play back 3D image content. Moreover, it is necessary to specify how to record and play back 3D content so that compatibility is maintained and at least 2D images can be played back by existing players for 2D playback.

[0009]

Embodiments of t~~T~~he present invention~~, which has been achieved with consideration of such a situation,~~ enable~~s~~ 3D image content to be appropriately played back from a recording medium such as a BD or the like.

Solution to Problem

[0009a]

According to a first aspect, there is provided a reproduction apparatus comprising: a reading unit which reads a PlayList file from a recording medium and reads a transport stream from the recording medium, the PlayList file being configured such that information for controlling reproduction of a basic stream and an expanded stream which have been obtained by encoding video streams captured from a plurality of viewing points using H.264 AVC/MVC, namely information on a play item configuring a main reproduction path with reference to a transport stream obtained *by* multiplexing the basic stream and the expanded stream and a PID of a transport packet of the basic stream are described in a play item field as a field inside a playlist field and type information, for which a value indicating that the expanded stream is included in the transport stream is set, and a PID of a transport packet of the expanded stream are described in an expanded field as a field outside the playlist field; a separation unit which separates the

transport packet of the basic stream from the transport stream based on the PID descried in the play item field of the PlayList file and separates the transport packet of the expanded stream from the transport stream which includes the expanded stream according to the value set for the type information based on the PID described in the expanded field; and a decoding unit which decodes the separated transport packet of the basic stream and the separated transport packet of the expanded stream.

[0009b]

According to a second aspect, there is provided a reproduction method comprising the steps of: reading a PlayList file from a recording, medium and reading a transport stream from the recording medium, the PlayList file being configured such that information for controlling reproduction of a basic stream and an expanded stream which have been obtained by encoding video streams captured from a plurality of viewing points using H.264 AVC/MVC, namely information on a play item configuring a main reproduction path with reference to a transport stream obtained by multiplexing the basic stream and the expanded stream and a PID of a transport packet of the basic stream are described in a play item field as a field inside a playlist field and type information, for which a value indicating that the expanded stream is included in the transport stream is set, and a PID of a transport packet of the expanded stream are described in an expanded field as a field outside the playlist field; separating the transport packet of the basic stream from the transport stream based on the PID descried in the play item field of the PlayList file; separating

the transport packet of the expanded stream from the transport stream which includes the expanded stream according to the value set for the type information based on the PID described in the expanded field; and decoding the separated transport packet of the basic stream and the separated transport packet of the expanded stream.

[0009c]

According to a third aspect, there is provided a recording method comprising the steps of: creating a transport stream which is obtained by multiplexing a basic stream and an expanded stream obtained by encoding video streams captured from a plurality of viewing points using H.264 AVC/MVC and a PlayList file in which information for controlling reproduction of the basic stream and the expanded stream, namely information on a play item configuring a main reproduction path with reference to the transport stream and a PID of a transport packet of the basic stream are described in a play item field as a field inside the playlist field, and type information, for which a value indicating that the expanded stream is included in the transport stream is set, and a PID of a transport packet of the expanded stream are described in an expanded field as field outside the playlist field; and recording the created transport stream and the PlayList field in a recording medium.

[0010]

Disclosed herein is ~~An~~an information processing apparatus that~~according to an aspect of the present invention~~ includes setting means that sets information for specifying a sub

playback path that refers to an extended stream and information for specifying a PID of a transport packet of the extended stream by using a first field and a second field, the extended stream and a basic stream being generated by encoding a video stream using a predetermined encoding method, the first and second fields being defined in an extended field of a PlayList that is information for controlling playback of content, the first field being a field in which information regarding a sub playback path is described, the second field being a field in which information regarding a stream number is described.

[0011]

The basic stream and the extended stream are respectively a Base view video stream and a Dependent view video stream that are generated by encoding a video stream using H.264 AVC/MVC encoding method, and the setting means may set in the first field, as information for specifying the sub playback path, information representing that a type of the sub playback path is a path that refers to the Dependent view video stream and a filename of a file for clip information that is attribute information regarding the Dependent view video stream.

[0012]

The basic stream and the extended stream are respectively a Base view video stream and a Dependent view video stream that are generated by encoding a video stream using H.264 AVC/MVC encoding method, and the setting means may set in the second field an ID of the sub playback path as information for specifying the sub playback path and a PID of a transport packet of the Dependent view video stream.

[0013]

Disclosed herein is an~~An~~ information processing method ~~according to an aspect of the present invention~~that includes the step of setting information for specifying a sub playback path that refers to an extended stream and information for specifying a PID of a transport packet of the extended stream by using a

first field and a second field, the extended stream and a basic stream being generated by encoding a video stream using a predetermined encoding method, the first and second fields being defined in an extended field of a PlayList that is information for controlling playback of content, the first field being a field in which information regarding a sub playback path is described, the second field being a field in which information regarding a stream number is described.

[0014]

Disclosed herein is a~~A~~ program ~~according to an aspect of the present invention~~that causes a computer to execute the processing including the step of setting information for specifying a sub playback path that refers to an extended stream and information for specifying a PID of a transport packet of the extended stream by using a first field and a second field, the extended stream and a basic stream being generated by encoding a video stream using a predetermined encoding method, the first and second fields being defined in an extended field of a PlayList that is information for controlling playback of content, the first field being a field in which information regarding a sub playback path is described, the second field being a field in which information regarding a stream number is described.

[0015]

Disclosed herein is aA playback apparatus ~~according to another aspect of the present invention~~that includes control means that controls playback of an extended stream on the basis of information for specifying a sub playback path that refers to the extended stream and information for specifying a PID of a transport packet of the extended stream, the extended stream and a basic stream being generated by encoding a video stream using a predetermined encoding method, the information for specifying the sub playback path and the information for specifying the PID being set in a first field and a second field, the first and second fields being defined in an extended field of a PlayList that is information for controlling playback of content, the first field being a field in which information regarding a sub playback path is described, the second field being a field in which information regarding a stream number is described.

[0016]

The basic stream and the extended stream are respectively a Base view video stream and a Dependent view video stream that are generated by encoding a video stream using H.264 AVC/MVC encoding method, and the control means may control playback of the Dependent view video while controlling playback of the Base view video stream on the basis of information that specifies a main playback path that refers to the Base view video stream and the PID of a

transport packet of the Base view video stream, the information being set in a field in the PlayList, the field being a field in which information regarding the main playback path is described.

[0017]

Disclosed herein is a~~A~~ playback method ~~according to another aspect of the present invention~~that includes the step of controlling playback of an extended stream on the basis of information for specifying a sub playback path that refers to the extended stream and information for specifying a PID of a transport packet of the extended stream, the extended stream and a basic stream being generated by encoding a video stream using a predetermined encoding method, the information for specifying a sub playback path and the information for specifying the PID being set in a first field and a second field, the first and second fields being defined in an extended field of a PlayList that is information for controlling playback of content, the first field being a field in which information regarding a sub playback path is described, the second field being a field in which information regarding a stream number is described.

[0018]

Disclosed herein is a~~A~~ program ~~according to another aspect of the present invention~~that causes a computer to perform processing including the step of controlling playback of an extended stream on

the basis of information for specifying a sub playback path that refers to the extended stream and information for specifying a PID of a transport packet of the extended stream, the extended stream and a basic stream being generated by encoding a video stream using a predetermined encoding method, the information for specifying the sub playback path and the information for specifying the PID being set in a first field and a second field, the first and second fields being defined in an extended field of a PlayList that is information for controlling playback of content, the first field being a field in which information regarding the sub playback path is described, the second field being a field in which information regarding a stream number is described.

[0019]

According to an embodiment~~aspect~~ of the present invention, information for specifying a sub playback path that refers to an extended stream and information for specifying a PID of a transport packet of the extended stream are set by using a first field and a second field, the extended stream and a basic stream being generated by encoding a video stream using a predetermined encoding method, the first and second fields being defined in an extended field of a PlayList that is information for controlling playback of content, the first field being a field in which information

regarding a sub playback path is described, the second field being a field in which information regarding a stream number is described.

[0020]

According to another embodiment~~aspect~~ of the present invention, playback of an extended stream is controlled on the basis of information for specifying a sub playback path that refers to the extended stream and information for specifying a PID of a transport packet of the extended stream, the extended stream and a basic stream being generated by encoding a video stream using a predetermined encoding method, the information for specifying the sub playback path and the information for specifying the PID being set in a first field and a second field, the first and second fields being defined in an extended field of a PlayList that is information for controlling playback of content, the first field being a field in which information regarding a sub playback path is described, the second field being a field in which information regarding a stream number is described.

Advantageous Effects of Invention

[0021]

With the embodiments of the present invention, 3D image content can be appropriately played back.

Brief Description of Drawings

[0022]