WHAT IS CLAIMED IS:

1. A spring, comprising:
a stranded wire formed from a plurality of strands of wire and configured as a canted coil spring having a plurality of coils that collectively define a toroid, the stranded wire having axial ends that are joined together such that the stranded wire is continuous.

2. A spring according to Claim 1, wherein the plurality of strands comprises seven strands of wire.

3. A spring according to Claim 1, wherein the plurality of strands comprises 4, 5, 9, 11, 13, 15 or 17 strands of wire.

4. A spring according to Claim 1, wherein the stranded wire provides about 200 to 20,000 Lbf/in/in^2.

5. A spring according to Claim 1, wherein the stranded wire provides a force variance of over 7000% over an operational range of the spring.

6. A spring according to Claim 5, wherein the force variance is about 7800% over the operational range of the spring.

7. A spring according to Claim 1, wherein at least one of the plurality strands is formed at a diameter that differs from a diameter of other ones of the plurality of strands.

8. A spring according to Claim 1, wherein the stranded wire has a central strand with a relatively smaller diameter, and the central strand is surrounded by surrounding strands having a relatively larger diameter.

9. A spring according to Claim 8, wherein the relatively smaller diameter is 0.006 inches, and the relatively larger diameter is 0.007 inches.

10. A spring according to Claim 1, wherein the stranded wire has a central strand with a relatively larger diameter, and the central strand is surrounded by surrounding strands having a relatively smaller diameter.

11. A spring according to Claim 10, wherein the relatively smaller diameter is 0.003 or 0.004 inches, and the relatively larger diameter is 0.005 inches.

12. A spring according to Claim 1, wherein at least one of the plurality of strands is formed from a first material that differs from a second material used to form other ones of the plurality of strands.

13. A spring according to Claim 1, wherein the stranded wire has a central strand formed from stainless steel, and the central strand is surrounded by surrounding strands formed from silver.

14. A spring according to Claim 1, wherein at least one of the strands is formed from a superconductive material.

15. A spring according to Claim 1, wherein the stranded wire has only two axial ends that are welded together such that the stranded wire is continuous, and the plurality of coils are unrestrained relative to each other such that a periodicity of the plurality of coils is not limited or impeded by axial connection or coupling of the plurality of coils.

16. An assembly, comprising:
a first connector having a recess formed therein;
a second connector having a second recess formed therein;
a stranded wire located in the recess and second recess between the first and second connectors, the stranded wire having a plurality of strands of wire and configured as a canted coil spring having a plurality of coils that collectively define a toroid, the stranded wire having axial ends that are joined together such that the stranded wire is continuous.

17. An assembly according to Claim 16, wherein the plurality of strands comprises seven strands of wire.

18. An assembly according to Claim 16, wherein the plurality of strands comprises 4, 5, 9, 11, 13, 15 or 17 strands of wire.

19. An assembly according to Claim 16, wherein the stranded wire provides about 200 to 20,000 $Lbf/in/in^2$.

20. An assembly according to Claim 16, wherein the stranded wire provides a force variance of over 7000% over an operational range of the spring.

21. An assembly according to Claim 20, wherein the force variance is about 7800% over the operational range of the spring.

22. An assembly according to Claim 16, wherein at least one of the plurality strands is formed at a diameter that differs from a diameter of other ones of the plurality of strands.

23. An assembly according to Claim 16, wherein the stranded wire has a central strand with a relatively smaller diameter, and the central strand is surrounded by surrounding strands having a relatively larger diameter.

24. An assembly according to Claim 23, wherein the relatively smaller diameter is 0.005 inches, and the relatively larger diameter is 0.007 inches.

25. An assembly according to Claim 16, wherein the stranded wire has a central strand with a relatively larger diameter, and the central strand is surrounded by surrounding strands having a relatively smaller diameter.

26. An assembly according to Claim 25, wherein the relatively smaller diameter is 0.003 or 0.004 inches, and the relatively larger diameter is 0.005 inches.

27. An assembly according to Claim 16, wherein at least one of the plurality of strands is formed from a first material that differs from a second material used to form other ones of the plurality of strands.

28. An assembly according to Claim 16, wherein the stranded wire has a central strand formed from stainless steel, and the central strand is surrounded by surrounding strands formed from silver.

29. An assembly according to Claim 16, wherein at least one of the strands is formed from a superconductive material.

30. An assembly according to Claim 16, wherein the stranded wire has only two axial ends that are welded together such that the stranded wire is continuous, and the plurality of coils are unrestrained relative to each other such that a periodicity of the plurality of coils is not limited or impeded by axial connection or coupling of the plurality of coils.

What is claimed is:

1. An electrical connector having a spring, the spring comprising:
a stranded wire formed from a plurality of conductive strands of wire and configured as a canted coil spring having a plurality of coils that collectively define a toroid, the stranded wire having axial ends that are joined together such that the stranded wire is continuous, wherein the stranded wire provides about 200 to 20,000 Lbf/in/in^2 and wherein the stranded wire has a central conductive strand with a relatively smaller diameter, and the central strand is surrounded by surrounding conductive strands and each surrounding conductive strand has a relatively larger diameter than the central conductive strand.

2. A spring according to claim 1, wherein the plurality of strands comprises seven strands of wire.

3. A spring according to claim 1, wherein the plurality of strands comprises 4, 5, 9, 11, 13, 15 or 17 strands of wire.

4. A spring according to claim 1, wherein the stranded wire provides a force variance of over 7000% over an operational range of the spring.

5. A spring according to claim 4, wherein the force variance is about 7800% over the operational range of the spring.

6. A spring according to claim 1, wherein at least one of the plurality strands is formed at a diameter that differs from a diameter of other ones of the plurality of strands.

7. A spring according to claim 1, wherein the relatively smaller diameter is 0.005 inches, and the relatively larger diameter is 0.007 inches.

8. A spring according to claim 1, wherein the relatively smaller diameter is 0.003 or 0.004 inches, and the relatively larger diameter is 0.005 inches.

9. A spring according to claim 1, wherein at least one of the plurality of strands is formed from a first material that differs from a second material used to form other ones of the plurality of strands.

10. A spring according to claim 1, wherein the stranded wire has a central strand formed from stainless steel, and the central strand is surrounded by surrounding strands formed from silver.

11. A spring according to claim 1, wherein at least one of the strands is formed from a superconductive material.

12. A spring according to claim 1, wherein the stranded wire has only two axial ends that are welded together such that the stranded wire is continuous, and the plurality of coils are unrestrained relative to each other such that a periodicity of the plurality of coils is not limited or impeded by axial connection or coupling of the plurality of coils.

13. An electrical connector assembly, comprising:
a first electrical connector having a recess formed therein;
a second electrical connector having a second recess formed therein;

a stranded wire located in the recess and second recess between the first and second connectors, the stranded wire having a plurality of strands of conductive strands of wire and configured as a canted coil spring having a plurality of coils that collectively define a toroid, the stranded wire having axial ends that are joined together such that the stranded wire is continuous, wherein the stranded wire provides about 200 to 20,000 Lbf/in/in^2 and wherein the stranded wire has a central conductive strand with a relatively smaller diameter, and the central strand is surrounded by surrounding conductive strands and each surrounding conductive strand has a relatively larger diameter than the central conductive strand.

14. An assembly according to claim 13, wherein the plurality of strands comprises seven strands of wire.

15. An assembly according to claim 13, wherein the plurality of strands comprises 4, 5, 9, 11, 13, 15 or 17 strands of wire.

16. An assembly according to claim 13, wherein the stranded wire provides a force variance of over 7000% over an operational range of the spring.

17. An assembly according to claim 16, wherein the force variance is about 7800% over the operational range of the spring.

18. An assembly according to claim 13, wherein at least one of the plurality strands is formed at a diameter that differs from a diameter of other ones of the plurality of strands.

19. An assembly according to claim 13, wherein the relatively smaller diameter is 0.005 inches, and the relatively larger diameter is 0.007 inches.

20. An assembly according to claim 13, wherein the relatively smaller diameter is 0.003 or 0.004 inches, and the relatively larger diameter is 0.005 inches.

21. An assembly according to claim 13, wherein at least one of the plurality of strands is formed from a first material that differs from a second material used to form other ones of the plurality of strands.

22. An assembly according to claim 13, wherein the stranded wire has a central strand formed from stainless steel, and the central strand is surrounded by surrounding strands formed from silver.

23. An assembly according to claim 13, wherein at least one of the strands is formed from a superconductive material.

24. An assembly according to claim 13, wherein the stranded wire has only two axial ends that are welded together such that the stranded wire is continuous, and the plurality of coils are unrestrained relative to each other such that a periodicity of the plurality of coils is not limited or impeded by axial connection or coupling of the plurality of coils.

25. An electrical connector having a spring, the spring comprising:
a stranded wire formed from a plurality of conductive strands of wire and configured as a canted coil spring having a plurality of coils that collectively define a toroid, the stranded wire having axial ends that are joined together such that the stranded wire is continuous, wherein the stranded wire provides

about 200 to 20,000 Lbf/in/in^2 and wherein the stranded wire has a central conductive strand with a relatively larger diameter, and the central strand is surrounded by surrounding conductive strands and each surrounding conductive strand has a relatively smaller diameter than the central conductive strand.

26. An electrical connector having a spring, the spring comprising:
a stranded wire formed from a plurality of conductive strands of wire and configured as a canted coil spring having a plurality of coils that collectively define a toroid, the stranded wire having axial ends that are joined together such that the stranded wire is continuous, wherein the stranded wire provides about 200 to 20,000 Lbf/in/in^2 and wherein the stranded wire has a central conductive strand with a diameter and the central strand is surrounded by surrounding conductive strands and each surrounding conductive stand has a diameter that is substantially equal to the diameter of the central conductive strand.

27. An electrical connector assembly, comprising:
a first electrical connector having a recess formed therein;
a second electrical connector having a second recess formed therein;
a stranded wire located in the recess and second recess between the first and second connectors, the stranded wire having a plurality of strands of conductive strands of wire and configured as a canted coil spring having a plurality of coils that collectively define a toroid, the stranded wire having axial ends that are joined together such that the stranded wire is continuous, wherein the stranded wire provides about 200 to 20,000 Lbf/in/in^2 and wherein the stranded wire has a central conductive strand with a relatively larger diameter, and the central strand is surrounded by surrounding conductive strands and each surrounding conductive strand has a relatively smaller diameter than the central conductive strand.

28. An electrical connector assembly, comprising:
a first electrical connector having a recess formed therein;
a second electrical connector having a second recess formed therein;
a stranded wire located in the recess and second recess between the first and second connectors, the stranded wire having a plurality of strands of conductive strands of wire and configured as a canted coil spring having a plurality of coils that collectively define a toroid, the stranded wire having axial ends that are joined together such that the stranded wire is continuous, wherein the stranded wire provides about 200 to 20,000 Lbf/in/in^2 and wherein the stranded wire has a central conductive strand with a diameter, and the central strand is surrounded by surrounding conductive strands and each surrounding conductive strand has a diameter that is substantially equal to the diameter of the central conductive strand.