CLAIMS

1. A method of causing a computer including a display device and an input device to display on the display device, a shape of a design product composed of a plurality of components based on component data,

the computer executing:

an acceptance step of accepting an instruction to modify at least one component among the plurality of components from the input device;

a search step of searching for whether a modified component after the modification in accordance with the accepted instruction is stored in a standard component data memory unit in which data on a plurality of standard components each including at least dimensions that define the shape and a model number are prestored hierarchically according to component types;

a model number replacing step in which, in a case where the component after the modification is searched in the search step to be stored in the standard component data memory unit, a model number of the component before the modification related to the design product is replaced with the model number related to the standard component; and

a redisplay step of displaying, on the display device, a shape of the component based on shape data of the modified component on which the instruction is accepted,

wherein the standard component data memory unit includes a range of dimensions related to at least one of the dimensions that define the shape data of the component, and

in a case where a modified dimension of the component searched in the search step is within the range of dimensions, the model number of the component before the modification related to the design product is replaced with a model number corresponding to the modified dimension in the model number replacing step.

2. The method according to claim 1, wherein

the computer includes an alert device, and

the computer further executes, an alert step of causing the alert device to issue a

warning in the case where the modified component is searched in the search step not to be stored in the standard component data memory unit.

3. The method according to claim 1 or 2, wherein the instruction to modify the component includes an instruction to modify at least one of the dimensions that define shape data of the component.

4. The method according to claim 2, wherein

in the case where the modified dimension of the component is searched in the search step to be out of the range of dimensions, the computer issues a warning in the alert step.

5. The method according to any one of claims 1 to 4, wherein the instruction to modify the component includes an instruction to modify shape data of the component.

6. The method according to any one of claims 1 to 5, wherein the instruction to modify the component includes an instruction to modify at least any piece of data in the data on the component.

7. The method according to claim 4, wherein the computer further executes:

a price calculation step of calculating a price of the modified component according to a length of the modified dimension in the case where the modified dimension of the component is searched in the search step to be within the range of dimensions; and

a price display step of causing the display device to display the price calculated in the price calculation step.

8. The method according to any one of claims 1 to 7, wherein a delivery date or a price of the component is included in the data.

9. The method according to any one of claims 1 to 8, wherein the instruction to modify the component includes an instruction to modify a shape of at least one portion of the component.

10. The method according to claim 9, wherein

data on a semi-standard component in which the shape of at least one portion of the component is modified are prestored in the standard component data memory unit, and

in the case where the modified shape of the component after the modification is searched in the search step to match with that of a semi-standard component, the model number of the component before the modification related to the design product is replaced in the model number replacing step with a model number generated according to the semi-standard component after the modification.

11. The method according to claim 9 or 10, wherein in the case where the modified shape of the component after the modification is searched in the search step to match with that of the standard component, the model number of the component before the modification related to the design product is replaced in the model number replacing step with a model number related to the standard component after the modification.

12. The method according to any one of claims 1 to 11, wherein the computer further executes,

a list creation step of creating a list including at least the model number of the displayed component,

wherein in the case where the model number of the component before the modification is replaced in the model number replacing step with the model number according to the standard component after the modification, a list in which the model number of the component before the modification is replaced with the model number according to the standard component after the modification is created in the list creation step.

13. The method according to any one of claims 4, 10, and 11, wherein the computer further executes, a file name changing step in which, in the case where the model number of the component is replaced in the model number replacing step, a file name related to data including the shape data and model number of the component is changed.

14. The method according to any one of claims 1 to 13, wherein the instruction to modify the component includes an instruction to change the model number.

15. The method according to claim 11 or 13, wherein

data on basic dimensions that define dimensions of a basic shape of the standard component are included in data on the standard component stored in the standard component data memory unit, and

in the case where the modified shape of the component is searched in the search step to match with that of the standard component, the component after the modification is displayed in the redisplay step so that the dimensions of the component matches with dimensions of the standard component.

16. The method according to any one of claims 1 to 15, wherein the computer further executes,

a related component changing step in which, in the case where the instruction to modify the component is accepted from the input device in the acceptance step, shape data of another component related to the component on which the instruction to modify is accepted, is changed,

wherein a shape based on the shape data of the component changed in the related component changing step is also redisplayed in the redisplay step.

17. A program causing a computer including a display device and an input device to execute:

an acceptance step of accepting an instruction to modify at least one component of a design product composed of a plurality of components from the input device;

a search step of searching for whether a modified component on which the instruction is accepted is stored in a standard component data memory unit in which data on a plurality of standard components each including at least dimensions that define a shape and a model number are prestored hierarchically according to component types;

a model number replacing step in which, in the case where the modified component is searched in the search step to be stored in the standard component data memory unit, the model number of the component before the modification related to the design product is replaced with the model number related to the standard component; and

a redisplay step of displaying, on the display device, a shape of the component based on shape data of the modified component on which the instruction is accepted,

wherein the standard component data memory unit includes a range of dimensions related to at least one of the dimensions that define the shape data of the component, and

in a case where a modified dimension of the component searched in the search step is within the range of dimensions, the model number of the component before the modification related to the design product is replaced with a model number corresponding to the modified dimension in the model number replacing step.