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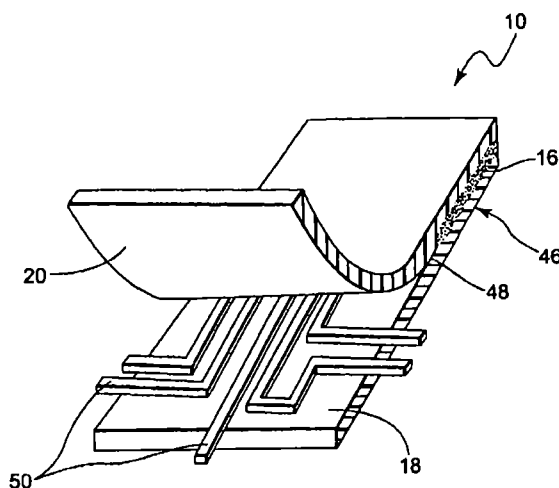
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(54) Title: CIRCUIT PROTECTIVE COMPOSITES



(57) **Abstract:** A composite, useful as a flexible circuit, comprises at least a portion of an electrical conductor having a first surface opposite a second surface. A first homogeneous polymeric film contacts the first surface of at least a portion of the electrical conductor. A second homogeneous polymeric film contacts at least a portion of the first film and the second surface of the at least a portion of the electrical conductor. The first and second films infusing to form a continuous phase surrounding the at least a portion of an electrical conductor. A process for producing a flexible circuit including hermetic sealing comprises the steps of providing at least one electrically conductive trace having a first surface opposite a second surface. At least a portion of the first surface is attached to a first homogeneous polymeric film. A second homogeneous polymeric film is contacted with at least a portion of the first film and at least a portion of the second surface. Thereafter, application of pressure to the first and second films, for a time at a selected temperature, promotes polymer infusion to form a continuous phase surrounding at least a portion of an electrically conductive trace.

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