

possible to apply a blower employed with such a Venturi effect to the air-circulation unit 3.

[0097] FIG. 4 shows an assembly of a base member 1 and a flow channel panel 2 in the touch-sensitive sheet member 100. According to the assembly in the touch-sensitive sheet member 100 shown in FIG. 4, the base member 1 and the flow channel panel 2 are prepared. The base member 1 is formed by perforating the apertures p1 to p24 in the body for base member. For example, in a case in which the touch-sensitive sheet member 100 is used as an input detection unit, which constitutes the input device, of a ten-key, a cross key function, a selection key or the like of a mobile phone, the aperture p1 is perforated on the region of the base member 1 in conformity with a position on which a key of numeral "1" is displayed and the aperture p2 is perforated on the region of the base member 1 in conformity with a position on which a key of numeral "2" is displayed. Further, the aperture p3 is perforated on the region of the base member 1 in conformity with a position on which a key of numeral "3" is displayed and the aperture p4 is perforated on the region of the base member 1 in conformity with a position on which a key of numeral "4" is displayed. The aperture p5 is perforated on the region of the base member 1 in conformity with a position on which a key of numeral "5" is displayed and the aperture p6 is perforated on the region of the base member 1 in conformity with a position on which a key of numeral "6" is displayed.

[0098] Further, the aperture p7 is perforated on the region of the base member 1 in conformity with a position on which a key of numeral "7" is displayed and the aperture p8 is perforated on the region of the base member 1 in conformity with a position on which a key of numeral "8" is displayed. The aperture p9 is perforated on the region of the base member 1 in conformity with a position on which a key of numeral "9" is displayed and the aperture p10 is perforated on the region of the base member 1 in conformity with a position on which a key of numeral "0" is displayed.

[0099] The aperture p11 is perforated on the region of the base member 1 in conformity with a position on which a key of numeral "#" is displayed and the aperture p12 is perforated on the region of the base member 1 in conformity with a position on which a key of numeral "*" is displayed.

[0100] Also, the aperture p13 constituting a cross key is perforated on the region of the base member 1 in conformity with a position which a key of determination "O" is displayed. The aperture p14 is perforated on the region of the base member 1 in conformity with a position on which a left facing arrow key is displayed and the aperture p15 is perforated on the region of the base member 1 in conformity with a position on which an upward facing arrow key is displayed. Further, the aperture p16 is perforated on the region of the base member 1 in conformity with a position on which a right facing arrow key is displayed and the aperture p17 is perforated on the region of the base member 1 in conformity with a position on which a downward facing arrow key is displayed.

[0101] Further, the aperture p18 constituting a function selection key is perforated on the region of the base member 1 in conformity with a position on which a key of "etc" is displayed and the aperture portion p19 is perforated on the region of the base member 1 in conformity with a position on which a key of "REW" is displayed. The aperture portion p20 is perforated on the region of the base member 1 in conformity with a position on which a left facing arrow stop key is displayed and the aperture portion p21 is perforated on the region of the base member 1 in conformity with a position on

which a right facing arrow stop key is displayed. The aperture portion p22 is perforated on the region of the base member 1 in conformity with a position on which a left facing fast-forward key is displayed and the aperture portion p23 is perforated on the region of the base member 1 in conformity with a position on which a right facing fast-forward key is displayed. The aperture portion p24 is perforated on the region of the base member 1 in conformity with a position on which a stop key is displayed (see FIG. 18). Each of the apertures p1 to p24 has an aperture diameter ϕ .

[0102] The flow channel panel 2 is formed so that the panel body 2k having the flow channels 2a, 2b is provided on the substrate 2c. For example, a core and cavity forming a tree shaped flow channel 2a and a linear shaped flow channel 2b is processed. The flow channel 2a is constituted, for example, by flow channels 201 to 211. The flow channel 2a is formed so that the flow channels 201, 206, the flow channels 202, 207, the flow channels 203, 208, the flow channels 204, 208 and the flow channels 205, 210 are arranged from the upward region of the flow channel 211 of the center region in order with them being perpendicular to the flow channel 211.

[0103] At a time of the mounting, the flow channel 211 of the center region introduces the air to the seven apertures p15, p13, p17, p2, p5, p8, p10 the flow channel 201 introduces the air to the aperture p14, the flow channel 202 introduces the air to the aperture p1, the flow channel 203 introduces the air to the aperture p4, the flow channel 204 introduces the air to the aperture p7, and the flow channel 205 introduces the air to the aperture p11.

[0104] Also, at a time of the mounting, the flow channel 206 introduces the air to the aperture p16, the flow channel 207 introduces the air to the aperture p3, the flow channel 208 introduces the air to the aperture p6, the flow channel 209 introduces the air to the aperture p9, and the flow channel 210 introduces the air to the aperture p12. The flow channel panel 2 is formed by die-tightening a die having such a core and cavity and by sealing a transparent resin material thereinto. The substrate 2c may be formed at the same time of molding the panel body 2k with the flow channels 2a, 2b using the same die.

[0105] When the base member 1 and the flow channel panel 2 are prepared, the base member 1 and the flow channel panel 2 are bonded. The base member 1 is bonded onto the upper portion of the flow channel panel 2 with it covering the flow channel panel 2. As an adhesive agent, for example, a hot melt-based resin adhesive agent, a double sided tape or the like is used to keep air-tightness. This enables a touch-sensitive sheet member as an intermediate component in which the base member 1 is provided on the flow channel panel 2 to be obtained. Thereafter, the air-circulation unit 3 is mounted thereon and the touch-sensitive sheet member 100 is completed. In this embodiment, the flow channel changeover unit 3a and the flow channel panel 2 are connected so that an extended portion of the air-exhaust port 306 of the flow channel changeover unit 3a communicates to the flow channel 2a of the flow channel panel 2 and also an extended portion of the air-exhaust port 307 communicates to the flow channel 2b of the flow channel panel 2. A structure of the air-circulation unit 3 should be referred to FIG. 2A and FIG. 3.

[0106] It should be noted that for the base member 1 and the flow channel panel 2, a transparent material is used in which the refractive index is near approximately 1.4 and all light transmittances is around of 70 to 95%, when a refractive