

ABSTRACT

A communication apparatus includes: storing means for storing information indicating a first base set including a first base sequence to an N-th base sequence; shifting means for generating a first shift sequence to an N-th shift sequence by determining a shift amount based on transmission data, and cyclic shifting an n-th base sequence (n being an integer from 1 to N) by the shift amount; holding means for holding timing information indicating transmission timings of sequences; and transmitting means for transmitting each shift sequence according to the timing information, wherein the first base sequence to the N-th base sequence satisfy a first condition of: a total across the first base sequence to the N-th base sequence of correlation values of autocorrelation is not 0 when a shift amount is 0, and a total across the first base sequence to the N-th base sequence of correlation values of autocorrelation is 0 when a shift amount is different from 0 used in data transmission.