CLAIMS

What is claimed is:

1. A filter cartridge, comprising:

a housing including a first end, a second end opposite to the first end, an inlet disposed in the first end of the housing, and an outlet;

a filter member disposed within the housing, the filter member configured to filter liquid flowing through the housing from the inlet to the outlet, the filter member including a first axial end facing the first end of the housing and a second axial end facing the second end of the housing;

an endcap disposed between the first axial end of the filter member and the inlet in the housing, the endcap including:

an outer side facing towards the first end of the housing, and

a plurality of fins projecting from the outer side of the endcap, the plurality of fins each extending in a curved shape along the outer side of the endcap, and the plurality of fins configured to redirect the liquid flowing into the filter cartridge through the inlet in the housing.

2. The filter cartridge of claim 1, wherein the plurality of fins are configured to redirect the liquid flowing into the housing through the inlet to flow circumferentially and radially outward relative to a longitudinal axis of the filter member, and the plurality of fins configured to prevent the liquid from flowing in a direct radial outward direction along the endcap.

3. The filter cartridge of claim 2, wherein the plurality of fins are configured to redirect the liquid flowing into the housing through the inlet to flow radially outward and one of clockwise or counter-clockwise relative to the axis of the filter member.

4. The filter cartridge of claim 1, wherein one or more channels are formed between the plurality of fins, the inlet in the housing fluidly connected to the filter member via the channels.

5. The filter cartridge of claim 1, wherein the first axial end of the filter member is spaced apart from the housing by the endcap, and the outer side of the endcap is spaced apart from the housing by the fins.

6. The filter cartridge of claim 1, wherein the outer side of the endcap is shaped to taper towards the inlet of the housing.

7. The filter cartridge of claim 1, wherein the outer side of the endcap has a conical shape that tapers towards the inlet of the housing.

8. The filter cartridge of claim 1, wherein the inlet in the housing faces towards the outer side of the endcap, the inlet configured to direct the liquid to flow toward the outer side of the endcap.

9. The filter cartridge of claim 1, wherein the endcap has an inward side that abuts or is fused to the first axial end of the filter member, the inward side of the endcap being opposite to the outer side of the endcap.

10. The filter cartridge of claim 1, wherein the fins extend end-to-end along the outer side of the endcap.

11. The filter cartridge of claim 1, wherein radial openings are provided between ends of the fins, the liquid configured to be directed to flow out from between the first axial end of filter member and the first end of the housing through the radial openings.

12. The filter cartridge of claim 1, wherein the fins extend side-by-side along the outer side of the endcap.

13. The filter cartridge of claim 1, wherein the housing defines an interior volume, the filter member and the endcap being disposed in the interior volume of the housing.

14. An endcap for a filter member in a filter cartridge, the filter cartridge including a housing and the filter member disposed within the housing, the endcap comprising:

an inward side configured to abut against or be fused to a first axial end of the filter member;

an outer side configured to face towards the housing; and

a plurality of fins projecting from the outer side of the endcap, the plurality of fins each extending in a curved shape along the outer side of the endcap, the plurality of fins configured to redirect the liquid flowing into the filter cartridge through an inlet in the housing.

15. The endcap of claim 14, wherein the endcap is configured to space apart the first axial end of the filter member from the housing, and the plurality of fins configured to space apart the outer side of the endcap from the housing.

16. The endcap of claim 14, wherein the outer side is shaped to taper towards an inlet of the housing.

17. The endcap of claim 16, wherein the outer side has a conical shape that tapers towards the inlet of the housing.

18. The endcap of claim 14, wherein the fins extend end-to-end along the outer side of the endcap.

19. The endcap of claim 18, wherein radial openings are provided between ends of the fins, the liquid configured to be directed to flow radially outward from between the first axial end of filter and the first end of the housing through the radial openings.

20. The endcap of claim 14, wherein the fins extend side-by-side along the outer side of the endcap.