

ULTRASONIC HORN AND MANUFACTURING APPARATUS OF SEMICONDUCTOR DEVICE

ABSTRACT

5 An ultrasonic horn (50) includes: a vibration source part (53) to which an ultrasonic vibrator
(58) is mounted; a tip end part (56) to which a capillary (18) is mounted; and an intermediate
part (54) which is interposed between the tip end part (56) and the vibration source part (53) and
propagates vibration generated by the ultrasonic vibrator (58) to the tip end part (56). The
intermediate part (54) is formed with a single spiral hole (68) which is a hole penetrating in a
10 radial direction of the ultrasonic horn (50) and advances in an axial direction as the spiral hole
advances in a circumferential direction.

Figure 2