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(54) Title: ACOUSTIC SOURCE FOR GENERATING AN ACOUSTIC BEAM

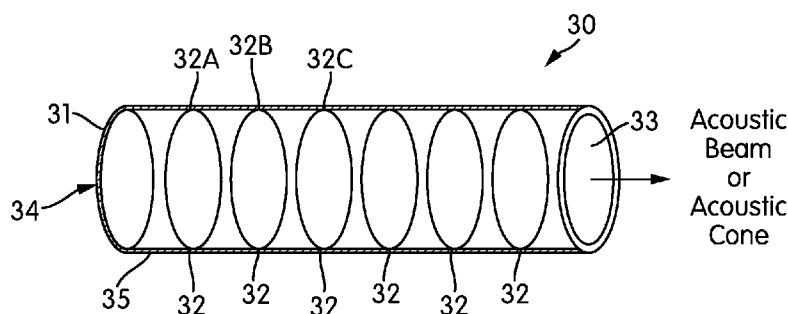


FIG. 1C

(57) **Abstract:** An acoustic source for generating an acoustic beam includes a housing; a plurality of spaced apart piezo-electric layers disposed within the housing; and a non-linear medium filling between the plurality of layers. Each of the plurality of piezoelectric layers is configured to generate an acoustic wave. The non-linear medium and the plurality of piezo-electric material layers have a matching impedance so as to enhance a transmission of the acoustic wave generated by each of plurality of layers through the remaining plurality of layers.