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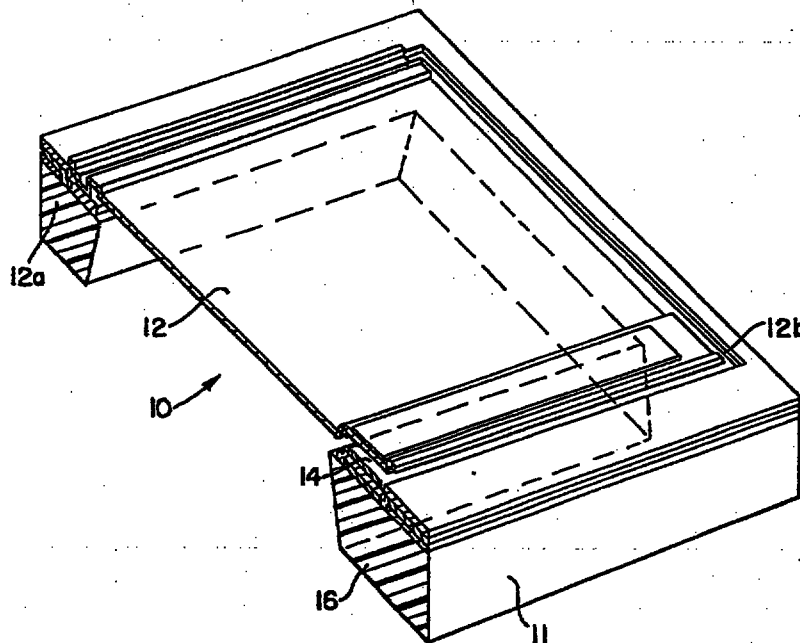
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(54) Title: MINIATURE SILICON CONDENSER MICROPHONE



(57) Abstract

Multiple embodiments of a solid state condenser transducer, and methods of manufacture, are disclosed. The transducer (10) comprises a semi-conductor substrate forming a frame (11) and having an opening, a thin-film cantilever structure (12) forming a diaphragm extending over a portion of the opening, the structure having a proximal portion and a distal portion. The proximal portion is attached to the frame, and the distal portion extends over a portion of the frame. A variable gap capacitor (14) having a movable plate and a fixed plate is provided, wherein the movable plate is disposed on the distal portion of the structure and the fixed plate is disposed on the frame adjacent the movable plate.