

# **TWO-DIMENSIONAL CODE GENERATION AND DECODING METHODS, APPARATUSES, AND DEVICES**

## **ABSTRACT**

Embodiments of this specification disclose two-dimensional code generation and  
5 decoding methods, apparatuses, and devices. The method includes: obtaining  
two-dimensional code of a to-be-generated two-dimensional code image; performing  
error resilient coding by using a coding algorithm with a predetermined error-tolerant  
rate, to obtain error-tolerant-processed two-dimensional code; determining a code  
element shape that is corresponding to each data information bit in the  
10 error-tolerant-processed two-dimensional code and that is in a generation region of the  
two-dimensional code image; determining, according to a predetermined arrangement  
rule of the two-dimensional code, first position information that is corresponding to  
each data information bit of the error-tolerant-processed two-dimensional code and  
that is in the generation region; determining second position information of each  
15 positioning point bit in the generation region; and generating the two-dimensional  
code image based on the first position information, the code element shape  
corresponding to each data information bit, and the second position information of  
each positioning point bit.

20 [FIG. 1]