ABSTRACT

The present application relates to the technical field of mobile communications, and provides a MIMO communication system based on a cross-polarized leaky coaxial cable, applicable to coverage of 2G/3G/4G/5G/6G signals. By receiving signals of different standards from different operators, it is determined whether adjacent channel interference and intermodulation interference occur in a combination of the signals. The signals of different standards in the combination of the signals of different standards which produces interference are respectively fed into different leaky coaxial cables. On one hand, adjacent channel interference between adjacent channel signals in a same leaky coaxial cable can be avoided, or intermodulation interference among different signals can be avoided, thereby reducing interferences between the signals and improving communication quality. On the other hand, radiation polarization directions of every two adjacent leaky coaxial cables are different, so that coherence of leaky coaxial cable signals is reduced, thereby improving the communication quality.

Fig. 2