

for the pilot avatar Z. The flow of the processing then continues to a step S47 in which the shared server 12 adds the pilot avatar Z to the list of names of objects each having an aura including the position of the object X as shown in the information management table for the object X as counterpart processing of the step S46. Then, the flow of the processing goes on to the step S48 in which the shared server 12 updates the information management tables of the pilot avatar Z and the object X in accordance with the cataloging at the steps S46 and S47, respectively. The flow of the processing then goes on to a step S49.

[0057] If the outcome of the judgment formed at the step S44 indicates that the transparency flag of the object X is TRUE, on the other hand, the flow of the processing goes on directly to the step S49, skipping the steps of S46 to S48. This is because, since the object X is transparent to the pilot avatar Z, the cataloging of the object X at the step S46 is not required. Thus, the counterpart cataloging of the pilot avatar Z at the step S47 is also unnecessary as well. As a result, the cataloging of the information management tables at the step S48 is not necessary. In addition, if the information management table at the step S45 shows that the object X is on the list of objects included in the aura of the pilot avatar Z or the result of the judgment formed at the step S45 indicates that the object X is not included in the aura of the pilot avatar Z, on the other hand, the flow of the processing goes on directly to the step S49, skipping the steps of S46 to S48. This is because, since the object X is already cataloged on the list of the information management table, or the object X is not really included in the aura of the pilot avatar Z, it is not necessary to catalog the object X on the list or the cataloging of the object X at the step S46 is not required. Thus, the counterpart cataloging of the pilot avatar Z at the step S47 is also unnecessary as well. As a result, the updating of the information management tables at the step S48 is not necessary.

[0058] The flow of the processing then goes on to a step S49 in which the shared server 12 refers to the information management table of the pilot avatar Z to find out whether the transparency flag is TRUE or FALSE. If the transparency flag of the pilot avatar is found FALSE, the flow of the processing goes on to a step S50 in which the shared server 12 examines the information management table of the pilot avatar Z to find out if the object X is on the list of objects each having an aura including the pilot avatar Z and forms a judgment as to whether or not the pilot avatar Z has entered the aura of the object. If the information management table shows that the object X is not on the list of objects each having an aura including the pilot avatar Z, but a result of the judgment formed at the step S50 indicates that the pilot avatar Z has actually entered the aura of the object X, the flow of the processing goes on to a step S51, in which the shared server 12 adds the pilot avatar Z to the list of names of objects included in the aura of the object X as

shown in the information management table for the object X. At a step S52 following the step S51, the shared server 12 thus adds the object X to the list of names of objects each having an aura including the pilot avatar Z as shown by the information management table for the pilot avatar Z. Then, at a step S53, the shared server 12 updates the information management tables of the pilot avatar Z and the object X in accordance with the cataloging at the steps S51 and S52, respectively. The flow of the processing then goes back to the step S41.

[0059] If the outcome of the judgment formed at the step S49 indicates that the transparency flag of the pilot avatar Z is TRUE, on the other hand, the flow of the processing goes back directly to the step S41, skipping the steps S51 to S53. This is because, since the pilot avatar Z is transparent to the object X, the cataloging of the pilot avatar Z at the step S51 is not required. Thus, the counterpart cataloging of the object X at the step S52 is also unnecessary as well. As a result, the cataloging of the information management tables at the step S53 is not necessary. In addition, if the information management table at the step S50 shows that the object X is on the list of objects each having an aura including the pilot avatar Z or the result of the judgment formed at the step S50 indicates that the pilot avatar Z is not included in the aura of the pilot object X, on the other hand, the flow of the processing goes back directly to the step S41, skipping the steps S51 to S53. This is because, since the object X is already cataloged on the list of the information management table or the pilot avatar Z is not really included in the aura of the pilot object X, it is not necessary to catalog the object X on the list, or the cataloging of the object X at the step S52 is not required. Thus, the counterpart cataloging of the pilot avatar Z at the step S51 is also unnecessary as well. As a result, the cataloging of the information management tables at the step S53 is not necessary.

[0060] If the outcome of the judgment formed at the step S42 indicates that all objects located in the virtual space have undergone pieces of processing, on the other hand, the processing represented by the flowcharts shown in Figs. 13A-13B is ended.

[0061] The processing to detect an inclusion of an object into the aura of the pilot avatar Z is carried out as described above.

[0062] In this specification, a system means a whole configuration comprising a plurality of apparatus and objects.

[0063] It should be noted that a computer program including computer program code means to be executed to carry out the various kinds of processing described above is presented to the client in computer-readable form through presentation media which can be communication presentation media such as a network and a digital satellite or information recording media such as a solid-state memory, a CD-ROM and a magnetic disc.

[0064] It should be understood that various alternatives to the embodiments of the invention described