

## Abstract

Disclosed in the embodiments of the present disclosure are a codebook determination method for a multi-antenna panel with eight antenna ports for uplink MIMO transmission, and an apparatus therefor, which method and apparatus can be applied to a communication system. The method comprises: determining a first beam of a first transport layer; determining codebook coefficients used when constructing a codebook for eight antenna ports, wherein the codebook coefficients comprise a first co-phasing coefficient, and a compensation factor between antenna panels; and determining codewords of L layers of a multi-antenna panel with eight antenna ports according to the first beam and the codebook coefficients, wherein L is a positive integer, and L is greater than or equal to 1 and less than or equal to 4. In the embodiments of the present disclosure, high-dimensional codewords of L layers of a multi-antenna panel with eight antenna ports can be constructed on the basis of a first beam of a first transport layer and codebook coefficients, such that requirements of uplink MIMO supporting transmissions from layer 1 to layer 4 of a multi-antenna panel with eight antenna ports can be met, thereby further enhancing uplink MIMO technology.

Fig. 2