

SENSING SCREEN, CONTROL CIRCUIT AND CONTROL METHOD THEREOF, AND SENSING SCREEN APPARATUS

ABSTRACT

The present invention discloses a sensing screen, a control circuit and control
5 method thereof, and a sensing screen apparatus, and pertains to the field of wireless
communications. The sensing screen includes a display screen, a first transparent
medium layer, a transparent connection layer, and an antenna layer. The antenna layer
includes multiple antenna units, and the antenna units include at least one first antenna
unit and multiple second antenna units. The first antenna unit is configured to transmit
10 a sensing signal, the second antenna units are configured to receive reflected signals
of the sensing signal, and the reflected signals are generated by a touch object by
reflecting the sensing signal. Alternatively, the first antenna unit and the second
antenna units are configured to simultaneously transmit or receive a communication
signal. The multiple second antenna units are interspersed with the first antenna unit.
15 According to the present invention, the antenna layer is arranged right above the
display screen, so that a touch area of the sensing screen is fully utilized while screen
display is not affected, so as to substantially increase an antenna size and increase an
antenna gain. Further, a location corresponding to the touch object is determined
according to the reflected signals, so as to implement a sensing function.

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FIGURE 2