## ABSTRACT

IMAGE PREDICT CODING METHOD, IMAGE PREDICT CODING DEVICE, IMAGE PREDICT CODING PROGRAM, IMAGE PREDICT DECODING METHOD, IMAGE PREDICT DECODING DEVICE, AND IMAGE PREDICT DECODING PROGRAM

When a larger number of prediction modes are provided in generation of intra-frame predicted signals, mode information to identify an intra-frame prediction method of a target block is efficiently encoded. An image predictive encoding method includes: determination of an optimum prediction mode from a plurality of prediction methods for a pixel signal of a target block; a predicted signal is generated according to the mode; a residual signal is determined between the pixel signal of the target block and the predicted signal; the residual signal and the optimum prediction mode are encoded to generate a compressed signal; the compressed signal is restored; the restored signal is stored as a reproduced pixel signal. In the prediction mode encoding, a candidate prediction mode list is generated as one containing elements of optimum prediction modes of a plurality of previously-reproduced blocks neighboring the target block; a flag to indicate whether the list contains an element corresponding to the optimum prediction mode is encoded; an index to the corresponding element is encoded if the corresponding element is present in the list; the optimum prediction mode is encoded based on numbering the elements in the list, unless there is no corresponding element in the list.

Figure 1