

CLAIMS

What is claimed is:

1. An electrical connector comprising:
 - a non-conductive housing having spaced openings on a front face thereof containing
 - 5 electrical contacts,
 - said electrical contacts comprising:
 - at its one end contact clips configured to receive correspondingly spaced and
 - correspondingly shaped members of the electrical plug, and
 - at its other end standardized contact members extending beyond the non-conductive
 - 10 housing, spaced independently of said contact clips;
 - said non-conductive housing having at its base a flange for adapting it to the housing of a power source.
2. The electrical connector of claim 1, wherein the said flange of non-conductive housing is
- 15 independent of spacing of the spaced openings on the front face thereof.
3. The electrical connector of claim 1, wherein the contact clips disposed in the spaced openings of the non-conductive housing are configured to receive the spaced members of an electrical plug of an International Electrotechnical Commission (IEC) 60320 standard or a
- 20 National Electrical Manufacturers Association (NEMA) standard.
4. The electrical connector of claim 1, further comprising a cantilevered snap-lock disposed on the flange and extending beyond the non-conductive housing, the cantilevered snap-lock being configured to be inserted into a corresponding notch or recess in the housing of the power
- 25 source.
5. The electrical connector of claim 4, further comprising an additional projection disposed on the flange configured to fit in a corresponding notch or recess in the housing of the power source, the notch or recess being provided to prevent the electrical connector from being wrongly
- 30 inserted into the corresponding housing of the power source.

6. The electrical connector of claim 4, wherein the cantilevered snap-lock is configured to snap-fit into a corresponding housing of the power source.
7. A housing of a power source configured to receive an electrical connector of claim 1,
5 comprising:
receptacle terminals spaced and configured to receive the contact members of the electrical connector.
8. The housing of a power source of claim 7, further comprising a notch or recess shaped
10 and configured to receive a cantilevered snap-lock disposed on the flange of the electrical connector.
9. The housing of a power source of claim 7, further comprising an additional notch or recess configured to receive an additional projection disposed on the flange of the electrical
15 connector and prevents the electrical connector from being wrongly inserted into it.
10. The housing of a power source of claim 7, further comprising a non-conductive cage disposed over the receptacle terminals and molded together to form a power cord, the said cage acts as an electrical safety barrier for a user's fingers.
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11. A power distribution unit comprising:
A cabinet having two or more housings of a power source configured to receive two or more electrical connectors as described in claim 1; and
a board, having a set of receptacle terminals disposed thereon, each set being configured
25 to receive standardized contact members of the said electrical connector
characterized by the fact that differently configured electrical connectors may each be interchangeably received by the said set of receptacle terminals disposed thereon.
12. The power distribution unit of claim 11, further comprising a non-conductive cage
30 disposed over each set of receptacle terminals that acts as an electrical safety barrier for a user's fingers.

13. The power distribution unit of claim 11, wherein each housing of the power source comprises a notch or recess shaped and configured to receive a cantilevered snap-lock disposed on each flange of each electrical connector as described in claims 1 and 2.

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14. The power distribution unit of claim 11, wherein each housing of the power source further comprises an additional notch or recess shaped and configured to receive a corresponding additional projection disposed on the flange as described in claim 4 and prevents each electrical connector from being wrongly inserted into it.

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15. The power distribution unit of claim 11, wherein the board is configured to enable a user to interchange the electrical connectors received in the housing of the power source from one electrical connector receiving one type of electrical plug to another electrical connector receiving the other type of electrical plug.

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