Claims

1. An electrical connector configured to mate with a pin, comprising:

a sleeve comprising an inner wall bounding a cavity; and

a terminal disposed in the cavity and configured to electrically connect the pin with the sleeve, the terminal comprising one or more conductive elements encircling, at least in part, an area with a center, each of the one or more conductive elements comprising:

at least two first portions abutting the inner wall of the sleeve, each of the at least two first portions offset from the center by more than a first radius; and

a plurality of second portions disposed within the cavity and connecting adjacent first portions of the at least two first portions and offset from the center by less than the first radius.

2. The electrical connector of claim 1, wherein:

each of the one or more conductive elements is configured to expand and contract in a radial direction with respect to the center of the area.

3. The electrical connector of claim 1 or claim 2, wherein:

the one or more conductive elements comprises two conductive elements stacked in an axial direction extending perpendicular to a radial direction with respect to the center of the area;

the terminal comprises a member connecting the two conductive elements; and

the member is disposed between the two conductive elements and joins first portions of the two conductive elements.

4. The electrical connector of any one of claims 1-3, wherein:

each of the one or more conductive elements comprises a first end and second end separated from each other; and

for each of the one or more conductive elements, the first end and second end are disposed in one of the at least two first portions.

5. The electrical connector of any one of claims 1-4, wherein:

at least one conductive element of the one or more conductive elements comprises one or more projections extending from an edge of the at least one conductive element and disposed between respective adjacent first portions of the at least one conductive element; and

the one or more projections is angled away from the center.

6. The electrical connector of any of claims 1-5, wherein:

the one or more conductive elements are stamped from a sheet of metal;

a thickness of the sheet defines a radial extent of each of the one or more conductive elements; and

a surface of the sheet defines surfaces of the one or more conductive elements facing the area.

7. The electrical connector of any one of claim 1-6, wherein:

each of the plurality of second portions comprises an elongated band; and

the elongated bands of the one or more conductive elements are disposed in parallel.

8. The terminal of claim 7, wherein:

each of the one or more conductive elements comprises three to six first portions; and

each first portion comprises a bend and an inflection point abutting the inner wall of the sleeve.

9. The electrical connector of claim 8, comprising:

a plurality of gaps between portions of the terminal and the inner wall of the sleeve and separated from each other by the inflection points of respective first portions of the terminal abutting the inner wall of the sleeve.

10. The electrical connector of claim 9, wherein:

each of the plurality of gaps decreases toward the inflection points of the respective first portions.

11. The electrical connector of claim 10, wherein:
each of the plurality of gaps is symmetrical; and
the plurality of gaps conforms to a wave.

12. The electrical connector of claim 4, wherein:
the first end and second end are disposed in a first portion.

13. The electrical connector of any one of claims 1-12, wherein:
the one or more conductive elements are a plurality of conductive elements stacked in an axial direction extending through the cavity of the sleeve.

14. The electrical connector of claim 13, comprising:
a plurality of members joining first portions of adjacent conductive elements of the plurality of conductive elements.

15. The electrical connector of claim 14, comprising:
a plurality of projections extending from edges of the second portions of the plurality of conductive elements and angled away from a center of the cavity.

16. A method of operating an electrical connector, the electrical connector comprising a sleeve having a cavity and a terminal disposed in the cavity, the method comprising:
inserting a pin into the terminal;
expanding the terminal; and
generating pressure against a circumferential surface of the pin so as to electrically connect the pin with the sleeve.

17. The method of claim 16, comprising:
generating pressure against an inner wall of the sleeve.

18. The method of claim 16, wherein:
the terminal comprises one or more conductive elements encircling, at least in part, an area with a center; and

each of the one or more conductive elements comprises at least two first portions each offset from the center by more than a first radius, and a plurality of second portions connecting adjacent first portions of the at least two first portions and offset from the center by less than the first radius.

19. The method of claim 18, wherein expanding the terminal comprises:

expanding the at least two first portions such that contact areas between the at least two first portions and an inner wall of the sleeve increase; and

expanding the plurality of second portions such that the plurality of second portions conform to the circumferential surface of the pin.

20. The method of claim 18, wherein:

each of the one or more conductive elements comprises a first end disposed in a first portion of the at least two first portions, and a second end disposed in the first portion of the at least two first portions and separated from the first end; and

expanding the terminal comprises further increasing a distance between the first and second ends.

21. The method of claim 18, wherein:

each of the one or more conductive elements comprises a plurality of projections extending from edges of the plurality of second portions of the conductive element and angled away from the center; and

expanding the terminal comprises for each of the one or more conductive elements, contacting the plurality of projections with the pin so as to guide the pin into contact with the plurality of second portions of the conductive element.