

What is claimed is:

1. A system for computer-aided design of an object, an article, or a consumer good, comprising:

an application server comprising at least one processor-enabled medium having one or more modules of a design software application residing thereon that are executable by the at least one processor;

a web server for providing a website interface for accessing the design software application; and

a social network server,

wherein the one or more executable modules of the design software application include at least a design module, a testing module, a user interface display module, a social media module, and a commerce module,

wherein the user interface display module is configured to provide the website interface displayed on at least a computer of a first user and a computer of a second user, the interface comprising a first portion for receiving an input from any one or more of the at least first and second users to access the design module, a second portion for receiving an input from any one or more of the at least first and second users to access the testing module, a third portion for receiving an input from any one or more of the at least first and second users to access the social media module, and a fourth portion for receiving an input from any one or more of the at least first and second users to access the commerce module;

wherein the design module is configured to:

receive via the website at least a first input from the first user and, independent from the first user, a second input from the second user, wherein the inputs comprise one or more modifications to an existing design template of the object, the article, or the consumer good,

permit each of the at least first and second users to provide comments about another user's input,

compare the first and the second inputs from each of the at least first and second users to one or more predetermined criteria residing in the application server processor-enabled medium,

accept any one or more of the first and the second inputs if it or they satisfy the one or more predetermined criteria and reject any one or more of the first and the second inputs if it or they do not satisfy the one or more predetermined criteria, and

modify by the design module the existing design template based on the accepted one or ones of the first and second inputs to generate a modified design template of the object, the article, or the consumer good,

wherein the testing module is configured to receive the second portion input from any one or more of the at least first and second users via the website, and thereafter cause the at least one application server processor to execute the testing module for evaluating the modified design template using one or more of the one or more predetermined criteria,

wherein the social media module is configured to receive the third portion input from any one or more of the at least first and second users via the website, and thereafter display one or more of a plurality of user profiles and a voting-based ranking of the modified design template relative to other users' modified design templates, the user profiles comprising information about the at least first and second users and the modified design template modified by the design module, and

wherein the commerce module is configured to receive the fourth portion input from any one or more of the at least first and second users via the website, and thereafter generate an electronic commerce marketplace for providing to a third party an offer of a sale, purchase, or license of the modified design template, or a purchase of the object, article, or consumer good based on the modified design template, or to make a design request.

2. The system of claim 1, further comprising a 3-D printer configured to fabricate the object, the article, or the consumer good, based on the modified design template.

3. The system of claim 1, wherein the design software application is further configured to display the modified design template or information contained in the modified design template by the social media module to elicit feedback from other users of the design software application.

4. The system of claim 1, wherein the design software application is further configured to output the modified design template or information contained in the modified design template by the social media module to the social media server to elicit feedback from web users other than the users of the design software application.

5. The system of claim 1, wherein evaluating the modified design template using one or more of the one or more predetermined criteria includes determining whether the modified design template or information contained in the modified design template complies with government regulations or industry standards.

6. The system of claim 1, wherein the comparison of the modified design template using one or more of the one or more predetermined criteria includes determining whether parts designed to interlock actually fit together.

7. The system of claim 1, wherein the comparison of the modified design template using one or more of the one or more predetermined criteria includes modeling a virtual object, article, or consumer good, based on the modified design template or information contained in the modified design template and simulating an effect of an external force on the virtual object, article, or consumer good.

8. The system of claim 7, wherein the external force includes gravity or a wind force.

9. The system of claim 8, wherein the simulated effect includes determining whether the wind force will cause a harmonic oscillation of the virtual object, article, or consumer good.

10. The system of claim 1, wherein the modified design template or information contained in the modified design template identifies at least one material to fabricate the object, the article, or the consumer good, and the comparison of the modified design template or information contained in the modified design template using one or more of the one or more predetermined criteria includes evaluating at least one material.

11. The system of claim 10, wherein the evaluation of the one or more materials includes evaluating the one or more materials based on strength, cost or compatibility with other materials included in the modified design template or information contained in the modified design template.

12. The system of claim 1, wherein the design software application is further configured to store the predetermined criteria and evaluate a second modified design template based on the predetermined criteria.

13. A non-transitory computer readable storage medium comprising a design software application having one or more executable software modules including at least a design module, a test module, a user interface display module, a social media module, a commerce module, and one or more predetermined criteria,

wherein the design module is configured to:

receive from a first computer system operated by a first user at least a first input comprising one or more first modifications to an existing design template of an object, an article, or a consumer good;

receive from a second computer system independent from the first computer system operated by a second user a second input comprising one or more second modifications to the existing design template;

permit each of the first and the second users to provide comments about the other user's input,

compare the first and the second inputs from each of first and the second users to the one or more predetermined criteria;

accept any one or more of the first and the second inputs if it or they satisfy the one or more predetermined criteria and reject any one or more of the first and the second inputs if it or they do not satisfy the one or more predetermined criteria,

modify by the design module the existing design template based on the accepted one or ones of the first and second inputs to generate a modified design template of the object, the article, or the consumer good,

wherein the user interface display module is configured to provide a website interface displayed on at least a computer of a first user and a computer of a second user, the interface comprising a first portion for receiving an input from any one or more of the at least first and second users to access the design module, a second portion for receiving an input from any one or more of the at least first and second users to access the testing module, a third portion for receiving an input from any one or more of the at least first and second users to access the social media module, and a fourth portion for receiving an input from any one or more of the at least first and second users to access the commerce module;

wherein the testing module is configured to receive the second portion input from any one or more of the at least first and second users via the website, and thereafter cause the at least one application server processor to execute the testing module for evaluating the modified design template using one or more of the one or more predetermined criteria,

wherein the social media module is configured to receive the third portion input from any one or more of the at least first and second users via the website, and thereafter display one or more of a plurality of user profiles and a voting-based ranking of the modified design template relative to other users' modified design templates, the user profiles comprising information about the at least first and second users and the modified design template modified by the design module, and

wherein the commerce module is configured to receive the fourth portion input from any one or more of the at least first and second users via the website, and thereafter generate an electronic commerce marketplace for providing to a third party an offer of a sale, purchase, or license of the modified design template, or a purchase of the object, article, or consumer good based on the modified design template, or to make a design request.

14. The computer readable storage medium of claim 13, wherein the application is further configured to output the modified design to a 3-D printer configured to fabricate the object, the article, or the consumer good based on the modified design template.

15. A method of manufacturing an object, an article, or a consumer good, the method comprising:

providing an application server comprising at least one processor-enabled medium having one or more modules of a design software application residing thereon that are executable by the at least one processor, wherein the one or more executable software modules include at least a design module, a test module, a user interface display module, a social media module, a commerce module, and one or more predetermined criteria, wherein the test module is configured to receive an input from any one or more of at least a first and a second user and thereafter cause the at least one application server processor to execute the test module for evaluating a modified design template using one or more of the one or more predetermined criteria, wherein the social media module is configured to display by a web server one or more of a plurality of user profiles, the user profiles comprising information about a respective user and the modified design template modified by the design module, and

wherein the commerce module is configured to offer for sale, purchase, or license to a web user other than the at least the first or the second user, the modified design template;

providing the web server different from the application server processor, having a computer code residing thereon that is executable by at least one processor for providing a website interface for at least the first user and the second user to access the design software application using respective first and second computers;

receiving from the first user via the website displayed on the first computer a first input comprising a first modification to the existing design template for creating a new design of the object, the article, or the consumer good;

receiving from the second user independently from the first user via the website displayed on the second computer a second input comprising a second modification to the existing design template;

comparing the inputs from each of the first and second users to the one or more predetermined criteria;

accepting any one or more of the user inputs if it or they satisfy the one or more predetermined criteria and rejecting any one or more of the user inputs if it or they do not satisfy the one or more predetermined criteria;

modifying by the design module the existing design template based on the accepted user inputs to generate the modified design template of the object, the article, or the consumer good; and

displaying an offer for sale, purchase, or license to a web user other than the at least the first or the second user, the modified design template.

16. The method of claim 15, further comprising:

outputting the modified design template to a 3-D printer configured to fabricate the object, the article, or the consumer good based on the modified design template.

17. The system of claim 1, wherein the existing design template and the modified design template comprise information useful in fabricating one of an automobile part, an article of clothing, and a household appliance.