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(54) Title: ELECTRODE ASSEMBLY COMPRISING AN ANISOTROPIC MATERIAL LAYER AND A SKIN CONTACT LAYER  
COMPRISING A CONDUCTIVE ADHESIVE COMPOSITE

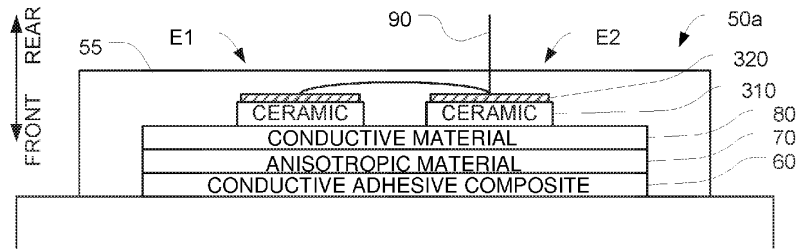


FIG. 10A

(57) Abstract: Alternating electric fields (e.g. TTFields) may be applied to a subject's body using an electrode assembly that includes an electrode element (E1, E2) having a skin-facing surface, a layer of anisotropic material (70) having a skin-facing surface and an opposing outwardly facing surface and a skin contact layer comprising a conductive adhesive composite (60), wherein the at least one electrode element is in electrical contact with the outwardly facing surface of the layer of anisotropic material, and wherein the skin contact layer is disposed on a skin-facing side of the layer of anisotropic material. The skin contact layer may comprise a skin contact structure (61) having an outer adhesive layer (62) comprising conductive adhesive composite, an inner adhesive layer (64) comprising conductive adhesive composite and a substrate (66) positioned between the inner and outer adhesive layers, wherein the at least one electrode element is in electrical contact with the outwardly facing surface of the layer of anisotropic material, wherein the outer adhesive layer of the skin contact structure is disposed on a skin-facing side of the layer of anisotropic material, and wherein the inner adhesive layer of the skin contact structure is configured to contact skin of a subject.

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