprising:

a frame comprising a plurality of strut members, and having an inflow end and an outflow end;

a leaflet structure situated at least partially within the frame; and

a covering disposed around an exterior of the frame, the covering comprising:

a cushioning layer;

a first strip member folded over an inflow circumferential edge portion of the cushioning layer to form a first protective portion; and

a second strip member folded over an outflow circumferential edge portion of the cushioning layer to form a second protective portion;

wherein the first strip member and the second strip member are spaced apart from each other along a longitudinal axis of the prosthetic heart valve; and

wherein the first strip member comprises a first circumferential edge portion on the outside of the frame and a second circumferential edge portion on the inside of the frame, and the first and second circumferential edge portions are sutured together through the frame.

2. The prosthetic heart valve of claim 1, wherein the cushioning layer forms an exterior surface of the covering.

3. The prosthetic heart valve of claim 1, wherein:

the cushioning layer comprises a first material; and

the first strip member comprises a second material different from the first material.

4. The prosthetic heart valve of claim 3, wherein the first material is a woven fabric, and the second material is a polymeric material or a tissue material.

5. The prosthetic heart valve of claim 4, wherein the woven fabric of the cushioning layer comprises texturized yarns that provide compressible volume to the woven fabric.

6. The prosthetic heart valve of claim 5, wherein the woven fabric of the cushioning layer is stretchable between a first configuration corresponding to a radially expanded

configuration of the prosthetic heart valve and a second configuration corresponding to a radially collapsed configuration of the prosthetic heart valve.

7. The prosthetic heart valve of claim 6, wherein a thickness of the woven fabric of the cushioning layer is greater when the prosthetic heart valve is in the expanded configuration than when the prosthetic heart valve is in the collapsed configuration.

8. The prosthetic heart valve of claim 4, wherein the first material of the cushioning layer comprises woven polyethylene terephthalate (PET) fabric, and the second material of the first strip member comprises expanded polytetrafluoroethylene (ePTFE).

9. The prosthetic heart valve of claim 1, wherein the first strip member extends around a circumference of the inflow end of the frame, and the second strip member extends around a circumference of the outflow end of the frame.

10. The prosthetic heart valve of claim 1, wherein the first strip member extends over inflow apices of the frame, and the second strip member extends over outflow apices of the frame.

11. The prosthetic heart valve of claim 1, wherein the first and second circumferential edge portions of the first strip member are sutured together through the cushioning layer to form the first protective portion.

12. The prosthetic heart valve of claim 11, wherein:

the prosthetic heart valve further comprises an inner skirt disposed within the frame; and the first strip member is sutured to the inner skirt.

13. The prosthetic heart valve of claim 1, wherein the second strip member comprises a first circumferential edge portion on the outside of the frame and a second circumferential edge portion on the inside of the frame, and the first circumferential edge portion of the second strip member is sutured to the second circumferential edge portion of the second strip member through the frame.

14. A prosthetic heart valve, comprising:

a frame comprising a plurality of strut members, and having an inflow end and an outflow end;

a leaflet structure situated at least partially within the frame; and

a covering disposed around an exterior of the frame, the covering comprising:

a cushioning layer comprising a first material, the cushioning layer forming an exterior surface of the covering; and

a first protective portion at the inflow end of the frame, the first protective portion comprising a second material different from the first material; and

a second protective portion at the outflow end of the frame, the second protective portion comprising the second material;

wherein the first protective portion comprises first and second circumferential edge portions that are sutured together through an inflow end portion of the cushioning layer, and the second protective portion is sutured to an outflow end portion of the cushioning layer.

15. The prosthetic heart valve of claim 14, wherein the cushioning layer comprises a woven fabric including texturized yarns that provide compressible volume to the woven fabric.

16. The prosthetic heart valve of claim 15, wherein the cushioning layer comprises polyethylene terephthalate (PET).

17. The prosthetic heart valve of claim 14, wherein the first protective portion comprises a first strip member comprising the second material, the first strip member being folded over an inflow circumferential edge portion of the cushioning layer to form the first protective portion.

18. The prosthetic heart valve of claim 17, wherein the second material comprises expanded polytetrafluoroethylene (ePTFE).

19. The prosthetic heart valve of claim 14, wherein the first protective portion and the second protective portion are spaced apart from each other along a longitudinal axis of the prosthetic heart valve.

20. A prosthetic heart valve, comprising:

a frame comprising a plurality of strut members, and having an inflow end and an outflow end;

a leaflet structure situated at least partially within the frame; and

a covering disposed around an exterior of the frame, the covering comprising:

a cushioning layer comprising a woven fabric;

a first strip member folded over an inflow circumferential edge portion of the cushioning layer to form a first protective portion, the first strip member comprising expanded polytetrafluoroethylene (ePTFE); and

a second strip member folded over an outflow circumferential edge portion of the cushioning layer to form a second protective portion, the second strip member comprising ePTFE;

wherein the first strip member and the second strip member are spaced apart from each other along a longitudinal axis of the prosthetic heart valve; and

wherein the first strip member comprises a first circumferential edge portion on the outside of the frame and a second circumferential edge portion on the inside of the frame, and the first and second circumferential edge portions are sutured together through the frame.