

ABSTRACT

This application provides a picture encoding and decoding method and apparatus for a video sequence. The picture decoding method in this application includes: determining motion information of a to-be-decoded block; obtaining a first decoding prediction block of the to-be-decoded block based on the motion information; performing motion search with first precision in the prediction reference picture block to obtain at least two second decoding prediction blocks; performing downsampling on the first decoding prediction block to obtain a first sampling pixel array; performing downsampling on the at least two second decoding prediction blocks to obtain at least two second sampling pixel arrays; calculating a difference between the first sampling pixel array and each of the second sampling pixel arrays, and using, as a target prediction motion vector, a motion vector corresponding to a second sampling pixel array with a minimum difference; and obtaining a target decoding prediction block of the to-be-decoded block based on the target prediction motion vector, and decoding the to-be-decoded block based on the target decoding prediction block. In this application, a calculation amount of difference comparison is reduced, and picture coding efficiency is improved.

FIGURE 1