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(54) Title: SELF-INSULATING CONTACTS FOR USE IN ELECTROLYTIC ENVIRONMENTS

(57) Abstract: An electrical connector is provided for supplying power in an electrolytic environment. The connector includes first and second mating contacts, each of which is coated with an electrically conductive material that includes a transition metal capable of forming a non-conductive passivation layer in an electrolytic environment. Each contact includes a substrate covered by the electrically conductive coating. The substrate may be formed of a material that is not capable of forming a non-conductive passivation layer in the electrolytic environment. The substrate material for each contact may be conductive or non-conductive, and may have different material properties than the electrically conductive coating.



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