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**Chen et al.**(10) **Pub. No.: US 2022/0399906 A1**(43) **Pub. Date: Dec. 15, 2022**(54) **RATE MATCHING METHOD AND  
APPARATUS FOR POLAR CODE****Publication Classification**(51) **Int. Cl.***H03M 13/00* (2006.01)*H03M 13/13* (2006.01)*H03M 13/27* (2006.01)(52) **U.S. Cl.**CPC ..... *H03M 13/635* (2013.01); *H03M 13/13*  
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**ABSTRACT**

Provided is a rate matching method and device for a Polar code. The method includes: concatenating K information bits and (N-K) frozen bits to generate a bit sequence of N bits, and encoding the bit sequence of N bits by means of a Polar code encoder with a generator matrix of size N×N to generate an initial bit sequence  $\{S_0, S_1, \dots, S_{N-1}\}$  of N bits, where K and N are both positive integers and K is less than or equal to N; dividing a circular buffer into q parts, selecting bits from the initial bit sequence  $\{S_0, S_1, \dots, S_{N-1}\}$  in a non-repeated manner, and writing the bits into the q parts of the circular buffer according to a predefined rule, where q=1, 2, 3 or 4; and sequentially selecting a bit sequence of a specified length from a predefined starting position in a bit sequence in the circular buffer and taking the bit sequence of the specified length as a bit sequence to be transmitted.

