

ANTENNA APPARATUS AND COMMUNICATION APPARATUS

ABSTRACT

The present invention relates to an antenna apparatus and a communication apparatus able to provide an antenna apparatus having wide band characteristics or diversity characteristics.

A first antenna element 11, a second antenna element 12, and a divider circuit 13 to which both the antenna elements 11 and 12 are coupled via respectively separate transmission lines 15 and 16 are included. Additionally, a delay process is conducted on one of the transmission lines by modifying the lengths of the transmission line 15 coupling the first antenna element 11 to the divider circuit 13 and the transmission line 16 coupling the second antenna element 12 to the divider circuit 13. By conducting this delay adjustment, the input impedance and/or phase of the first and second antenna elements are adjusted, and wider band characteristics than the antenna characteristics of the first and second antenna elements individually are configured.

Figure 1