[0007] In view of the above-described circumstances, it is desirable to handle sound data appropriately.

Solution to Problem

[0008]According to a first aspect of the present invention, there is provided a first information processing apparatus, including: circuitry configured to: receive a first image signal and a first sound signal from a second information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS); receive a second image signal and sound signal from a third information processing apparatus; transmit first control information to the second information processing apparatus, wherein the first control information indicates a reduction of an amount of the first sound signal; transmit second control information to the third information processing apparatus, wherein the second control information indicates a reduction of an amount of the second sound signal; control at least one of the second information processing apparatus or the third information processing apparatus to stop output of data in at least one of a plurality of packetized elementary stream (PES) payloads, wherein the output of the data is stopped based on at least one of the first control information or the second control information, each of a plurality of PES packets includes a corresponding PES payload of the plurality of PES payloads, each of the plurality of PES payloads is in a corresponding TS packet of a plurality of TS packets, each of the plurality of TS packets is specified by a corresponding packet identifier (PID) of a plurality packet identifiers (PIDs), and each of the plurality of PIDs specifies at least one of the first sound signal or the second sound signal in a program map table (PMT); and extract a presentation time stamp (PTS) included in a PES header portion of each of the plurality of PES packets.

[0009] In the first aspect, the controller may make the request to the another information processing apparatus based on a first trigger. In this manner, an embodiment of the present disclosure exerts an effect of making a request to another information processing apparatus based on the first trigger.

[0010] In the first aspect, the controller may specify, when making the request to the another information processing apparatus, one of the first sound data reduction method in which the MPEG2-TS multiplex signal containing the PES packet carrying sound data is generated and transmitted and a second sound data reduction method in which the MPEG2-TS multiplex signal not containing the PES packet carrying sound data is generated and transmitted. In this manner, an embodiment of the present disclosure exerts an effect of specifying, when making a request to another information processing apparatus, one of the first sound data reduction method in which an MPEG2-TS multiplex signal containing a PES packet carrying sound data is generated and transmitted and the second sound data reduction method in which an MPEG2-TS multiplex signal not containing a PES packet carrying sound data is generated and transmitted.

[0011] In the first aspect, the controller may perform control to extract sound data contained in the PES payload when requesting the another information processing apparatus to restore an original sound data amount based on a second trigger while receiving the MPEG2-TS multiplex signal in which the sound data amount is reduced and performing demultiplexing on the MPEG2-TS multiplex signal received from the another information processing apparatus after the request. In this manner, an embodiment of the present disclosure exerts an effect of extracting sound data contained in a PES payload when requesting another

information processing apparatus to restore an original sound data amount based on the second trigger while receiving an MPEG2-TS multiplex signal in which a sound data amount is reduced and performing demultiplexing on an MPEG2-TS multiplex signal received from another information processing apparatus after the request.
[0012] In the first aspect, the first trigger and the second trigger may be caused by user operation. In this manner, an embodiment of the present disclosure exerts an effect of using the first trigger and the second trigger caused by user operation.
[0013] In the first aspect, the first trigger may be caused by detection of a user exiting around the information processing apparatus or movement of the user. In this manner, an embodiment of the present disclosure exerts an effect of using the first trigger caused by detection of a user existing around an information processing apparatus or the movement of the user.
[0014] In the first aspect, the controller may retain a sound volume setting value of sound output before the request is made, requests the another information processing apparatus to restore an original sound data amount, and sets the retained sound volume setting value at timing when sound data contained in the PES payload is extracted after the request. In this manner, an embodiment of the present disclosure exerts an effect of retaining a sound volume setting value of sound output before a request is made, requesting another information processing apparatus to restore an original sound data amount, and setting the retained sound volume setting value at timing when sound data contained in a PES payload is extracted after the request.
[0015] According to a second aspect of the present invention, there is provided a first information processing apparatus, including: circuitry configured to: transmit an image signal and a sound signal to a second information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS); receive first control information from the second information processing apparatus; step output of data in a packetized elementary stream (PES) payload, wherein the output of the data is stopped based on the received first control information, a first PES packet includes the PES payload, a TS packet includes the first PES packet, the TS packet is specified by a packet identifier (PID), the PID specifies the transmitted sound signal in a program map table (PMT), and the PID is independent of the output of the data in the PES payload; multiplex the first PES packet and a second PES packet to generate a first multiplexed PES packet, wherein the second PES packet includes the image signal; and transmit the first multiplexed PES packet to the second information processing apparatus.
[0016] In the second aspect, the controller may perform control to reduce a data amount, when requested to reduce a sound data amount from the another information processing apparatus, by making the PES payload data amount to substantially zero or completely zero. In this manner, an embodiment of the present disclosure exerts an effect of reducing a data amount, when requested to reduce a sound data amount from another information processing apparatus, by making a PES payload data amount to substantially zero or completely zero.
[0017] In the second aspect, the controller may perform control to store, when requested to restore an original sound data amount from the another information processing apparatus while transmitting the PES packet for sound signal transmission in which the data amount is reduced by the first sound data reduction and the PES packet for image signal transmission after multiplexing, normal sound data in the PES payload, and to multiplex and transmit the PES packet for sound signal transmission and the PES packet for image signal

transmission. In this manner, an embodiment of the present disclosure exerts an effect of storing, when requested to restore an original sound data amount from another information processing apparatus while transmitting a PES packet for sound signal transmission in which the data amount is reduced by the first sound data reduction and a PES packet for image signal transmission after multiplexing them, normal sound data in a PES payload, and multiplexing and transmitting the PES packet for sound signal transmission and the PES packet for image signal transmission.

[0018] In the second aspect, the controller may perform control to perform, when requested to use sound data reduction other than the first sound data reduction to reduce a sound data amount from the another information processing apparatus, second sound data reduction in which the PES packet carrying sound data is not generated without including information of the PID specifying sound data in the PMT, and to transmit a PES packet for image signal transmission without multiplexing a PES packet for sound signal transmission. In this manner, an embodiment of the present disclosure exerts an effect of performing, when requested to use sound data reduction other than the first sound data reduction to reduce a sound data amount from another information processing apparatus, the second sound data reduction in which a PES packet carrying sound data is not generated without including information of a PID specifying sound data in a PMT, and transmitting a PES packet for image signal transmission without multiplexing a PES packet for sound signal transmission.

[0019] In the second aspect, the controller may perform control to store, when requested to restore an original sound data amount from the another information processing apparatus while transmitting the PES packet for image signal transmission without multiplexing the PES packet for sound signal transmission after the second sound data reduction is performed, normal sound data in the PES payload with the PID specifying sound data transmission included in the PMT, and to multiplex and transmit the PES packet for sound signal transmission and the PES packet for image signal transmission. In this manner, an embodiment of the present disclosure exerts an effect of storing, when requested to restore an original sound data amount from another information processing apparatus while transmitting a PES packet for image signal transmission without multiplexing a PES packet for sound signal transmission after the second sound data reduction is performed, normal sound data in a PES payload with a PID specifying sound data transmission included in a PMT, and multiplexing and transmitting a PES packet for sound signal transmission and a PES packet for image signal transmission.

[0020] Disclosed herein is a communication system including: a first information processing apparatus configured to wirelessly transmit a multiplexed image signal and sound signal to a second information processing apparatus using an MPEG2-TS, reduce a PES payload data amount in a PES packet stored in a TS packet specified by a PID specifying sound data transmission described in a PMT, based on a request from the second information processing apparatus, without changing the PID, to perform first sound data reduction in which a PES packet containing a PTS in a PES header portion is generated, and to multiplex and transmit the PES packet for sound signal transmission in which the data amount is reduced and the PES packet for image signal transmission; and a second information processing apparatus configured to discard data contained in the PES payload in the PES packet stored in the TS packet specified by the PID specifying sound data transmission described in the PMT and to extract the PTS contained in the PES header

portion, when requesting the first information processing apparatus to reduce a sound data amount while receiving the multiplexed image signal and sound signal from the first information processing apparatus using the MPEG2-TS and performing demultiplexing on an MPEG2-TS multiplex signal received from the first information processing apparatus after the request. In this manner, an embodiment of the present disclosure exerts an effect that the first information processing apparatus reduces a PES payload data amount in a PES packet stored in a TS packet specified by a PID specifying sound data transmission described in a PMT, based on a request from the second information processing apparatus,

without changing the PID, performs the first sound data reduction in which a PES packet containing a PTS in a PES header portion is generated, and multiplexes and transmits a PES packet for sound signal transmission in which the data amount is reduced and a PES packet for image signal transmission, and the second information processing apparatus discards data contained in a PES payload in a PES packet stored in a TS packet specified by a PID specifying sound data transmission described in a PMT and extracts a PTS contained in a PES header portion, when requesting the first information processing apparatus to reduce a sound data amount and performing demultiplexing on an MPEG2-TS multiplex signal received from the first information processing apparatus after the request.

[0020a] According to a third aspect of the present invention, there is provided a communication system including: a first information processing apparatus comprising first circuitry configured to: transmit an image signal and a sound signal to a second information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS);receive control information from the second information processing apparatus; stop output of data in a packetized elementary stream (PES) payload, wherein the output of the data is stopped based on the received control information, a first PES packet includes the PES payload, a TS packet includes the first PES packet, the TS packet is specified by a packet identifier (PID), the PID specifies the transmitted sound signal in a program map table (PMT), and the PID is independent of the output of the data in the PES payload; multiplex the first PES packet and a second PES packet to generate a first multiplexed PES packet, wherein the second PES packet includes the image signal; and transmit the first multiplexed PES packet to the second information processing apparatus; and the second information processing apparatus comprising second circuitry configured to: transmit the control information to the first information processing apparatus to reduce an amount of the sound signal; and control the first information processing apparatus to stop the output of the data in the PES payload, wherein the output of the data is stopped based on the control information.

[0020b] According to a fourth aspect of the present invention, there is provided a information processing method, including: in a first information processing apparatus: a first image signal and a first sound signal from a first information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS); receiving a second image signal and a second sound signal from a third information processing apparatus; transmitting first control information to the second information processing apparatus, wherein the first control information indicates a reduction of an amount of the first sound signal; transmitting second control information to the third information processing apparatus, wherein the second control information indicates a reduction of an amount of the second sound signal; controlling at least one of the second

information processing apparatus or the third information processing apparatus to stop output of data contained in a at least one of a plurality of packetized elementary stream (PES) payloads, wherein the output of the data is stopped based on at least one of the first control information or the second control information, each of a plurality of PES packets includes a corresponding PES payload of the plurality of PES payloads, each of the plurality of PES payloads is packed in a corresponding TS packet of a plurality of TS packets, each of the plurality of TS packets is specified by a corresponding packet identifier (PID) of a plurality of packet identifiers (PIDs), and each of the plurality of PIDs specifies at least one of the first sound signal or the second sound signal in a program map table (PMT); and extracting a presentation time stamp (PTS) included in a PES header portion of each of the plurality of PES packets.

[0020c] According to a fifth aspect of the present invention, there is provided a information processing method, including: in a first information processing apparatus: transmitting an image signal and a sound signal to a second information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS); receiving control information from the second information processing apparatus; stopping output of data in a packetized elementary stream (PES) payload, wherein the output of the data is stopped based on the received control information, a first PES packet includes the PES payload, a TS packet includes the first PES packet, the TS packet is specified by a packet identifier (PID), the PID specifies the transmitted sound signal in a program map table (PMT), and the PID is independent of the output of the data included in the PES payload; multiplex the first PES packet and the second PES packet to generate a multiplexed PES packet, wherein the second PES packet includes the image signal; and transmitting the multiplexed PES packet to the second information processing apparatus.

[0020d] According to a sixth aspect of the present invention, there is provided a non-transitory computer readable medium having stored thereon computer executable instruction which, when executed by a computer of a first information processing apparatus, cause the computer to execute operations, the operations including: receiving a first image signal and a first sound signal from a second information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS); receiving a second image signal and a second sound signal from a third information processing apparatus; transmitting first control information to the second information processing apparatus, wherein the first control information indicates a reduction of an amount of the first sound signal; transmitting second control information to the third information processing apparatus, wherein the second control information indicates a reduction of an amount of the second sound signal; controlling at least one of the second information processing apparatus or the third information processing apparatus to stop output of data in at least one of a plurality of a packetized elementary stream (PES), wherein the output of the data is stopped based on at least one of the first control information or the second control information, each of the plurality of PES payloads is packed in a corresponding TS packet of a plurality of TS packets, each of the plurality of TS packets is specified by a packet identifier (PID) of a plurality of packet identifiers (PIDs), and each of the plurality of PIDs specifies at least one of the first sound signal or the second sound signal in a program map table (PMT); and extracting a presentation time stamp (PTS) included in a PES header portion of each of the plurality of PES packets.

[0020e] According to a seventh aspect of the present invention, there is provided a non-transitory computer readable medium having stored thereon computer executable instruction which, when executed by a computer of a first information processing apparatus, cause the computer to execute operations, the operations including: transmitting an image signal and a sound signal to a second information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS); receiving control information from the second information processing apparatus; stopping output of data in a packetized elementary stream (PES) payload, wherein the output of the data is stopped based on the received control information, a first PES packet includes the PES payload, a TS packet includes the first PES packet, the TS packet is specified by a packet identifier (PID), the PID specifies the transmitted sound signal in a program map table (PMT), and the PID is independent of the output of the data in the PES payload; multiplex the first PES packet and a second PES packet to generate a multiplexed PES packet wherein the second PES packet includes the image signal; and transmitting the multiplexed PES packet to the second information processing apparatus.

Advantageous Effects of Invention

[0021] Embodiments of the present invention exert an excellent effect of handling sound data appropriately. The effect described herein is not necessarily restrictive, and any of the effects described in the present disclosure may be exerted.

Brief Description of Drawings

[0022]

[fig.1] FIG. 1 is a diagram illustrating a configuration example of a communication system 10 according to the first embodiment of the present disclosure.

[fig.2] FIG. 2 is a block diagram illustrating a functional configuration example of an information processing apparatus 100 according to an embodiment of the present disclosure.

[fig.3] FIG. 3 is a sequence chart illustrating a communication processing example of a source device 50 and a sink device 60 that are bases of an embodiment of the present disclosure.

[fig.4] FIG. 4 is a sequence chart illustrating a communication processing example of a source device 50 and a sink device 60 that are bases of an embodiment of the present disclosure.

[fig.5] FIG. 5 is a sequence chart illustrating a communication processing example of a source device 50 and a sink device 60 that are bases of an embodiment of the present disclosure.

[fig.6] FIG. 6 is a diagram illustrating an example of an RTSP message exchanged between the source device 50 and the sink device 60 that are bases of an embodiment of the present disclosure.

[fig.7] FIG. 7 is a diagram illustrating an example of an RTSP message exchanged between the source device 50 and the sink device 60 that are bases of an embodiment of the present disclosure.

[fig.8] FIG. 8 is a diagram illustrating an example of information exchanged between information processing apparatuses according to the first embodiment of the present disclosure.

[fig.9] FIG. 9 is a diagram illustrating an example of information exchanged between information processing apparatuses according to the first embodiment of the present disclosure.

[fig.10] FIG. 10 is a diagram illustrating an example of information exchanged between information processing apparatuses according to the first embodiment of the present disclosure.

Claims

1. A first information processing apparatus, comprising:

circuitry configured to:

receive a first image signal and a first sound signal from a second information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS);

receive a second image signal and sound signal from a third information processing apparatus;

transmit first control information to the second information processing apparatus, wherein the first control information indicates a reduction of an amount of the first sound signal;

transmit second control information to the third information processing apparatus, wherein the second control information indicates a reduction of an amount of the second sound signal;

control at least one of the second information processing apparatus or the third information processing apparatus to stop output of data in at least one of a plurality of packetized elementary stream (PES) payloads, wherein

the output of the data is stopped based on at least one of the first control information or the second control information,

each of a plurality of PES packets includes a corresponding PES payload of the plurality of PES payloads,

each of the plurality of PES payloads is in a corresponding TS packet of a plurality of TS packets,

each of the plurality of TS packets is specified by a corresponding packet identifier (PID) of a plurality packet identifiers (PIDs), and

each of the plurality of PIDs specifies at least one of the first sound signal or the second sound signal in a program map table (PMT); and

extract a presentation time stamp (PTS) included in a PES header portion of each of the plurality of PES packets.

2. The first information processing apparatus according to claim 1, wherein the circuitry is further configured to:

transmit at least one of the first control information or the second control information to the second information processing apparatus or the third information processing apparatus based on a first trigger.

3. The first information processing apparatus according to claim 1, wherein the circuitry is further configured to:

specify one of a first sound data reduction method or a second sound data reduction method to at least one of the second information processing apparatus or the third information processing apparatus,

in the first sound data reduction method, a first MPEG 2-TS multiplex signal is generated by the at least one of the second information processing apparatus or the third information processing apparatus,

the first MPEG 2-TS multiplex signal comprises the at least one of the first sound signal or the second sound signal,

in the second sound data reduction method, a second MPEG 2-TS multiplex signal is generated by the at least one of the second information processing apparatus or the third information processing apparatus, and

the second MPEG 2-TS multiplex signal is devoid of the at least one of the first sound signal or the second sound signal.

4. The first information processing apparatus according to claim 1, wherein the circuitry is further configured to:

transmit a first request to the at least one of to the second information processing apparatus or the third information processing apparatus based on a first trigger, wherein the first request corresponds to a reduction of at least one of an original amount of the first sound signal or an original amount of the second sound signal;

receive at least one MPEG 2-TS multiplex signal that comprises at least one of the reduced original amount of the first sound signal or the reduced original amount of the second sound signal;

transmit a second request to the at least one of the second information processing apparatus or the third information processing apparatus based on a second trigger, wherein the second request corresponds to at least one of a restoration of the reduced original amount of the first sound signal to the original amount of the first sound signal or a restoration of the reduced original amount of the second sound signal to the original amount of the second sound signal; and

extract the at least one of sound signal or the second sound signal from the at least one MPEG2-TS multiplex signal after the transmission of the second request.

5. The first information processing apparatus according to claim 4, wherein the first trigger and the second trigger are based on a user operation.

6. The first information processing apparatus according to claim 2, wherein the first trigger is based on one of an exit of a user from an area or a user movement, and

the area is in specific proximity to the first information processing apparatus.

7. The first information processing apparatus according to claim 1, wherein the circuitry is further configured to:

retain a sound volume setting value of each of the first sound signal and the second sound signal;

transmit a first request to the at least one of the second information processing apparatus or the third information processing apparatus, wherein the

first request corresponds to a reduction of at least one of an original amount of the first sound signal or an original amount of the second sound signal;

transmit the second request to the second information processing apparatus, wherein the second request corresponds to at least one of a restoration of the reduced original amount of the first sound signal to the original amount of the first sound signal or a restoration of the reduced original amount of the second sound signal to the original amount of the second sound signal to; and

reset the retained sound volume setting value of each of the first sound signal and the second sound signal after the transmissions of the second request.

8. A first information processing apparatus, comprising:

circuitry configured to:

transmit an image signal and a sound signal to a second information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS);

receive first control information from the second information processing apparatus;

step output of data in a packetized elementary stream (PES) payload, wherein

the output of the data is stopped based on the received first control information,

a first PES packet includes the PES payload,

a TS packet includes the first PES packet,

the TS packet is specified by a packet identifier (PID),

the PID specifies the transmitted sound signal in a program map table (PMT), and

the PID is independent of the output of the data in the PES payload;

multiplex the first PES packet and a second PES packet to generate a first multiplexed PES packet, wherein the second PES packet includes the image signal; and

transmit the first multiplexed PES packet to the second information processing apparatus.

9. The first information processing apparatus according to claim 8, wherein the circuitry is further configured to:

reduce an amount of the data to substantially zero or completely zero, and

the reduction is based on the received first control information.

10. The first information processing apparatus according to claim 8, wherein the circuitry is further configured to:

receive second control information from the second information processing apparatus to restore an original amount of the data in the PES payload;

store the original amount of the data in the PES payload;

multiplex a third PES packet and the second PES packet to generate a second multiplexed PES packet; and

transmit the second multiplexed PES packet to the second information processing apparatus,

the third PES packet includes the PES payload with the original amount of the data, and

the data corresponds to the sound signal.

11. The first information processing apparatus according to claim 8, wherein the circuitry is further configured to:

receive second control information from the second information processing apparatus; and

stop transmission of the first PES packet in the first multiplexed PES packet, wherein

the transmission of the first PES packet is stopped based on the received second control information,

the second control information is different from the first control information, and

the PMT is devoid of the PID corresponding to the first PES packet.

12. The first information processing apparatus according to claim 11, wherein

the circuitry is further configured to:

receive third control information from the second information processing apparatus to restore an original amount of the data in the PES payload;

store the original amount of the data in the PES payload;

multiplex a third PES packet for sound signal transmission and the second PES packet to generate a second multiplexed PES packet; and

transmit the second multiplexed PES packet to the second information processing apparatus,

the third PES packet includes the PES payload with the original amount of the data, and

the data corresponds to the sound signal.

13. A communication system comprising:

a first information processing apparatus comprising first circuitry configured to:

transmit an image signal and a sound signal to a second information

processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS);

receive control information from the second information processing apparatus;

stop output of data in a packetized elementary stream (PES) payload , wherein

the output of the data is stopped based on the received control information,

a first PES packet includes the PES payload,

a TS packet includes the first PES packet,

the TS packet is specified by a packet identifier (PID),

the PID specifies the transmitted sound signal in a program map table (PMT), and

the PID is independent of the output of the data in the PES payload;

multiplex the first PES packet and a second PES packet to generate a first multiplexed PES packet, wherein the second PES packet includes the image signal; and

transmit the first multiplexed PES packet to the second information processing apparatus; and

the second information processing apparatus comprising second circuitry configured to:

transmit the control information to the first information processing apparatus to reduce an amount of the sound signal; and

control the first information processing apparatus to stop the output of the data in the PES payload, wherein the output of the data is stopped based on the control information.

14. An information processing method, comprising:

in a first information processing apparatus:

a first image signal and a first sound signal from a first information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS);

receiving a second image signal and a second sound signal from a third information processing apparatus;

transmitting first control information to the second information processing apparatus, wherein the first control information indicates a reduction of an amount of the first sound signal;

transmitting second control information to the third information processing apparatus, wherein the second control information indicates a reduction of an amount of the second sound signal;

controlling at least one of the second information processing apparatus or the third information processing apparatus to stop output of data contained in a at least one of a plurality of packetized elementary stream (PES) payloads, wherein

the output of the data is stopped based on at least one of the first control information or the second control information,

each of a plurality of PES packets includes a corresponding PES payload of the plurality of PES payloads,

each of the plurality of PES payloads is packed in a corresponding TS packet of a plurality of TS packets,

each of the plurality of TS packets is specified by a corresponding packet identifier (PID) of a plurality of packet identifiers (PIDs), and

each of the plurality of PIDs specifies at least one of the first sound signal or the second sound signal in a program map table (PMT); and

extracting a presentation time stamp (PTS) included in a PES header portion of each of the plurality of PES packets.

15. An information processing method, comprising:

in a first information processing apparatus:

transmitting an image signal and a sound signal to a second information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS); receiving control information from the second information processing apparatus;

stopping output of data in a packetized elementary stream (PES) payload, wherein

the output of the data is stopped based on the received control information,

a first PES packet includes the PES payload,

a TS packet includes the first PES packet,

the TS packet is specified by a packet identifier (PID),

the PID specifies the transmitted sound signal in a program map table (PMT), and

the PID is independent of the output of the data included in the PES payload;

multiplex the first PES packet and the second PES packet to generate a multiplexed PES packet, wherein the second PES packet includes the image signal; and

transmitting the multiplexed PES packet to the second information processing apparatus.

16. A non-transitory computer readable medium having stored thereon computer executable instruction which, when executed by a computer of a first information processing apparatus, cause the computer to execute operations, the

operations comprising:

receiving a first image signal and a first sound signal from a second information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS);

receiving a second image signal and a second sound signal from a third information processing apparatus;

transmitting first control information to the second information processing apparatus, wherein the first control information indicates a reduction of an amount of the first sound signal;

transmitting second control information to the third information processing apparatus, wherein the second control information indicates a reduction of an amount of the second sound signal;

controlling at least one of the second information processing apparatus or the third information processing apparatus to stop output of data in at least one of a plurality of a packetized elementary stream (PES), wherein

the output of the data is stopped based on at least one of the first control information or the second control information,

each of the plurality of PES payloads is packed in a corresponding TS packet of a plurality of TS packets,

each of the plurality of TS packets is specified by a packet identifier (PID) of a plurality of packet identifiers (PIDs), and

each of the plurality of PIDs specifies at least one of the first sound signal or the second sound signal in a program map table (PMT); and

extracting a presentation time stamp (PTS) included in a PES header portion of each of the plurality of PES packets.

17. A non-transitory computer readable medium having stored thereon computer executable instruction which, when executed by a computer of a first

information processing apparatus, cause the computer to execute operations, the operations comprising:

transmitting an image signal and a sound signal to a second information processing apparatus based on a moving picture experts group (MPEG) 2-transport stream (TS);

receiving control information from the second information processing apparatus;

stopping output of data in a packetized elementary stream (PES) payload, wherein

the output of the data is stopped based on the received control information,

a first PES packet includes the PES payload,

a TS packet includes the first PES packet,

the TS packet is specified by a packet identifier (PID),

the PID specifies the transmitted sound signal in a program map table (PMT), and

the PID is independent of the output of the data in the PES payload;

multiplex the first PES packet and a second PES packet to generate a multiplexed PES packet wherein the second PES packet includes the image signal; and

transmitting the multiplexed PES packet to the second information processing apparatus.