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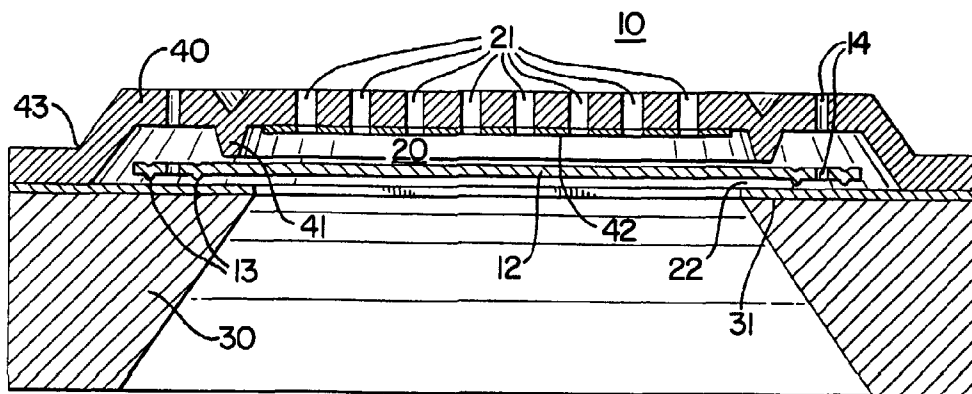
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(54) Title: MINIATURE BROADBAND TRANSDUCER



(57) Abstract: Multiple embodiments of solid state micro-structures, such as a condenser microphone, are disclosed. According to one embodiment, the transducer a fixed perforated member, a freely movable diaphragm spaced from the perforated member, a support ring in the perforated member maintaining the proper spacing between the diaphragm and the perforated member near the perimeter; and compliant suspension springs allowing the diaphragm to rest freely on the support ring and yet mechanically decouples the diaphragm from the perforated member. According to another embodiment, a raised micro-structure is disclosed for use in a silicon based device. The raised micro-structure comprises a generally planar film having a ribbed sidewall supporting the film.



WO 02/015636 A3



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