

This is because the deletion of the object X from the list at the step S24 is not required and the counterpart processing at the step S25 is thus also unnecessary as well. As a result, the updating of the information management tables at the step S26 is not necessary.

[0050] If the outcome of the judgment formed at the step S22 indicates that all objects located in the aura of the pilot avatar Z as indicated by the information management table have undergone the pieces of processing of the steps S23 to S26, on the other hand, the flowchart goes on to the step S27 in which the shared server 12 selects an object having an aura covering the position of the pilot avatar Z from those listed in the information management table as an object X. The flow of the processing then goes on to a step S28 in which the shared server 12 forms a judgment as to whether or not all objects each having an aura covering the position of the pilot avatar Z as indicated by the information management table have undergone pieces of processing of steps S29 to S32. If all objects each having an aura covering the position of the pilot avatar Z as indicated by the information management table have not undergone the pieces of processing of the steps S29 to S32, the flowchart goes on to the step S29. At the step S29, the shared server 12 forms a judgment as to whether or not the pilot avatar Z is located in the aura of the object X, or examines the information management table to find out whether the transparency flag of the object X is TRUE or FALSE.

[0051] If the outcome of the judgment formed at the step S29 indicates that the pilot avatar Z is not located in the aura of the object X anymore or the transparency flag of the object X is found TRUE, the flow of the processing proceeds to a step S30 in which the shared server 12 deletes the pilot avatar Z from the list of names of objects included in the aura of the object X as shown by the information management table for the object X provided that the pilot avatar Z is found on the list. The pilot avatar Z needs to be deleted from the list since the pilot avatar Z has departed from the aura of the object X, or even if the pilot avatar Z is still included in the aura of the object X, the pilot avatar Z needs to be deleted from the list since the object X is now transparent to the pilot avatar Z. The flow of the processing then continues to a step S31 in which the shared server 12 deletes the object X from the list of names of objects each having an aura including the position of the pilot avatar Z as shown in the information management table for the pilot avatar Z as counterpart processing of the step S30 if the object X is found on the list. Then, the flow of the processing goes on to the step S32 in which the shared server 12 updates the information management tables of the pilot avatar Z and the object X in accordance with the deletions at the steps S31 and S30, respectively. The flow of the processing then goes back to the step S27.

[0052] If the outcome of the judgment formed at the step S29 indicates that the pilot avatar Z is still located

in the aura of the object X and the transparency flag of the object X is found FALSE, on the other hand, the flow of the processing goes back to the step S27, skipping the pieces of processing of the steps of S30 to S32. This is because the deletion of the pilot avatar Z from the list at the step S30 is not required and the counterpart processing at the step S31 is thus also unnecessary as well. As a result, the updating of the information management tables at the step S32 is not necessary.

[0053] If the outcome of the judgment formed at the step S28 indicates that all objects each having an aura including the position of the pilot avatar Z have been undergone, on the other hand, the processing represented by the flowcharts shown in Figs. 12A-12B is ended.

[0054] The processing to detect an exclusion of an object from the aura of the avatar Z, or the pilot avatar, is carried out as described above.

[0055] Details of the departure detection processing carried out at the step S13 of the flowchart shown in Fig. 11 are explained by referring to the flowcharts shown in Figs. 13A-13B as follows. As shown in Fig. 13A, the flowchart begins with a step S41 in which the shared server 12 selects an object from those in the virtual space as an object X. The flow of the processing then goes on to a step S42 in which the shared server 12 forms a judgment as to whether or not all objects located in the virtual space have undergone pieces of processing at the subsequent steps. If all objects located in the virtual space have not undergone the subsequent pieces of processing, the flowchart goes on to the step S43' in which the shared server 12 forms a judgment as to whether or not the object X is a pilot avatar Z itself. If the outcome of the judgment formed at the step S43 indicates that the object X is the pilot avatar Z itself, the flow of the processing goes back to the step S41.

[0056] If the outcome of the judgment formed at the step S43 indicates that the object X is not the pilot avatar Z itself, on the other hand, the flow of the processing goes on to a step S44 in which the shared server 12 refers to the information management table of the object X to find out whether the transparency flag is TRUE or FALSE. If the transparency flag is found FALSE, the flow of the processing goes on to a step S45 in which the shared server 12 examines the information management table of the pilot avatar Z to find out. if the object X is not on the list of objects included in the aura of the pilot avatar Z and forms a judgment as to whether or not the object X has gotten included in the aura of the pilot avatar Z. If the information management table shows that the object X is not on the list of objects included in the aura of the pilot avatar Z, but a result of the judgment formed at the step S45 indicates that the object X has actually gotten included in the aura of the pilot avatar Z, the flow of the processing goes on to a step S46. At the step S46, the shared server 12 adds the object X to the list of names of objects located in the aura of the pilot avatar Z as shown by the information management table