DESCRIPTION

Title of Invention: RECORDING MEDIUM, PLAYBACK METHOD, AND PLAYBACK DEVICE

Technical Field

[0001]

The present disclosure relates to a recording medium in which is recorded an encoded video stream, a playback method of the video stream, and a playback device.

Background Art

[0002]

Technology relating to DVDs has conventionally been disclosed (e.g., PTL 1).

Citation List

Patent Literature

[0003]

PTL 1: Japanese Unexamined Patent Application Publication No. 9-282848

Summary of

[0004] According to an aspect, a playback device that reads out and plays content from a non-transitory recording medium in which are recorded a video stream that is encoded video information, and map information, wherein the map information includes playback start time information of a picture (PTS) that is included in the video stream and is independently decodable,start position information (I_start) indicating a data start position of the picture, andsize information (I_end) indicating a data size of a section where the picture is recorded, based on a predetermined stipulated data size,the playback device comprising:a reader that reads out the map information;a determiner that determines the stipulated data size indicated by the size information included in the map information that has been read out;an acquirer that acquires the picture from the video stream based on the result of the determination, and the start position information and the size information included in the map information that has been read out;a video player that decodes and plays the acquired picture; wherein the stipulated data size of 4K resolution of the video stream is larger than the stipulated data size of 2K resolution of the video stream. According to an aspect, a playback method of reading out and playing content from a non-transitory recording medium in which are recorded a video stream that is encoded video information, and map information, wherein the map information includes playback start time information of a picture (PTS) that is included in the video stream and is independently decodable, start position information (I_start) indicating a data start position of the picture, and size information (I_end) indicating a data size of a section where the picture is recorded, based on a predetermined stipulated data size, the playback method comprising: reading out the map information; determining the stipulated data size indicated by the size information included in the map information that has been read out; acquiring the picture from the video stream based on the result of the determination, and the start position information and the size information included in the map information that has been read out; and decoding and playing the acquired picture, wherein the stipulated data size of 4K resolution of the video stream is

larger than the stipulated data size of 2K resolution of the video stream. According to an aspect, a playback device that reads out and plays content from a non-transitory recording medium in which are recorded a multiplexed digital stream that includes an encoded video information, and map information, wherein the map information includes playback start time information of a picture that is included in the encoded video stream and is independently decodable, start position information indicating a data start position of the picture in the multiplexed digital stream, and size information (I_MUX_SIZE) indicating a data size of the picture in the multiplexed digital stream is recorded based on a predetermined stipulated data size, and the playback device comprising: a reader that reads out the map information; a determiner that determines the stipulated data size indicated by the size information included in the map information that has been read out; an acquirer that acquires the picture from the video stream based on the result of the determination, and the start position information and the size information included in the map information that has been read out; and a video player that decodes and plays the acquired picture, wherein the stipulated data size of 4K resolution of the video stream is larger than the stipulated data size of 2K resolution of the video stream. According to an aspect, a playback method of reading out and playing content from a non-transitory recording medium in which are recorded a multiplexed digital stream that includes an encoded video information, and map information,wherein the map information includes playback start time information of a picture that is included in the encoded video stream and is independently decodable, start position information indicating a data start position of the picture in the multiplexed digital stream, and size information (I_MUX_SIZE) indicating a data size of the picture in the multiplexed digital stream is recorded based on a predetermined stipulated data size, the playback method comprising:reading out the map information;determining the stipulated data size indicated by the size information included in the map information that has been read out;acquiring the picture from the video stream based on the result of the determination, and the start position information and the size information included in the map information that has been read out; and decoding and playing the acquired picture,wherein the stipulated data size of 4K resolution of the video stream is larger than the stipulated data size of 2K resolution of the video stream. Recorded in a recording medium according to the present disclosure is a video stream that is encoded video information, map information, and bitrate information of the video stream. The map information includes playback start time information of a picture that is included in the video stream and is independently decodable, start position information indicating a data start position of the picture in the video stream, and size information indicating data size of a section where the picture is recorded in the video stream, based on a predetermined stipulated data size. The stipulated data size differs in accordance with the bitrate information.

[0005]

According to the above aspect, further improvement can be realized.

Brief Description of Drawings

[0006]

[Fig. 1] Fig. 1 is a diagram illustrating an SD-DVD structure.

[Fig. 2] Fig. 2 is a schematic diagram for describing navigation information embedded in an MPEG stream, which is AV data.

CLAIMS

1. A playback device that reads out and plays content from a non-transitory recording medium in which are recorded a video stream that is encoded video information, and map information,
wherein the map information includes
playback start time information of a picture (PTS) that is included in the video stream and is independently decodable,
start position information (I_start) indicating a data start position of the picture, and
size information (I_end) indicating a data size of a section where the picture is recorded, based on a predetermined stipulated data size,
the playback device comprising:
a reader that reads out the map information;
a determiner that determines the stipulated data size indicated by the size information included in the map information that has been read out;
an acquirer that acquires the picture from the video stream based on the result of the determination, and the start position information and the size information included in the map information that has been read out;
a video player that decodes and plays the acquired picture;
wherein the stipulated data size of 4K resolution of the video stream is larger than the stipulated data size of 2K resolution of the video stream.

2. A playback method of reading out and playing content from a non-transitory recording medium in which are recorded a video stream that is encoded video information, and map information,
wherein the map information includes
playback start time information of a picture (PTS) that is included in the video stream and is independently decodable, start position information (I_start) indicating a data start position of the picture, and
size information (I_end) indicating a data size of a section where the picture is recorded, based on a predetermined stipulated data size, the playback method comprising:
reading out the map information;
determining the stipulated data size indicated by the size information included in the map information that has been read out;
acquiring the picture from the video stream based on the result of the determination, and the start position information and the size information included in the map information that has been read out; and
decoding and playing the acquired picture,
wherein the stipulated data size of 4K resolution of the video stream is larger than the stipulated data size of 2K resolution of the video stream.

3. A playback device that reads out and plays content from a non-transitory recording medium in which are recorded a multiplexed digital stream that includes an encoded video information, and map information,
wherein the map information includes playback start time information of a picture that is included in the encoded video stream and is independently decodable, start position information indicating a data start position of the picture in the multiplexed digital stream, and size information (I_MUX_SIZE) indicating a data size of the picture in the multiplexed digital stream is recorded based on a predetermined stipulated data size, and the playback device comprising:
a reader that reads out the map information;

a determiner that determines the stipulated data size indicated by the size information included in the map information that has been read out;
an acquirer that acquires the picture from the video stream based on the result of the determination, and the start position information and the size information included in the map information that has been read out; and
a video player that decodes and plays the acquired picture,
wherein the stipulated data size of 4K resolution of the video stream is larger than the stipulated data size of 2K resolution of the video stream.

4. A playback method of reading out and playing content from a non-transitory recording medium in which are recorded a multiplexed digital stream that includes an encoded video information, and map information,
wherein the map information includes playback start time information of a picture that is included in the encoded video stream and is independently decodable, start position information indicating a data start position of the picture in the multiplexed digital stream, and size information (I_MUX_SIZE) indicating a data size of the picture in the multiplexed digital stream is recorded based on a predetermined stipulated data size,
the playback method comprising:
reading out the map information;
determining the stipulated data size indicated by the size information included in the map information that has been read out;
acquiring the picture from the video stream based on the result of the determination, and the start position information and the size information included in the map information that has been read out; and
decoding and playing the acquired picture,
wherein the stipulated data size of 4K resolution of the video stream is larger than the stipulated data size of 2K resolution of the video stream.