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(54) **PRODUCT DISPENSING COMB**

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(57) **ABSTRACT**

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Related U.S. Application Data

(60) Provisional application No. 61/913,955, filed on Dec. 10, 2013.

A product dispensing comb provides one or more internal reservoirs in the comb body, in which a hairspray, hair gel, water, or other hair application may be stored. The application may be dispensed through ports between the teeth of the comb, as a liquid or as an atomized spray.

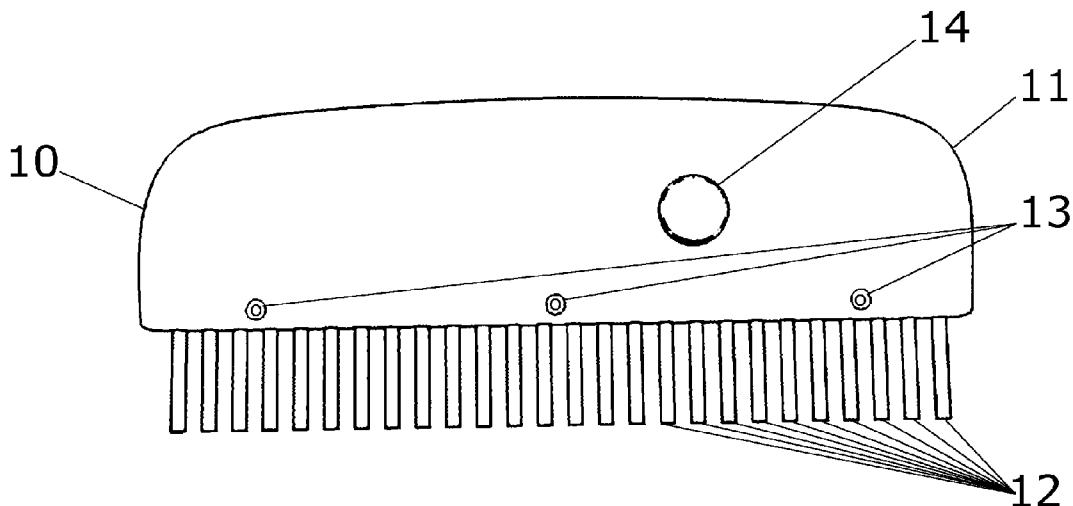
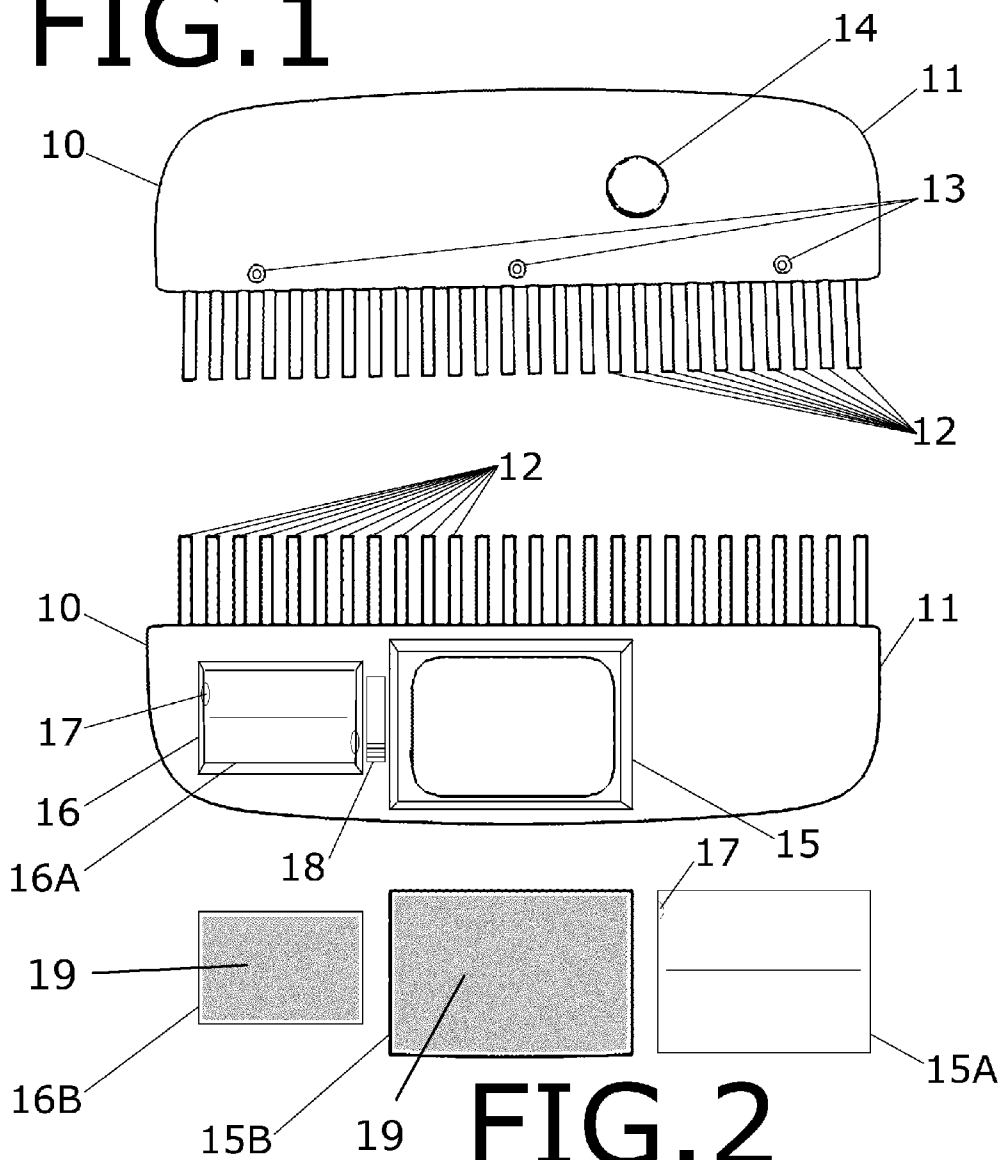


FIG. 1



PRODUCT DISPENSING COMB
CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Application No. 61/913,955, filed Dec. 10, 2013, which is hereby incorporated by reference.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not Applicable

PARTIES TO A JOINT RESEARCH AGREEMENT

[0003] Not Applicable

REFERENCE TO SEQUENCE LISTING, A TABLE, OR A COMPUTER PROGRAM LISTING COMPACT DISK APPENDIX

[0004] Not Applicable

BACKGROUND OF THE INVENTION

[0005] The invention relates generally to hair care accessories and in particular to a product dispensing comb. Many people prefer to use hair gel, hairspray, and similar products on their hair on a regular basis. Others choose to use water to manage their hair. Unfortunately, the containers do not fit into a pocket or purse, and are generally very cumbersome in the workplace or a college classroom. Even water is not always available. A product dispensing comb would resolve this problem.

SUMMARY OF THE INVENTION

[0006] Accordingly, the invention is directed to a product dispensing comb. The comb features one or more internal reservoirs in the comb body, in which a hairspray, hair gel, water, or other hair application may be stored. The application may be dispensed through ports between the teeth of the comb, as a liquid or as an atomized spray.

[0007] Additional features and advantages of the invention will be set forth in the description which follows, and will be apparent from the description, or may be learned by practice of the invention. The foregoing general description and the following detailed description are exemplary and explanatory and are intended to provide further explanation of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The accompanying drawings are included to provide a further understanding of the invention and are incorporated into and constitute a part of the specification. They illustrate one embodiment of the invention and, together with the description, serve to explain the principles of the invention.

[0009] FIG. 1 is a front view of the first exemplary embodiment, displaying the comb 10, the comb body 11, the teeth 12, the ports 13, and the button 14.

[0010] FIG. 2 is a rear view of the first exemplary embodiment with the product reservoirs and the primary reservoir lid removed, displaying the comb 10, the comb body 11, the teeth 12, the primary frame 15, the primary frame lid 15A, the primary reservoir 15B, the secondary frame 16, the secondary

frame lid 16A, the secondary reservoir 16B, the indentations 17, the selector knob 18, and the quantity of hair care application 19.

DETAILED DESCRIPTION OF THE INVENTION

[0011] Referring now to the invention in more detail, the invention is directed to a product dispensing comb 10. The comb 10 preferably lacks a distal handle, as shown. The comb 10 features one or more internal reservoirs in the comb body 11, in which a hairspray, hair gel, water, or other hair application may be stored. The quantity of application 19 may be dispensed through ports 13 between the teeth 12 of the comb 10, as a liquid or as an atomized spray. The teeth 12 are affixed to the edge of the comb body 11 in a linear configuration, according to standard methods and structures, as shown.

[0012] The first exemplary embodiment features a comb 10 with a primary reservoir 15B and a secondary reservoir 16B mounted in the comb body 11, which may be removed and filled by the user with water, hair gel, hairspray, or other hair care applications. Alternate embodiments, which feature more or fewer reservoirs, are also contemplated. The primary reservoir 15B is secured within a primary frame 15 set within the rear surface of the comb body 11 by a primary frame lid 15A, which is shaped to conform with and snap into the primary frame 15. The primary reservoir 15B is shaped so as to conform to and fit within the frame 15. The secondary reservoir 16B is secured within a secondary frame 16 on the rear surface of the comb body 11 by a secondary frame lid 16A. The frame lids are semi-rigid, and designed to constantly apply pressure to the respective reservoirs secured behind them in their respective frames, such that the contents would be squeezed out if an opening is provided. This may be achieved by a spring-loaded platform positioned on the inner side of the primary frame lid 15A or secondary frame lid 16A, by constructing the interior of the primary or secondary frame lids 15A and 16A of compressible material, or other urging means. Indentations 17, which are located on the edges of each frame lid, may be used to remove the frame lids with a fingernail, coin, or similar implement. Each frame lid may then be snapped back into its respective frame with gentle pressure after the reservoir has been filled and placed in the frame.

[0013] The reservoirs are preferably rectangular, flexible and easily compressed, and may be filled with a quantity of water, hair gel, hairspray, or other hair applications 19 by the user. Manufacturers of hair gel and other hair care products may provide disposable pre-filled reservoirs, containing their products, for use with the comb 10.

[0014] The comb body 11 has set therein a selector knob 18, which enables the user to elect to open the primary reservoir 15B, open the secondary reservoir 16B, or lock and secure both reservoirs for storage in a pocket, purse, or other location. The comb body 11 has set within it a button 14 which, when pressed, will open the selected reservoir and dispense its contents via concealed tubes within the comb body 11 to ports 13, located between the teeth 12 of the comb 10. The ports 13 dispense the contents outward, and may be applied to the hair of the user while the user is combing the hair with the comb 10. Generically, this may be understood as the comb body 11 being configured so as to selectively place any reservoir or no reservoir in selective fluid communication with the ports 13, controlled by the button 14. The ports 13 feature nozzles which may be easily twisted by the user to select dispensation of the contents in a thin stream of liquid or an

atomized spray. The ports **13** are in selective fluid communication with the primary reservoir **15B** or the secondary reservoir **16**, as controlled by the selector knob **18** and button **14**.

[0015] To use the first exemplary embodiment, the user removes the primary frame lid **15A** from the primary frame **15**. The user then removes the primary reservoir **15B**, fills it with water, hair gel, or some other hair application of the user's choice, and replaces it in the primary frame **15**. Finally, the user snaps the primary frame lid **15A** into the primary frame **15**, using gentle pressure of the fingers. The user may choose to repeat this procedure with a second hair application, using the secondary reservoir **16B**. When ready to apply the contents to the hair, the user selects a reservoir by using the selector knob **18**, and combs the hair while pressing the button **14** on the comb body **11**. When finished, the user locks and secures the reservoirs with the selector knob **18**, and stores the comb **10**.

[0016] The comb **10**, the comb body **11**, the teeth **12**, the ports **13**, the button **14**, the primary frame **15**, the primary frame lid **15A**, the secondary frame **16**, the secondary frame lid **16A**, and the selector knob **18** are preferably manufactured from semi-rigid, durable materials, such as plastic, steel, or acrylic polymers and are preferably available in a variety of colors. The primary reservoir **15B** and the secondary reservoir **16B** are preferably manufactured from flexible, durable materials such as silicone or plastic. Alternatively, the primary reservoir **15B** and the secondary reservoir **16B** may be manufactured from flexible, disposable materials such as plastic or foil-backed paper.

[0017] Components, component sizes and dimensions, and materials listed above are preferable, but artisans will recognize that alternate components and materials could be selected without altering the scope of the invention.

[0018] While the foregoing written description of the invention enables one of ordinary skill to make and use what is presently considered to be the best mode thereof, those of ordinary skill in the art will understand and appreciate the existence of variations, combinations, and equivalents of the specific embodiment, method, and examples herein. The invention should, therefore, not be limited by the above described embodiment, method, and examples, but by all embodiments and methods within the scope and spirit of the invention.

I claim:

1. A product dispensing comb comprising:
 - (a) a comb;
 - (b) said comb comprising a comb body and a plurality of teeth;
 - (c) said plurality of teeth being affixed in a linear configuration along the edge of said comb body;
 - (d) a button;
 - (e) said button being set within said comb body **11**;
 - (f) a plurality of ports;
 - (g) said plurality of ports being set within said comb body **11** between some of said plurality of teeth;
 - (h) a frame;
 - (i) said frame being set within the rear surface of said comb body;
 - (j) a reservoir;
 - (k) said reservoir being flexible and easily compressed;
 - (l) said reservoir being filled with a quantity of hair care application;

- (m) said reservoir being removably placed within said frame;
- (n) a frame lid;
- (o) said frame lid being shaped so as to conform with and removably snap into said frame;
- (p) said frame lid being configured so as to exert pressure on said reservoir;
- (q) said reservoir being configured so as to be in selective fluid communication with said plurality of ports, controlled by the actuation of said button.

2. The product dispensing comb of claim **1** wherein multiple of said frame, said frame lid, and said reservoir are provided; wherein a selector knob is set within said comb body; and wherein said selector knob is configured so as to selectively place any of said reservoir or none of said reservoir in selective fluid communication with said plurality of ports controlled by said button.

3. The product dispensing comb of claim **1** wherein said comb lacks a handle.

4. The product dispensing comb of claim **1** wherein each of said plurality of ports is selectable between emitting said quantity of hair care application as liquid or as atomized spray.

5. The product dispensing comb of claim **2** wherein said comb lacks a handle.

6. The product dispensing comb of claim **2** wherein each of said plurality of ports is selectable between emitting said quantity of hair care application as liquid or as atomized spray.

7. The product dispensing comb of claim **5** wherein each of said plurality of ports is selectable between emitting said quantity of hair care application as liquid or as atomized spray.

8. The product dispensing comb of claim **1** wherein said reservoir is refillable.

9. The product dispensing comb of claim **1** wherein said reservoir is pre-filled and disposable.

10. The product dispensing comb of claim **2** wherein said reservoir is refillable.

11. The product dispensing comb of claim **2** wherein said reservoir is pre-filled and disposable.

12. The product dispensing comb of claim **3** wherein said reservoir is refillable.

13. The product dispensing comb of claim **3** wherein said reservoir is pre-filled and disposable.

14. The product dispensing comb of claim **4** wherein said reservoir is refillable.

15. The product dispensing comb of claim **4** wherein said reservoir is pre-filled and disposable.

16. The product dispensing comb of claim **5** wherein said reservoir is refillable.

17. The product dispensing comb of claim **5** wherein said reservoir is pre-filled and disposable.

18. The product dispensing comb of claim **6** wherein said reservoir is refillable.

19. The product dispensing comb of claim **7** wherein said reservoir is refillable.

20. The product dispensing comb of claim **7** wherein said reservoir is pre-filled and disposable.

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