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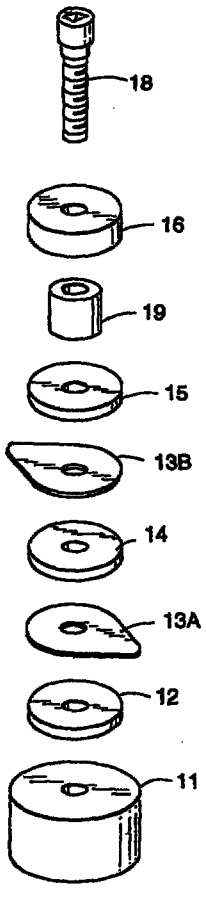
(54) Title: ULTRASONIC TRANSDUCER

(57) Abstract

An ultrasonic transducer for generating and transmitting ultrasonic wave energy of a predetermined frequency to the surface of an object. In one embodiment, a resonator (12) is inserted between the head mass (11) and the piezoelectric crystal (14). The resonator is made from a material having an acoustic velocity equal to or greater than the object, preferably a ceramic such as a silicon carbide or alumina oxide. In another embodiment, the head mass (11) and tail mass (16) are also made from ceramic materials.