WHAT IS CLAIMED IS:

1. An electrode assembly for use in neuromodulation, the electrode assembly comprising:

a plastic segment coupleable to a strut and defining a U-shaped channel;

a plurality of electrodes longitudinally spaced along the segment and coupled to the segment over the U-shaped channel, wherein insulating material at least partially covers edges of the plurality of electrodes;

a plurality of conductors electrically connected to the plurality of electrodes, the plurality of conductors positioned in the U-shaped channel, wherein each of the plurality of conductors is coated with insulative material; and

an insulating sheet covering the plurality of conductors.

2. The electrode assembly of Claim 1, wherein the U-shaped channel has a depth configured to cover partially laterally cover the plurality of electrodes.

3. The electrode assembly of Claim 1 or 2, wherein each of the plurality of electrodes has a rectangular cross-section.

4. The electrode assembly of Claim 1 or 2, wherein each of the plurality of electrodes has a rounded cross-section.

5. The electrode assembly of any one of Claims 1 to 4, wherein the U-shaped channel has a depth between 0.005 inches (approx. 0.13 mm) and 0.02 inches (approx. 0.51 mm) and wherein the U-shaped channel has a width between 0.015 inches (approx. 0.38 mm) and 0.05 inches (approx. 1.3 mm).

6. An electrode assembly for use in neuromodulation, the electrode assembly comprising:

a segment comprising walls at least partially defining a U-shaped channel;

a plurality of electrodes coupled to the segment over the U-shaped channel; and

a plurality of conductors electrically connected to the plurality of electrodes, the plurality of conductors positioned in the U-shaped channel.

7. The electrode assembly of Claim 6, wherein each of the plurality of conductors is coated with insulative material.

8. The electrode assembly of Claim 6 or 7, further comprising an insulating sheet covering the plurality of conductors.

9. The electrode assembly of any one of Claims 6 to 8, wherein the U-shaped channel has a depth configured to cover partially laterally cover the plurality of electrodes.

10. The electrode assembly of any one of Claims 6 to 9, wherein each of the plurality of electrodes has a rectangular cross-section.

11. The electrode assembly of any one of Claims 6 to 9, wherein each of the plurality of electrodes has a rounded cross-section.

12. The electrode assembly of any one of Claims 6 to 11, wherein insulating material at least partially covers edges of the plurality of electrodes.

13. The electrode assembly of any one of Claims 6 to 12, wherein the segment comprises plastic.

14. The electrode assembly of any one of Claims 6 to 13, wherein the segment is molded.

15. The electrode assembly of any one of Claims 6 to 14, wherein each of the plurality of electrodes is longitudinally spaced along the segment.

16. The electrode assembly of any one of Claims 6 to 15, wherein each of the plurality of electrodes is circular.

17. The electrode assembly of any one of Claims 6 to 16, wherein the segment is coupleable to a strut.

18. The electrode assembly of Claim 17, wherein the strut comprises a wire of a self-expanding structure changeable between a collapsed state and an expanded state.

19. The electrode assembly of any one of Claims 6 to 18, wherein the U-shaped channel has a depth between 0.005 inches (approx. 0.13 mm) and 0.02 inches (approx. 0.51 mm).

20. The electrode assembly of any one of Claims 6 to 19, wherein the U-shaped channel has a width between 0.015 inches (approx. 0.38 mm) and 0.05 inches (approx. 1.3 mm).