

ABSTRACT

A signal identification method and a communication apparatus are provided, to resolve a problem that a data packet loss is caused because a receive end device cannot accurately synchronize to a target frame due to frame overlapping in a signal transmission process; and may be applied to systems such as a UWB-based wireless personal area network system, a Wi-Fi system, and a sensing system. The method includes: A first device performs channel estimation based on an L-LTF sequence corresponding to a received signal frame, to obtain a first channel estimation value, and determines, based on the first channel estimation value and mark information of N subcarrier elements, whether the L-LTF sequence corresponding to the signal frame is a target L-LTF sequence, where the first channel estimation value includes channel estimation values corresponding to M subcarrier elements in the L-LTF sequence corresponding to the signal frame, the mark information of the N subcarrier elements includes sequence numbers of the N subcarrier elements and amplitude and/or phase change values corresponding to the N subcarrier elements, M and N are positive integers, $M > 1$, and $1 \leq N \leq M$.

(Fig.8)