

CLAIMS

What is claimed is:

1. A method for decoding a predicted image, comprising:
5 parsing a bitstream to obtain first indication information;
determining a set of candidate modes for a first to-be-processed image area according to the first indication information, wherein
when the first indication information is 0, a set of candidate translational modes is used as the set of candidate modes for the first to-be-processed image area,
10 wherein the translational mode indicates a prediction mode that a predicted image is obtained by using a translational model; or when the first indication information is 1, a set of candidate translational modes and a set of candidate affine modes are used as the set of candidate modes for the first to-be-processed image area, wherein the affine mode indicates a prediction mode that a predicted image is obtained by using an
15 affine model;
parsing the bitstream to obtain second indication information;
determining, in a set of candidate prediction modes for the first to-be-processed image area, a prediction mode for a to-be-processed image unit according to the second indication information, wherein the to-be-processed image unit belongs to the first to-be-processed image area; and
20 determining a predicted image of the to-be-processed image unit according to the prediction mode.
2. The method according to claim 1, wherein the first to-be-processed image area
25 comprises one of an image frame group, an image frame, an image tile set, an image slice set, an image tile, an image slice, an image encoding unit set, or an image encoding unit.
3. A method for encoding a predicted image, comprising:
30 when a set of candidate translational modes is used as a set of candidate modes for a first to-be-processed image area, setting first indication information to 0 and encoding the first indication information into a bitstream, wherein the translational mode indicates a prediction mode that a predicted image is obtained by using a translational model; or when a set of candidate translational modes and a set

of candidate affine modes are used as a set of candidate modes for a first to-be-processed image area, setting first indication information to 1 and encoding the first indication information into a bitstream, wherein the affine mode indicates a prediction mode that a predicted image is obtained by using an affine model;

5 determining, in a set of candidate prediction modes for the first to-be-processed image area, a prediction mode for a to-be-processed image unit, wherein the to-be-processed image unit belongs to the first to-be-processed image area;

 determining a predicted image of the to-be-processed image unit according to the prediction mode; and

10 encoding second indication information into the bitstream, wherein the second indication information indicates the prediction mode.

4. The method according to claim 3, wherein the first to-be-processed image area comprises one of an image frame group, an image frame, an image tile set, an image slice set, an image tile, an image slice, an image encoding unit set, or an image encoding unit.

5. An apparatus for decoding a predicted image, comprising:

 a first parsing module, configured to parse a bitstream to obtain first indication information;

20 a first determining module, configured to determine a set of candidate modes for a first to-be-processed image area according to the first indication information, wherein

 when the first indication information is 0, a set of candidate translational modes is used as the set of candidate modes for the first to-be-processed image area, wherein the translational mode indicates a prediction mode that a predicted image is obtained by using a translational model; or when the first indication information is 1, a set of candidate translational modes and a set of candidate affine modes are used as the set of candidate modes for the first to-be-processed image area, wherein the affine mode indicates a prediction mode that a predicted image is obtained by using an affine model;

30 a second parsing module, configured to parse the bitstream to obtain second indication information;

 a second determining module, configured to determine, in a set of candidate prediction modes for the first to-be-processed image area, a prediction mode for a to-be-

processed image unit according to the second indication information, wherein the to-be-processed image unit belongs to the first to-be-processed image area; and

a third determining module, configured to determine a predicted image of the to-be-processed image unit according to the prediction mode.

5

6. The apparatus according to claim 5, wherein the first to-be-processed image area comprises one of an image frame group, an image frame, an image tile set, an image slice set, an image tile, an image slice, an image encoding unit set, or an image encoding unit.

10

7. An apparatus for encoding a predicted image, comprising:

a first encoding module, configured to: when a set of candidate translational modes is used as a set of candidate modes for a first to-be-processed image area, set first indication information to 0 and encode the first indication information into a
15 bitstream, wherein the translational mode indicates a prediction mode that a predicted image is obtained by using a translational model; or when a set of candidate translational modes and a set of candidate affine modes are used as a set of candidate modes for a first to-be-processed image area, set first indication information to 1 and encode the first indication information into a bitstream, wherein the affine mode
20 indicates a prediction mode that a predicted image is obtained by using an affine model;

a first determining module, configured to determine, in a set of candidate prediction modes for the first to-be-processed image area, a prediction mode for a to-be-processed image unit, wherein the to-be-processed image unit belongs to the first to-be-processed image area;
25

a second determining module, configured to determine a predicted image of the to-be-processed image unit according to the prediction mode; and

a second encoding module, configured to encode second indication information into the bitstream, wherein the second indication information indicates the prediction
30 mode.

8. The apparatus according to claim 7, wherein the first to-be-processed image area comprises one of an image frame group, an image frame, an image tile set, an image slice set, an image tile, an image slice, an image encoding unit set, or an image encoding unit.