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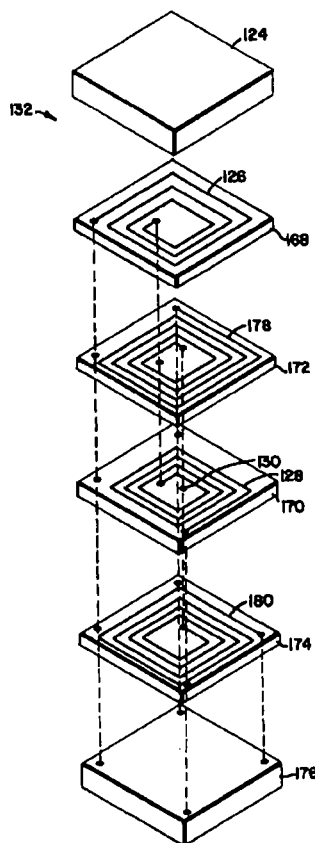
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[Continued on next page]

(54) Title: MULTI-LAYER TRANSFORMER HAVING ELECTRICAL CONNECTION IN A MAGNETIC CORE



(57) Abstract: A method, apparatus, and article of manufacture for a multi-layer transformer (132) includes a plurality of layers (168-174) having a magnetic core area (114) disposed on each of the layers forming a magnetic core of the transformer having a primary winding (126, 128) disposed on at least one of the layers, and a secondary winding (178, 180) disposed on at least one of the layers. A plurality of interconnecting vias (130) connect the primary winding between the layers, and a second plurality of interconnecting vias (130) connect the secondary winding between the layers. The interconnecting vias are disposed proximate a center of the magnetic core of the transformer, thus, reducing the overall volume, size, weight, and cost of a transformer while meeting regulatory isolation safety requirements.

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