Claims

1. A method for decoding a picture block from a multi-layered stream comprising a first layer and a second layer, the method comprising:

- decoding (10) from said second layer at least one stream (S_diff) into decoded data and into one information for identifying a reconstructed reference picture in a decoder picture buffer of said first layer;
- reconstructing (12) a special reference picture from said identified reconstructed reference picture and from said decoded data and storing said special reference picture in a decoder picture buffer of said second layer, wherein said reconstructed special reference picture is indicated as not to be displayed;
- decoding a flag indicating that the subsequently decoded pictures of the second layer are not using any inter-layer prediction; and
- reconstructing (16) a picture block of one of said subsequently decoded pictures at least from said special reference picture.

2. The method according to claim 1, wherein said at least one stream (S_diff) encodes the pixel by pixel difference between two reconstructed reference pictures.

3. The method according to claim 1 or 2, wherein the first layer is a base layer.

4. A method for encoding a picture block in a multi-layered stream comprising a first layer and a second layer, the method comprising:

- encoding (20) said picture block from at least one reconstructed reference picture; and
- encoding (24) in said second layer said at least one reconstructed reference picture as a special reference picture from another reconstructed reference picture stored in a decoder picture buffer of said first layer and an information for identifying said another reconstructed reference picture in said decoder picture buffer of said first layer, wherein said special reference picture is indicated as not to be displayed when reconstructed; and

- encoding in said second layer a flag indicating that the subsequently encoded pictures of the second layer are not using any inter-layer prediction.

5. The method according to claim 4, wherein encoding in said second layer at least one reconstructed reference picture as a special reference picture comprises determining the pixel by pixel difference between said at least one reconstructed reference picture and said another reconstructed reference picture and encoding said pixel by pixel difference.

6. The method according to claim 4 or 5, wherein the first layer is a base layer.

7. A decoding device for decoding a picture block from a multi-layered stream comprising a first layer and a second layer, the decoding device comprising:

- means for decoding (DEC2) from said second layer at least one stream (S_diff) into decoded data and into one information for identifying a reconstructed reference picture in a decoder picture buffer of said first layer;
- means for reconstructing (DEC2) a special reference picture from said identified reconstructed reference picture and from said decoded data and storing said special reference picture in a decoder picture buffer of said second layer, wherein said reconstructed special reference picture is indicated as not to be displayed;
- means for decoding a flag indicating that the subsequently decoded pictures of the second layer are not using any inter-layer prediction; and
- means for reconstructing (DEC0, DEC1) a picture block of one of said subsequently decoded pictures at least from said special reference picture.

8. The decoding device according to claim 7, wherein said device is configured to execute the steps of the decoding method according to any of claims 1 to 3.

9. A coding device for encoding a picture block in a multi-layered stream comprising a first layer and a second layer, the coding device comprising:

- means for encoding said picture block from at least one reconstructed reference picture; and
- means for encoding in said second layer said at least one reconstructed reference picture as a special reference picture from another reconstructed reference picture stored in a decoder picture buffer of said first layer and an information for identifying said another reconstructed reference picture in said decoder picture buffer of said first layer, wherein said special reference picture is indicated as not to be displayed when reconstructed; and
- means for encoding in said second layer a flag indicating that the subsequently encoded pictures of the second layer are not using any inter-layer prediction.

10. The coding device according to claim 9, wherein said device is configured to execute the steps of the encoding method according to any of claims 4 to 6.

11. A decoding device for decoding a picture block from a multi-layered stream comprising a first layer and a second layer, said decoding device comprising at least a processor configured to:

- decode from said second layer at least one stream (S_diff) into decoded data and into one information for identifying a reconstructed reference picture in a decoder picture buffer of said first layer;
- reconstruct a special reference picture from said identified reconstructed reference picture and from said decoded data and storing said special reference picture in a decoder picture buffer of said second layer, wherein said reconstructed special reference picture is indicated as not to be displayed;
- decode a flag indicating that the subsequently decoded pictures of the second layer are not using any inter-layer prediction; and
- reconstruct a picture block of one of said subsequently decoded pictures at least from said special reference picture.

12. A coding device for encoding a picture block in a multi-layered stream comprising a first layer and a second layer, said coding device comprising at least a processor configured to:

- encode said picture block from at least one reconstructed reference picture; and

- encode in said second layer said at least one reconstructed reference picture as a special reference picture from another reconstructed reference picture stored in a decoder picture buffer of said first layer and an information for identifying said another reconstructed reference picture in said decoder picture buffer of said first layer, wherein said special reference picture is indicated as not to be displayed when reconstructed; and

- encode in said second layer a flag indicating that the subsequently encoded pictures of the second layer are not using any inter-layer prediction.

Claims

1. A method comprising:

- reconstructing a reference picture from another reference picture of a decoder picture buffer of a first layer of a multi-layered stream and from data decoded from a second layer of said multi-layered stream and storing said reference picture in a decoder picture buffer of said second layer, wherein said reference picture is indicated as not to be displayed;
- decoding a flag indicating that a subsequently decoded picture of the second layer is not using any inter-layer prediction; and
- reconstructing (16) a picture block of said subsequently decoded picture at least from said reference picture.

2. The method of claim 1 further comprising:

decoding from said second layer information for identifying said another reference picture.

3. The method according to claim 1 or 2, wherein said data decoded from said second layer are representative of a pixel by pixel difference between said reference picture and said another reference picture.

4. The method according to any of claims 1 to 3, wherein the first layer is a base layer.

5. The method according to any of claims 1 to 4, wherein said reference picture and said another reference picture are temporally aligned.

6. A method comprising:

- encoding in a second layer of a multi-layered stream a reference picture of a decoder picture buffer of said second layer from another reference picture of a decoder picture buffer of a first layer of said multi-layered stream, wherein said reference picture is indicated as not to be displayed;

- encoding a flag indicating that a subsequently encoded picture of said second layer is not using any inter-layer prediction;
- encoding a picture block of said subsequently encoded picture at least from said reference picture.

7. The method of claim 6 further comprising:
encoding in said second layer information for identifying said another reference picture.

8. The method according to claim 6 or 7, wherein encoding in said second layer said reference picture comprises determining the pixel by pixel difference between said reference picture and said another reference picture and encoding said pixel by pixel difference.

9. The method according to any of claims 6 to 8, wherein the first layer is a base layer.

10. The method according to any of claims 6 to 9, wherein said reference picture and said another reference picture are temporally aligned.

11. A decoder comprising:
- means for reconstructing a reference picture from another reference picture of a decoder picture buffer of a first layer of a multi-layered stream and from data decoded from a second layer of said multi-layered stream and for storing said reference picture in a decoder picture buffer of said second layer, wherein said reference picture is indicated as not to be displayed;
- means for decoding a flag indicating that a subsequently decoded picture of the second layer is not using any inter-layer prediction; and
- means for reconstructing a picture block of said subsequently decoded picture at least from said reference picture.

12. The decoder of claim 11 further comprising:

means for decoding from said second layer information for identifying said another reference picture.

13. The decoder according to claim 11 or 12, wherein said data decoded from said second layer are representative of a pixel by pixel difference between said reference picture and said another reference picture.

14. The decoder according to any of claims 11 to 13, wherein the first layer is a base layer.

15. The decoder according to any of claims 11 to 14, wherein said reference picture and said another reference picture are temporally aligned.

16. An encoder comprising:

- means for encoding in a second layer of a multi-layered stream a reference picture of a decoder picture buffer of said second layer from another reference picture of a decoder picture buffer of a first layer of said multi-layered stream, wherein said reference picture is indicated as not to be displayed;
- means for encoding a flag indicating that a subsequently encoded picture of said second layer is not using any inter-layer prediction;
- means for encoding a picture block of said subsequently encoded picture at least from said reference picture.

17. The encoder of claim 16 further comprising:
means for encoding in said second layer information for identifying said another reference picture.

18. The encoder according to claim 16 or 17, wherein encoding in said second layer said reference picture comprises determining the pixel by pixel difference between said reference picture and said another reference picture and encoding said pixel by pixel difference.

19. The encoder according to any of claims 16 to 18, wherein the first layer is a base layer.

20. The encoder according to any of claims 16 to 19, wherein said reference picture and said another reference picture are temporally aligned.