

ENCODING AND DECODING METHOD AND APPARATUS

ABSTRACT

An encoding method, a decoding method, and an apparatus are provided, to generate a polar code that matches higher-order modulation. In this application, the encoding method includes:
5 determining a symbol quantity S based on an encoding bit quantity L and an energy level quantity B , where S is $S1$ or $S2$, $S1=L/B$, and $S2=L/2B$; determining K information sub-channels from an encoding sequence based on the symbol quantity S , the energy level quantity B , and a reliability
10 sequence; and encoding K information bits and outputting a bit sequence based on the K information sub-channels, where the K information sub-channels are selected from candidate sub-channels based on an order of reliability of the candidate sub-channels, and the candidate sub-channels are $S1$ sub-channels or $2 \times S2$ sub-channels in a sub-sequence whose energy level is i in the encoding sequence.

FIG. 8