

ABSTRACT

An adaptive antenna transmission apparatus, used in a base station apparatus of a cellular communication system, for transmitting signals by a plurality of antenna elements constituting an adaptive antenna. In the adaptive antenna transmission apparatus, a base station apparatus (1) detects an interference component, which is a reflection component of a downlink transmission signal of its own base at an interference processing part (7), and controls the downlink transmission directivity, in accordance with the result of detection at a signal processing part (4), so as to minimize the reflected component. This can reduce the interference power of the downlink transmission signal at the base station apparatus (1), and thereby can prevent decrease of the channel capacity and make the effective operation of the base station.