received in real time in the case (2). In both cases (1) and (2), if there is a packet that has not been received timely, it may be impossible to decode the entire frame of the packet. In addition, instead of a frame that cannot be fully or partially decoded due to packets that were not been received timely, the previous frame that could be decoded is displayed. As a result, the video being displayed stops as described above, causing the previous image to remain displayed.

[0009]

Thus, one objective of the present invention is to provide a system, a reception device, a transmission device, a method, a program, and a recording medium with the program recorded thereon, which allow transmitted videos to be reproduced in a real time manner without delay and the reproducibility of videos to be improved.

[0009a]

In one aspect, the present disclosure refers to a video communication method comprising dividing each of a plurality of still image frames of a video including the plurality of still image frames into a plurality of blocks, encoding the plurality of blocks individually on a per block basis, and transmitting an encoded block obtained by encoding a block of the plurality of blocks by a connectionless communication scheme and reconstructing, for each of the plurality of still image frames, a still image frame by allocating, at a corresponding position, a decoded block generated by decoding the encoded block of one said still image frame, the encoded block being received in an encoded block reception period corresponding to the one still image frame, wherein the encoded block reception period is a period from a current frame start time to a time at which a certain time has elapsed, the certain time being obtained by adding a margin time to an expected time for receiving all encoded blocks of one frame.

[0009b]

In another aspect, the present disclosure refers to an image reception method comprising, generating, for each of a plurality of still image frames, a decoded block by decoding an encoded block of one said still image frame, the encoded block being received in an encoded block reception period corresponding to the one still image frame, the encoded block being obtained by dividing each of the plurality of still image frames of a video including the plurality of still image frames into a plurality of blocks, and by encoding the plurality of blocks individually on a per block basis, and the encoded block being transmitted by a connectionless communication scheme, and reconstructing a still image frame by allocating, at a corresponding position, the generated decoded block, wherein the encoded block reception period is a period from a current frame start time to a time at which a certain time has elapsed, the certain time being obtained by adding a margin time to an expected time for receiving all encoded blocks of one frame.

[0009c]

In yet another aspect, the present disclosure refers to an image transmission method comprising dividing each of a plurality of still image frames of a video including the plurality of still image frames into a plurality of blocks, encoding the plurality of blocks individually on a per block

basis, and transmitting an encoded block obtained by encoding a block of the plurality of blocks by a connectionless communication scheme.

[0009d]

A video communication system comprising an image dividing unit configured to divide each of a plurality of still image frames of a video including the plurality of still image frames into a plurality of blocks, an encoding unit configured to encode the plurality of blocks individually on a per block basis, a transmitting unit configured to transmit an encoded block obtained by encoding a block of the plurality of blocks by a connectionless communication scheme, a decoding unit configured to decode, for each of the plurality of still image frames, the encoded block of one said still image frame received in an encoded block reception period corresponding to the one still image frame to generate a decoded block, and a frame reconstruction unit configured to reconstruct a still image frame by allocating the generated decoded block at a corresponding position, wherein the encoded block reception period is a period from a current frame start time to a time at which a certain time has elapsed, the certain time being obtained by adding a margin time to an expected time for receiving all encoded blocks of one frame.

[0009e]

In yet another aspect, the present disclosure refers to an image reception device comprising, a decoding unit configured to generate a decoded block obtained by decoding, for each of a plurality of still image frames, an encoded block of one said still image frame, the encoded block being received in an encoded block reception period corresponding to the one still image frame, the encoded block being obtained by dividing each of the plurality of still image frames of a video including the plurality of still image frames into a plurality of blocks, and encoding the plurality of blocks individually on a per block basis, and the encoded block being transmitted by a connectionless communication scheme, and a frame reconstruction unit configured to reconstruct a still image frame by allocating, at a corresponding position, the generated decoded block, wherein the encoded block reception period is a period from a current frame start time to a time at which a certain time has elapsed, the certain time being obtained by adding a margin time to an expected time for receiving all encoded blocks of one frame.

[0009f]

In yet another aspect, the present disclosure refers to an image transmission device comprising an image dividing unit configured to divide each of a plurality of still image frames of a video including the plurality of still image frames into a plurality of blocks, an encoding unit configured to encode the plurality of blocks individually on a per block basis, and a transmitting unit configured to transmit an encoded block obtained by encoding a block of the plurality of blocks by a connectionless communication scheme.

[0009g]

In yet another aspect, the present disclosure refers to a remote control device comprising the image transmission device according to the previous aspect, and an imaging device configured to supply a video to the image transmission device.

[0010]
In addition, another objective of the present invention is to provide a system, a reception device, a transmission device, a method, a program, and a recording medium with the program recorded thereon, which allow states including a degraded communication state to be recognized in a real time manner without delay.

Solution to Problem

[0011]

An aspect of the present invention is to provide a video communication method including dividing each of a plurality of still image frames of a video including the plurality of still image frames into a plurality of blocks, encoding the plurality of blocks individually on a per block basis, and transmitting an encoded block obtained by encoding a block of the plurality of blocks by a connectionless communication scheme, and reconstructing, for each of the plurality of still image frames, a still image frame by allocating, at a corresponding position, a decoded block generated by decoding the encoded block of one said still image frame, the encoded block being received in an encoded block reception period corresponding to the one still image frame, in which the encoded block reception period is a period from a current frame start time to a time at