

ABSTRACT OF THE DISCLOSURE

Representative vectors z_{1i} and z_{2j} are selected from codebooks CB1 and CB1, respectively, and multiplied by weighting coefficient vectors w_1 and w_2 of the same number of dimensions as those of the representative vectors by multipliers 21 and 22, whereby weighted representative vectors $z_{1i}w_1$ and $z_{2j}w_2$ are generated. These weighted representative vectors are vector combined by a combining part 3 into a combined vector y_{ij} , and a combination of the representative vectors is selected by a control part in such a manner as to minimize the distance between the combined vector y_{ij} and an input vector X . The weighting coefficient vectors w_1 and w_2 each have a maximum component in a different dimension and are selected so that the sum of diagonal matrixes W_1 and W_2 using components of the weighting coefficient vectors as their diagonal elements becomes a constant multiple of the unit matrix.