

ABSTRACT

An ultrasonic transducer (1) comprises an elongate horn (2), a counterpiece (3), two piezoelectric drives (4, 5) and a screw (6). The counterpiece is fastened to the horn by means of the screw and thus clamps the piezoelectric drives, which are arranged on either side of a longitudinal axis (7) of the ultrasonic transducer, between the horn and the counterpiece. The ultrasonic transducer is designed in such a way that the tip of a capillary which is clamped in the horn can oscillate in two different directions.

(Figs. 1-5)