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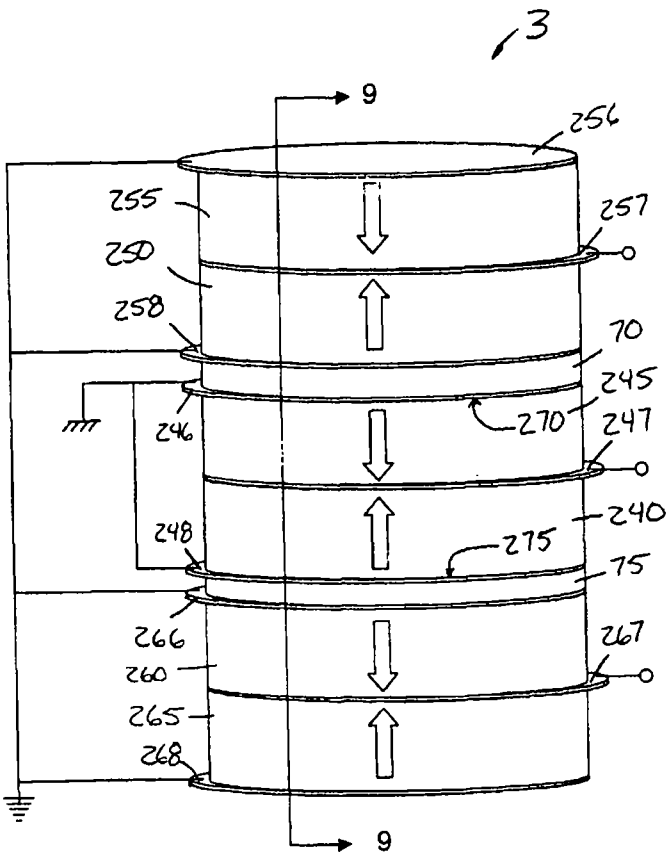
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(54) Title: COMPOSITE PIEZOELECTRIC TRANSFORMER



(57) Abstract: A multi-layer piezoelectric transformer (1) is provided that is capable of achieving high mechanical momentum and, therefore, is capable of high energy transmission. The piezoelectric tranformer (1) has a plurality of layers (43, 44, 53, 54, 63, 64) arranged as a composite structure. The outermost portions (31, 33) of the piezoelectric transformer (1) comprise the input portions, which are bonded to the central output portion (32) of the piezoelectric transformer (1). The construction and anisotropic nature of the piezoelectric transformer (1) allows it to be driven at the longitudinal resonant frequency of the piezoelectric transformer (1) corresponding to its overall thickness, which increases the achievable gain and power density of the piezoelectric transformer (1).

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