

CLAIMS

1. A transmission system including a transmission terminal~~+, and~~ a display device, another transmission terminal~~,~~ and an external input device~~, the display device, the another transmission terminal, and the external input device~~ that are each being connected to the terminal device, wherein

1)- the transmission terminal comprises:

a resolution acquisition unit configured to acquire a resolution available for the display device;

a resolution modification unit configured to modify a resolution of the display device to a resolution selected from among the resolution available for the display device acquired by the resolution acquisition unit; and

a resolution information transmission unit configured to transmit first resolution information, when the resolution of the display device has been modified by the resolution modification unit, to the external input device, the first resolution information representing the modified resolution~~+, and~~

2)- the external input device comprises:

a resolution information reception unit configured to receive the first resolution information transmitted from the resolution information transmission unit;

a resolution conversion unit ~~for converting~~ configured to a resolution of the display data based on the first resolution information and second resolution information representing a resolution on a display device of the external input device; and

a display data transmission unit configured to transmit the display data whose resolution has been converted by the resolution conversion unit, to the transmission terminal in order to let the transmission terminal transmit the converted resolution to the ~~other~~

another transmission terminal.

2. The transmission system set forth in claim 1, wherein the display data transmission unit transmits, to the transmission terminal, the display data whose resolution has been converted in an uncompressed format.

3. The transmission system set forth in claim 1, wherein the external input device further comprises a display control unit configured to convert the display data whose resolution has been converted into a compressed format, and the display data transmission unit transmits the display data converted into the compressed format by the display control unit to the transmission terminal.

4. The transmission system set forth in any one of claims 1 to 3, further comprising a relay device arranged between the transmission terminal and the ~~other~~ another transmission terminal, wherein

the transmission terminal transmits, to the ~~other~~ another transmission terminal through the relay device, the display data whose resolution has been converted and that has been transmitted from the external input device, and

the ~~other~~ another transmission terminal conducts a rendering process for the display data whose resolution has been converted and that have been transmitted from the transmission terminal, and displays the rendering processed data on the display device of the ~~other~~ another transmission terminal.

5. The transmission system set forth in any one of claims 1 to 4, wherein the transmission terminal further comprises:

a resolution determination unit configured to determine whether or not a resolution available for the

display device acquired by the resolution acquisition unit includes a resolution having an aspect ratio other than a reference aspect ratio used in transmitting image data; and

a resolution selection unit configured to select, based on the determination made by the resolution determination unit, the resolution having an aspect ratio other than the reference aspect ratio or the resolution with the reference aspect ratio, from among the resolution available for the display device.

6. The transmission system set forth in any one of claims 1 to 4, wherein the transmission terminal further comprises:

a display data reception unit configured to receive the display data whose resolution has been converted and that have been transmitted from the external input device; and

a display control unit configured to display an image on the display device of the transmission terminal based on the display data received by the display data reception unit.

7. An external input device connected to a transmission terminal that is connected to another transmission terminal, the external input device comprising:

a resolution information reception unit configured to receive first resolution information from the transmission terminal when a resolution on a display device of the transmission terminal has been modified, the first resolution information representing the modified resolution;

a resolution conversion unit configured to convert a resolution of the display data based on the first resolution information that has been received by the

resolution information reception unit and second resolution information representing a resolution on a display device of the external input device; and

a display data transmission unit configured to transmit the display data whose resolution has been converted by the resolution conversion unit, to the transmission terminal in order to let the transmission terminal transmit the display data to the ~~other~~ another transmission terminal.

8. The external input device set forth in claim 7, wherein the display data transmission unit transmits, to the transmission terminal in an uncompressed format, the display data whose resolution has been converted.

9. The external input device set forth in claim 7, further comprising a display control unit configured to convert the display data whose resolution has been converted into a compressed format,

wherein the display data transmission unit transmits the display data converted into the compressed format to the transmission terminal.

10. The external input device set forth in any one of claims 7 to 9, wherein the resolution conversion unit converts the resolution of the display data into the resolution represented by the second resolution information when÷

a resolution in a vertical direction represented in the second resolution information is not greater than a resolution in a vertical direction represented in the first resolution information, as well as a resolution in a horizontal direction represented in the second resolution information is not greater than a resolution in a

horizontal direction represented in the first resolution information.

11. The external input device set forth in any one of claims 7 to 9, wherein the resolution conversion unit converts a resolution in a horizontal direction of the display data into a resolution in a horizontal direction represented in the first resolution information when ~~+~~ either a resolution in a horizontal direction represented in the second resolution information is higher than the resolution in the horizontal direction represented in the first resolution information, as well as a resolution in a vertical direction represented in the second resolution information is not greater than a resolution in a vertical direction represented in the first resolution information ~~+~~, or the resolution in the horizontal direction represented in the second resolution information is higher than the resolution in the horizontal direction represented in the first resolution information, the resolution in the vertical direction represented in the second resolution information is higher than the resolution in the vertical direction represented in the first resolution information, and the resolution in the vertical direction represented in the first resolution information is not less than the resolution in the horizontal direction represented in the first resolution information as well.

12. The external input device set forth in any one of claims 7 to 9, wherein the resolution conversion unit converts a resolution in a vertical direction of the display data into a resolution in a vertical direction represented in the first resolution information when ~~+~~

either a resolution in a vertical direction represented in the second resolution information is higher than the resolution in the vertical direction represented in the first resolution information, as well as a resolution in a horizontal direction represented in the second resolution information is not greater than a resolution in a horizontal direction represented in the first resolution information~~7,~~ or the resolution in the horizontal direction represented in the second resolution information is higher than the resolution in the horizontal direction represented in the first resolution information, the resolution in the vertical direction represented in the second resolution information is higher than the resolution in the vertical direction represented in the first resolution information, and the resolution in the vertical direction represented in the first resolution information is lower than the resolution in the horizontal direction represented in the first resolution information as well.

13. A computer-readable storage medium with an executable program ~~of causing a computer to execute an operation for~~ converting display resolution by an external input device which transmits display data to a transmission terminal connected to another transmission terminal to be able to communicate therewith, ~~the operation comprising wherein the~~ program instructs a computer to execute:

~~a procedure of~~ receiving, from the transmission terminal, first resolution information which represents a resolution that has been modified when the resolution on a display device of the transmission terminal has been modified;

~~a procedure of~~ converting a resolution of the display data based on the first resolution information that has been received and second resolution information

representing a resolution on a display device of the external input device; and

~~a procedure of transmitting the display data whose resolution has been converted in the procedure of converting a resolution, to the transmission terminal in order to let the transmission terminal transmit the display data from the transmission terminal to the ~~other~~ another transmission terminal.~~