CLAIMS

1. A method for predictively encoding a motion vector used in motion compensated prediction of a video sequence consisting of a temporal sequence of frame pictures, comprising:

a step of determining a motion vector of a target partition in a frame picture of an encoding target in the video sequence;

a step of determining a first motion vector predictor candidate that satisfies a predetermined criterion used in determination of motion vector predictor candidates, the first motion vector predictor candidate determined from a motion vector or motion vectors of one or more partitions belonging to a left-neighboring region located on the left side of the target partition;

a step of determining a second motion vector predictor candidate that satisfies a predetermined criterion used for determination of motion vector predictor candidates, the second motion vector predictor candidate determined from a motion vector or motion vectors of one or more partitions belonging to an above-neighboring region located above the target partition;

a step of selecting an optimum motion vector predictor and outputting motion vector predictor indication information to specify the selected optimum motion vector predictor, wherein the optimum motion vector predictor is selected based on comparison between one or more motion vector predictor candidates including the first motion vector predictor candidate and the second motion vector predictor candidate, and the motion vector of the target partition; and

a step of encoding the motion vector predictor indication

information.

2. The method according to claim 1, wherein the step of encoding comprises encoding the motion vector predictor indication information into encoded data of a bit count according to the number of the motion vector predictor candidates.

3. The method according to claim 2, wherein the step of encoding comprises encoding the motion vector predictor indication information into encoded data of a minimum bit count according to the number of the motion vector predictor candidates.

4. The method according to any one of claims 1 to 3, wherein the left-neighboring region includes a neighboring partition located below and on the left side of the target partition.

5. The method according to any one of claims 1 to 4, wherein the above-neighboring region includes a neighboring partition located above and on the right side of the target partition.

6. The method according to any one of claims 1 to 5, wherein either the left-neighboring region or the above-neighboring region includes a neighboring partition located above and on the left side of the target partition.

7. The method according to any one of claims 1 to 6, wherein

the step of determining the first motion vector predictor candidate comprises scanning one or more partitions included in the left-neighboring region, in an upward direction from a bottom of the left-neighboring region, and thereby determining, as the first motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidates, from the motion vector or motion vectors of the one or more partitions belonging to the left-neighboring region.

8. The method according to any one of claims 1 to 7, wherein the step of determining the second motion vector predictor candidate comprises scanning one or more partitions included in the above-neighboring region, in a direction from right to left, and thereby determining, as the second motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidate, from the motion vector or motion vectors of the one or more partitions belonging to the above-neighboring region.

9. The method according to any one of claims 1 to 6, wherein the step of determining the first motion vector predictor candidate comprises determining first scan direction indication information indicative of a direction of scanning of one or more partitions included in the left-neighboring region in order to determine the first motion vector predictor candidate,

wherein the step of determining the second motion vector

predictor candidate comprises determining second scan direction indication information indicative of a direction of scanning of one or more partitions included in the above-neighboring region in order to determine the second motion vector predictor candidate, and

wherein the step of encoding comprises further encoding the first scan direction indication information and the second scan direction indication information.

10. The method according to any one of claims 1 to 9, wherein the number of the one or more motion vector predictor candidates is not more than 3.

11. The method according to any one of claims 1 to 10, wherein, without encoding a residual signal between the motion vector of the target partition and the optimum motion vector predictor, the optimum motion vector predictor is used as the motion vector of the target partition.

12. The method according to any one of claims 1 to 11, wherein a predicted signal of the target partition is generated by referring to a reference frame with a frame number specified by a reference picture list identification and a reference picture identification,

wherein the step of determining the first motion vector predictor candidate comprises determining the first motion vector predictor candidate from motion vectors of partitions in the left-neighboring region having a reference picture list identification and/or a reference

picture identification coincident with the reference picture list identification and/or the reference picture identification for the target partition, and

wherein the step of determining the second motion vector predictor candidate comprises determining the second motion vector predictor candidate from motion vectors of partitions in the above-neighboring region having a reference picture list identification and/or a reference picture identification coincident with the reference picture list identification and/or the reference picture identification for the target partition.

13. A device for predictively encoding a motion vector used in motion compensated prediction of a video sequence consisting of a temporal sequence of frame pictures, comprising:

motion detection means adapted to determine a motion vector of a target partition in a frame picture of an encoding target in the video sequence;

first motion vector predictor candidate determination means adapted to determine a first motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates, the first motion vector predictor candidate determined from a motion vector or motion vectors of one or more partitions belonging to a left-neighboring region located on the left side of the target partition;

second motion vector predictor candidate determination means adapted to determine a second motion vector predictor candidate that

satisfies a predetermined criterion used in determination of motion vector predictor candidates, the second motion vector predictor candidate determined from a motion vector or motion vectors of one or more partitions belonging to an above-neighboring region located above the target partition;

motion vector predictor determination means adapted to select an optimum motion vector predictor and output motion vector predictor indication information to specify the selected optimum motion vector predictor, wherein the optimum motion vector predictor is selected based on comparison between one or more motion vector predictor candidates including the first motion vector predictor candidate and the second motion vector predictor candidate; and

encoding means adapted to encode the motion vector predictor indication information.

14. A program for causing a computer to operate as a device for predictively encoding a motion vector used in motion compensated prediction of a video sequence consisting of a temporal sequence of frame pictures, the program causing the computer to function as:

motion detection means adapted to determine a motion vector of a target partition in a frame picture of an encoding target in the video sequence;

first motion vector predictor candidate determination means adapted to determine a first motion vector predictor candidate that satisfies a predetermined criterion used in determination of motion vector predictor candidates, the first motion vector predictor candidate

determined from a motion vector or motion vectors of one or more partitions belonging to a left-neighboring region located on the left side of the target partition;

second motion vector predictor candidate determination means adapted to determine a second motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates, the second motion vector predictor candidate determined from a motion vector or motion vectors of one or more partitions belonging to an above-neighboring region located above the target partition;

motion vector predictor determination means adapted to select an optimum motion vector predictor and output motion vector predictor indication information to specify the selected optimum motion vector predictor, wherein the optimum motion vector predictor is selected based on comparison between one or more motion vector predictor candidates including at least the first motion vector predictor candidate and the second motion vector predictor candidate, and the motion vector of the target partition; and

encoding means adapted to encode the motion vector predictor indication information.

15. A method for predictively decoding a motion vector used in motion compensated prediction to restore a video sequence consisting of a temporal sequence of frame pictures, comprising:

a step of determining a first motion vector predictor candidate that satisfies a predetermined criterion used in determination of motion

vector predictor candidates, from a motion vector or motion vectors of one or more partitions belonging to a left-neighboring region located on the left side of a target partition in a frame picture of a decoding target;

a step of determining a second motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates, from a motion vector or motion vectors of one or more partitions belonging to an above-neighboring region located above the target partition;

a step of decoding encoded data to restore motion vector predictor indication information specifying an optimum motion vector predictor for the target partition; and

a step of selecting the optimum motion vector predictor specified by the motion vector predictor indication information, from one or more motion vector predictor candidates including at least the first motion vector predictor candidate and the second motion vector predictor candidate.

16. The method according to claim 15, wherein a bit count of the encoded data of the motion vector predictor indication information is a bit count according to the number of the motion vector predictor candidates.

17. The method according to claim 16, wherein the bit count of the encoded data of the motion vector predictor indication information is a minimum bit count according to the number of the motion vector predictor candidates.

18. The method according to any one of claims 15 to 17, wherein the left-neighboring region includes a neighboring partition located below and on the left side of the target partition.

19. The method according to any one of claims 15 to 18, wherein the above-neighboring region includes a neighboring partition located above and on the right side of the target partition.

20. The method according to any one of claims 15 to 19, wherein either the left-neighboring region or the above-neighboring region includes a neighboring partition located above and on the left side of the target partition.

21. The method according to any one of claims 15 to 20, wherein the step of determining the first motion vector predictor candidate comprises scanning one or more partitions included in the left-neighboring region, in an upward direction from a bottom of the left-neighboring region, and thereby determining, as the first motion vector predictor candidate, a motion vector satisfying the predetermined criterion used in determination of motion vector predictor candidates, from the motion vector or motion vectors of the one or more partitions belonging to the left-neighboring region.

22. The method according to any one of claims 15 to 21, wherein the step of determining the second motion vector predictor

candidate comprises scanning one or more partitions included in the above-neighboring region in a direction from right to left, and thereby determining, as the second motion vector predictor candidate, a motion vector satisfying the predetermined criterion used in determination of motion vector predictor candidates, from the motion vector or motion vectors of the one or more partitions belonging to the above-neighboring region.

23. The method according to any one of claims 15 to 20, further comprising:

wherein the step of determining the first motion vector predictor candidate comprises a step of decoding encoded data to restore first scan direction indication information to specify a direction of scanning of one or more partitions included in the left-neighboring region,

wherein the step of determining the second motion vector predictor candidate comprises decoding encoded data to restore second scan direction indication information to specify a direction of scanning of one or more partitions included in the above-neighboring region,

wherein the step of determining the first motion vector predictor candidate comprises: scanning one or more partitions included in the left-neighboring region, in the direction specified by the first scan direction indication information, to determine the first motion vector predictor candidate, and

wherein the step of determining the second motion vector predictor candidate comprises scanning one or more partitions included in the above-neighboring region, in the direction specified by the second

scan direction indication information, to determine the second motion vector predictor candidate.

24. The method according to any one of claims 15 to 23, wherein the number of the one or more motion vector predictor candidates is not more than 3.

25. The method according to any one of claims 15 to 24, wherein the optimum motion vector predictor is used as a motion vector of the target partition.

26. The method according to any one of claims 15 to 25, wherein a predicted signal of the target partition is generated by referring to a reference frame with a frame number specified by a reference picture list identification and a reference picture identification,

wherein the step of determining the first motion vector predictor candidate comprises determining the first motion vector predictor candidate from motion vectors of partitions in the left-neighboring region having a reference picture list identification and/or a reference picture identification coincident with the reference picture list identification and/or the reference picture identification for the target partition, and

wherein the step of determining the second motion vector predictor candidate comprises determining the second motion vector predictor candidate from motion vectors of partitions in the above-neighboring region having a reference picture list identification

and/or a reference picture identification coincident with the reference picture list identification and/or the reference picture identification for the target partition.

27. A device for predictively decoding a motion vector used in motion compensated prediction to restore a video sequence consisting of a temporal sequence of frame pictures, comprising:

first motion vector predictor candidate determination means adapted to determine a first motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates from a motion vector or motion vectors of one or more partitions belonging to a left-neighboring region located on the left side of a target partition in a frame picture of a decoding target;

second motion vector predictor candidate determination means adapted to determine a second motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates from a motion vector or motion vectors of one or more partitions belonging to an above-neighboring region located above the target partition;

decoding means adapted to decode encoded data to restore motion vector predictor indication information specifying an optimum motion vector predictor for the target partition; and

optimum motion vector predictor determination means adapted to select the optimum motion vector predictor specified by the motion vector predictor indication information, from one or more motion vector predictor candidates including at least the first motion vector predictor

candidate and the second motion vector predictor candidate.

28. A program for causing a computer to operate as a device for predictively decoding a motion vector used in motion compensated prediction to restore a video sequence consisting of a temporal sequence of frame pictures, the program causing the computer to function as:

first motion vector predictor candidate determination means adapted to determine a first motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates from a motion vector or motion vectors of one or more partitions belonging to a left-neighboring region located on the left side of a target partition in a frame picture of a decoding target;

second motion vector predictor candidate determination means adapted to determine a second motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates from a motion vector or motion vectors of one or more partitions belonging to an above-neighboring region located above the target partition;

decoding means adapted to decode encoded data to restore motion vector predictor indication information specifying an optimum motion vector predictor for the target partition; and

optimum motion vector predictor determination means adapted to select the optimum motion vector predictor specified by the motion vector predictor indication information, from one or more motion vector predictor candidates including at least the first motion vector predictor candidate and the second motion vector predictor candidate.

CLAIMS

1. A method for predictively encoding a motion vector used in motion compensated prediction of a video sequence consisting of a temporal sequence of frame pictures, comprising:

a step of determining a motion vector of a target partition in a frame picture of an encoding target in the video sequence;

a step of determining a first motion vector predictor candidate that satisfies a predetermined criterion used in determination of motion vector predictor candidates, the first motion vector predictor candidate determined from a motion vector or motion vectors of one or more partitions belonging to a left-neighboring region located on the left side of the target partition;

a step of determining a second motion vector predictor candidate that satisfies a predetermined criterion used for determination of motion vector predictor candidates, the second motion vector predictor candidate determined from a motion vector or motion vectors of one or more partitions belonging to an above-neighboring region located above the target partition;

a step of selecting an optimum motion vector predictor and outputting motion vector predictor indication information to specify the selected optimum motion vector predictor, wherein the optimum motion vector predictor is selected based on comparison between one or more motion vector predictor candidates including the first motion vector predictor candidate and the second motion vector predictor candidate, and the motion vector of the target partition; and

a step of encoding the motion vector predictor indication information,

wherein the left-neighboring region includes a neighboring partition located below and on the left side of the target partition,

wherein the above-neighboring region includes a neighboring partition located above and on the right side of the target partition,

wherein the above-neighboring region includes a neighboring partition located above and on the left side of the target partition,

wherein the step of determining the first motion vector predictor candidate comprises scanning one or more partitions included in the left-neighboring region, in an upward direction from a bottom of the

left-neighboring region, and thereby determining, as the first motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidates, from the motion vector or motion vectors of the one or more partitions belonging to the left-neighboring region, and

wherein the step of determining the second motion vector predictor candidate comprises scanning one or more partitions included in the above-neighboring region, in a direction from right to left, and thereby determining, as the second motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidate, from the motion vector or motion vectors of the one or more partitions belonging to the above-neighboring region.

2. The method according to claim 1, wherein the step of encoding comprises encoding the motion vector predictor indication information into encoded data of a bit count according to the number of the motion vector predictor candidates.

3. The method according to claim 2, wherein the step of encoding comprises encoding the motion vector predictor indication information into encoded data of a minimum bit count according to the number of the motion vector predictor candidates.

4. The method according to any one of claims 1 to 3, wherein the step of determining the first motion vector predictor candidate comprises determining first scan direction indication information indicative of a direction of scanning of one or more partitions included in the left-neighboring region in order to determine the first motion vector predictor candidate,

wherein the step of determining the second motion vector predictor candidate comprises determining second scan direction indication information indicative of a direction of scanning of one or more partitions included in the above-neighboring region in order to determine the second motion vector predictor candidate, and

wherein the step of encoding comprises further encoding the first

scan direction indication information and the second scan direction indication information.

5. The method according to any one of claims 1 to 4, wherein the number of the one or more motion vector predictor candidates is not more than 3.

6. The method according to any one of claims 1 to 5, wherein, without encoding a residual signal between the motion vector of the target partition and the optimum motion vector predictor, the optimum motion vector predictor is used as the motion vector of the target partition.

7. The method according to any one of claims 1 to 6, wherein a predicted signal of the target partition is generated by referring to a reference frame with a frame number specified by a reference picture list identification and a reference picture identification,

wherein the step of determining the first motion vector predictor candidate comprises determining the first motion vector predictor candidate from motion vectors of partitions in the left-neighboring region having a reference picture list identification and/or a reference picture identification coincident with the reference picture list identification and/or the reference picture identification for the target partition, and

wherein the step of determining the second motion vector predictor candidate comprises determining the second motion vector predictor candidate from motion vectors of partitions in the above-neighboring region having a reference picture list identification and/or a reference picture identification coincident with the reference picture list identification and/or the reference picture identification for the target partition.

8. A device for predictively encoding a motion vector used in motion compensated prediction of a video sequence consisting of a temporal sequence of frame pictures, comprising:

motion detection means adapted to determine a motion vector of a target partition in a frame picture of an encoding target in the video sequence;

first motion vector predictor candidate determination means adapted

to determine a first motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates, the first motion vector predictor candidate determined from a motion vector or motion vectors of one or more partitions belonging to a left-neighboring region located on the left side of the target partition;

second motion vector predictor candidate determination means adapted to determine a second motion vector predictor candidate that satisfies a predetermined criterion used in determination of motion vector predictor candidates, the second motion vector predictor candidate determined from a motion vector or motion vectors of one or more partitions belonging to an above-neighboring region located above the target partition;

motion vector predictor determination means adapted to select an optimum motion vector predictor and output motion vector predictor indication information to specify the selected optimum motion vector predictor, wherein the optimum motion vector predictor is selected based on comparison between one or more motion vector predictor candidates including the first motion vector predictor candidate and the second motion vector predictor candidate; and

encoding means adapted to encode the motion vector predictor indication information,

wherein the left-neighboring region includes a neighboring partition located below and on the left side of the target partition,

wherein the above-neighboring region includes a neighboring partition located above and on the right side of the target partition,

wherein the above-neighboring region includes a neighboring partition located above and on the left side of the target partition,

wherein the step of determining the first motion vector predictor candidate comprises scanning one or more partitions included in the left-neighboring region, in an upward direction from a bottom of the left-neighboring region, and thereby determining, as the first motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidates, from the motion vector or motion vectors of the one or more partitions belonging to the left-neighboring region, and

wherein the step of determining the second motion vector predictor

candidate comprises scanning one or more partitions included in the above-neighboring region, in a direction from right to left, and thereby determining, as the second motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidate, from the motion vector or motion vectors of the one or more partitions belonging to the above-neighboring region.

9. A program for causing a computer to operate as a device for predictively encoding a motion vector used in motion compensated prediction of a video sequence consisting of a temporal sequence of frame pictures, the program causing the computer to function as:

motion detection means adapted to determine a motion vector of a target partition in a frame picture of an encoding target in the video sequence;

first motion vector predictor candidate determination means adapted to determine a first motion vector predictor candidate that satisfies a predetermined criterion used in determination of motion vector predictor candidates, the first motion vector predictor candidate determined from a motion vector or motion vectors of one or more partitions belonging to a left-neighboring region located on the left side of the target partition;

second motion vector predictor candidate determination means adapted to determine a second motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates, the second motion vector predictor candidate determined from a motion vector or motion vectors of one or more partitions belonging to an above-neighboring region located above the target partition;

motion vector predictor determination means adapted to select an optimum motion vector predictor and output motion vector predictor indication information to specify the selected optimum motion vector predictor, wherein the optimum motion vector predictor is selected based on comparison between one or more motion vector predictor candidates including at least the first motion vector predictor candidate and the second motion vector predictor candidate, and the motion vector of the target partition; and

encoding means adapted to encode the motion vector predictor

indication information,

wherein the left-neighboring region includes a neighboring partition located below and on the left side of the target partition,

wherein the above-neighboring region includes a neighboring partition located above and on the right side of the target partition,

wherein the above-neighboring region includes a neighboring partition located above and on the left side of the target partition,

wherein the step of determining the first motion vector predictor candidate comprises scanning one or more partitions included in the left-neighboring region, in an upward direction from a bottom of the left-neighboring region, and thereby determining, as the first motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidates, from the motion vector or motion vectors of the one or more partitions belonging to the left-neighboring region, and

wherein the step of determining the second motion vector predictor candidate comprises scanning one or more partitions included in the above-neighboring region, in a direction from right to left, and thereby determining, as the second motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidate, from the motion vector or motion vectors of the one or more partitions belonging to the above-neighboring region.

10. A method for predictively decoding a motion vector used in motion compensated prediction to restore a video sequence consisting of a temporal sequence of frame pictures, comprising:

a step of determining a first motion vector predictor candidate that satisfies a predetermined criterion used in determination of motion vector predictor candidates, from a motion vector or motion vectors of one or more partitions belonging to a left-neighboring region located on the left side of a target partition in a frame picture of a decoding target;

a step of determining a second motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates, from a motion vector or motion vectors of one or more partitions belonging to an above-neighboring region located above

the target partition;

a step of decoding encoded data to restore motion vector predictor indication information specifying an optimum motion vector predictor for the target partition; and

a step of selecting the optimum motion vector predictor specified by the motion vector predictor indication information, from one or more motion vector predictor candidates including at least the first motion vector predictor candidate and the second motion vector predictor candidate,

wherein the left-neighboring region includes a neighboring partition located below and on the left side of the target partition,

wherein the above-neighboring region includes a neighboring partition located above and on the right side of the target partition,

wherein the above-neighboring region includes a neighboring partition located above and on the left side of the target partition,

wherein the step of determining the first motion vector predictor candidate comprises scanning one or more partitions included in the left-neighboring region, in an upward direction from a bottom of the left-neighboring region, and thereby determining, as the first motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidates, from the motion vector or motion vectors of the one or more partitions belonging to the left-neighboring region, and

wherein the step of determining the second motion vector predictor candidate comprises scanning one or more partitions included in the above-neighboring region, in a direction from right to left, and thereby determining, as the second motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidate, from the motion vector or motion vectors of the one or more partitions belonging to the above-neighboring region.

11. The method according to claim 10, wherein a bit count of the encoded data of the motion vector predictor indication information is a bit count according to the number of the motion vector predictor candidates.

12. The method according to claim 11, wherein the bit count of

the encoded data of the motion vector predictor indication information is a minimum bit count according to the number of the motion vector predictor candidates.

13. The method according to any one of claims 10 to 12, further comprising:

wherein the step of determining the first motion vector predictor candidate comprises a step of decoding encoded data to restore first scan direction indication information to specify a direction of scanning of one or more partitions included in the left-neighboring region,

wherein the step of determining the second motion vector predictor candidate comprises decoding encoded data to restore second scan direction indication information to specify a direction of scanning of one or more partitions included in the above-neighboring region,

wherein the step of determining the first motion vector predictor candidate comprises: scanning one or more partitions included in the left-neighboring region, in the direction specified by the first scan direction indication information, to determine the first motion vector predictor candidate, and

wherein the step of determining the second motion vector predictor candidate comprises scanning one or more partitions included in the above-neighboring region, in the direction specified by the second scan direction indication information, to determine the second motion vector predictor candidate.

14. The method according to any one of claims 10 to 13, wherein the number of the one or more motion vector predictor candidates is not more than 3.

15. The method according to any one of claims 10 to 14, wherein the optimum motion vector predictor is used as a motion vector of the target partition.

16. The method according to any one of claims 10 to 15, wherein a predicted signal of the target partition is generated by referring to a reference frame with a frame number specified by a reference picture list

identification and a reference picture identification,

wherein the step of determining the first motion vector predictor candidate comprises determining the first motion vector predictor candidate from motion vectors of partitions in the left-neighboring region having a reference picture list identification and/or a reference picture identification coincident with the reference picture list identification and/or the reference picture identification for the target partition, and

wherein the step of determining the second motion vector predictor candidate comprises determining the second motion vector predictor candidate from motion vectors of partitions in the above-neighboring region having a reference picture list identification and/or a reference picture identification coincident with the reference picture list identification and/or the reference picture identification for the target partition.

17. A device for predictively decoding a motion vector used in motion compensated prediction to restore a video sequence consisting of a temporal sequence of frame pictures, comprising:

first motion vector predictor candidate determination means adapted to determine a first motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates from a motion vector or motion vectors of one or more partitions belonging to a left-neighboring region located on the left side of a target partition in a frame picture of a decoding target;

second motion vector predictor candidate determination means adapted to determine a second motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates from a motion vector or motion vectors of one or more partitions belonging to an above-neighboring region located above the target partition;

decoding means adapted to decode encoded data to restore motion vector predictor indication information specifying an optimum motion vector predictor for the target partition; and

optimum motion vector predictor determination means adapted to select the optimum motion vector predictor specified by the motion vector predictor indication information, from one or more motion vector predictor candidates including at least the first motion vector predictor candidate and

the second motion vector predictor candidate,

wherein the left-neighboring region includes a neighboring partition located below and on the left side of the target partition,

wherein the above-neighboring region includes a neighboring partition located above and on the right side of the target partition,

wherein the above-neighboring region includes a neighboring partition located above and on the left side of the target partition,

wherein the step of determining the first motion vector predictor candidate comprises scanning one or more partitions included in the left-neighboring region, in an upward direction from a bottom of the left-neighboring region, and thereby determining, as the first motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidates, from the motion vector or motion vectors of the one or more partitions belonging to the left-neighboring region, and

wherein the step of determining the second motion vector predictor candidate comprises scanning one or more partitions included in the above-neighboring region, in a direction from right to left, and thereby determining, as the second motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidate, from the motion vector or motion vectors of the one or more partitions belonging to the above-neighboring region.

18. A program for causing a computer to operate as a device for predictively decoding a motion vector used in motion compensated prediction to restore a video sequence consisting of a temporal sequence of frame pictures, the program causing the computer to function as:

first motion vector predictor candidate determination means adapted to determine a first motion vector predictor candidate satisfying a predetermined criterion used in determination of motion vector predictor candidates from a motion vector or motion vectors of one or more partitions belonging to a left-neighboring region located on the left side of a target partition in a frame picture of a decoding target;

second motion vector predictor candidate determination means adapted to determine a second motion vector predictor candidate satisfying

a predetermined criterion used in determination of motion vector predictor candidates from a motion vector or motion vectors of one or more partitions belonging to an above-neighboring region located above the target partition;

decoding means adapted to decode encoded data to restore motion vector predictor indication information specifying an optimum motion vector predictor for the target partition; and

optimum motion vector predictor determination means adapted to select the optimum motion vector predictor specified by the motion vector predictor indication information, from one or more motion vector predictor candidates including at least the first motion vector predictor candidate and the second motion vector predictor candidate,

wherein the left-neighboring region includes a neighboring partition located below and on the left side of the target partition,

wherein the above-neighboring region includes a neighboring partition located above and on the right side of the target partition,

wherein the above-neighboring region includes a neighboring partition located above and on the left side of the target partition,

wherein the step of determining the first motion vector predictor candidate comprises scanning one or more partitions included in the left-neighboring region, in an upward direction from a bottom of the left-neighboring region, and thereby determining, as the first motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidates, from the motion vector or motion vectors of the one or more partitions belonging to the left-neighboring region, and

wherein the step of determining the second motion vector predictor candidate comprises scanning one or more partitions included in the above-neighboring region, in a direction from right to left, and thereby determining, as the second motion vector predictor candidate, a motion vector satisfying the predetermined criterion used for determination of motion vector predictor candidate, from the motion vector or motion vectors of the one or more partitions belonging to the above-neighboring region.