

ABSTRACT

A communication method and apparatus are disclosed. The method includes: A first apparatus generates a cubic polynomial exponential sequence, where a cubic term coefficient of the cubic polynomial exponential sequence is associated with a quadratic term coefficient of the cubic polynomial exponential sequence; and the first apparatus outputs the cubic polynomial exponential sequence. Compared with existing communication sequences, a sequence capacity of the cubic polynomial exponential sequence is positively correlated with a cube of a sequence length of the cubic polynomial exponential sequence, the cubic polynomial exponential sequence can resist a Doppler shift with more subcarrier spacings, and a product of a maximum round-trip delay and a maximum Doppler shift is not constrained by the sequence length.