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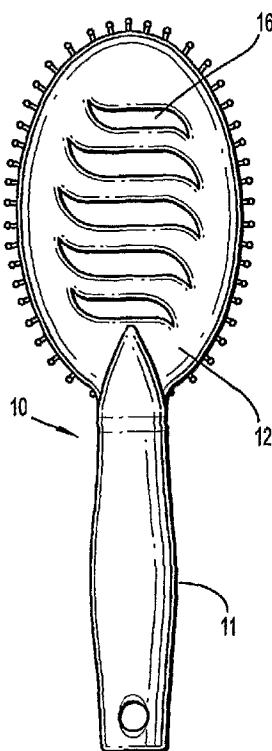
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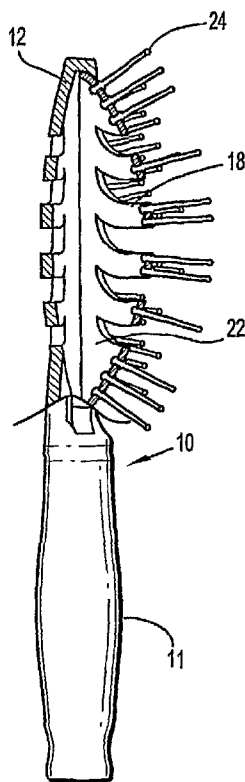
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[Continued on next page]

(54) Title: VENTED CUSHION BRUSH



A



B

(57) Abstract: A hair brush head has a solid, relatively hard body (12), a cushion base (18) attached to one side of the body (12) with a portion spaced with respect to the body in order to form an air space (22) between itself and the body, and a plurality of vent openings (16, 20) in both the body (12) and the cushion base (18). Bristles (24) for brushing hair are attached directly to the cushion base (18).

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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VENTED CUSHION BRUSH

CROSS-REFERENCE TO RELATED APPLICATIONS

None.

TECHNICAL FIELD

The present invention relates to hair brushes and, more particularly, to hairbrushes having features that facilitate air circulation while retaining characteristics of cushion-style brushes.

BACKGROUND OF THE INVENTION

Known hairbrushes have vented brush heads that support bristles while allowing air circulation through the vents. These types of brushes are well suited for styling the hair while drying or carrying out additional styling techniques using appliances that emit forced air. Existing vented brushes are limited to having a brush head that is solid or relatively hard.

Other known brushes exist that provide a cushion base on the inside surface of the brush head, where the bristles are supported directly on the cushion base. This provides bristles that give when pressed against the scalp during hair brushing, resulting in the bristles conforming to the shape and curvature of the head in order to maximize the amount of hair engaged in the bristles at one time, and resulting in a greater degree of comfort since the bristles feel soft on the head compared to bristles mounted on a hard or solid brush head.

There exists no current brush that simultaneously achieves the benefits of both vented brushes and cushioned base brushes.

OBJECTS OF THE INVENTION

It is an object to provide a brush design that achieves the benefits of both known designs of vented brushes and of cushioned base brushes.

This object, as well as others, is achieved by the present invention.

BRIEF SUMMARY OF THE INVENTION

The present invention achieves the above-mentioned objects by utilizing a hair brush head that has a solid, relatively hard body, a cushion base attached to one side of the body and raised with respect thereto in order to form an air space

between itself and the body, and a plurality of vent openings in both the body and the cushion base. Bristles for brushing hair are attached directly to the cushioned body.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1A is a top view of a brush according to the present invention.

FIG. 1B is a cross-sectional view of the brush shown in FIG 1A, taken along line A-A shown in FIG 1C.

FIG. 1C is a bottom view of the brush shown in FIG. 1A.

FIG. 1D is a side view of the brush shown in FIG. 1A.

FIG. 2A is a schematic, top view of a brush according to the present invention.

FIG. 2B is a schematic, bottom view of the brush shown in FIG. 2A.

FIG. 3A is a schematic, bottom view of another brush according to the present invention.

FIG. 3B is a schematic, bottom view of the brush shown in FIG. 3A.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

A brush (10) according to a first preferred embodiment of the invention is shown in FIGs. 1A – 1D. The brush (10) comprises a head (12), a handle (14), a plurality of vents (16) in the head (12), and a cushion (18). A soft pad or cushion (18) is attached to the inner side of the head (12), as shown in FIG 1B, which is a cross-sectional view taken along lines A-A shown in FIG 1C. The cushion is attached to the head at the periphery of the cushion only, so that a portion of the cushion is spaced from the head, thereby enabling the cushion to flex inwardly relative to the head when pressure is applied to the cushion. The cushion (18) has a plurality of vents (20). The vents (16) in the head and the vents (20) in the cushion extend all the way through each of the head and cushion, respectively, so that circulating air may freely pass through the vents. An internal gap (22) exists between the head and cushion as shown in Fig. 1B so that the cushion (18) may flex inward toward the head (12) during use. A plurality of bristles (24) are attached to the cushion (18).

In a first preferred embodiment of the present invention, as shown in FIGs. 1A – 1D and as shown schematically in FIGs. 3A- 3B, the head (12) has an oval profile. In the schematic view of FIG. 3B, the bristles have been omitted. The oval profile is functional in that the rounded, tapered ends of the oval enable the bristles to reach tight areas of the hair, such as in close proximity to ears and around the neckline. The tapered ends also enable precise brushing of a selected and limited amount of hair in specialized styling techniques.

A second preferred embodiment of the present invention is shown schematically in Figs. 2A – 2B, where a brush head (26) has a generally rectangular shape. A complementary cushion (28) is attached to the head (26) and functions as described with respect to the cushion and head of the first embodiment of the present invention. Vents (30) in the head (26) and vents (32) in the cushion (28) are provided to function as the vents described with respect to the first embodiment of the present invention. A handle (27) is provided.

The brushes of either embodiment described above may be provided with various features including, but not limited to, ion or infra red emitting coatings and surfaces such as ceramic or tourmaline; ion or infra red emitting elements such

as electronic ion or energy generators; heat generating devices such as internal heat elements and blower fans; electronic controls and displays; handle contours and materials such as gel grip or textured grip; and other features.

While the preferred embodiment of the present invention has been herein described, various modification may be made without departing from the scope of the present invention.

CLAIMS

WHAT IS CLAIMED IS:

- 1) A hair brush comprising
 - a brush head having at least one vent that extends through said head;
 - a flexible base attached to said head, said base having at least one vent that extends through said base;
 - a plurality of bristles attached to said base.
- 2) A brush according to claim 1 further comprising
 - a handle attached to said head.
- 3) A brush according to claim 1, wherein
 - said brush head comprises a plurality of vents.
- 4) A brush according to claim 1, wherein
 - said cushion comprises a plurality of vents.
- 5) A brush according to claim 1, wherein
 - said head has a generally oval shape.
- 6) A brush according to claim 1, wherein
 - said head has a generally rectangular shape.
- 7) A brush according to claim 1, wherein
 - said flexible base is attached to said head only at the periphery of said base.
- 8) A brush according to claim 7, wherein
 - a portion of said base supporting a plurality of said bristles is spaced from said head.

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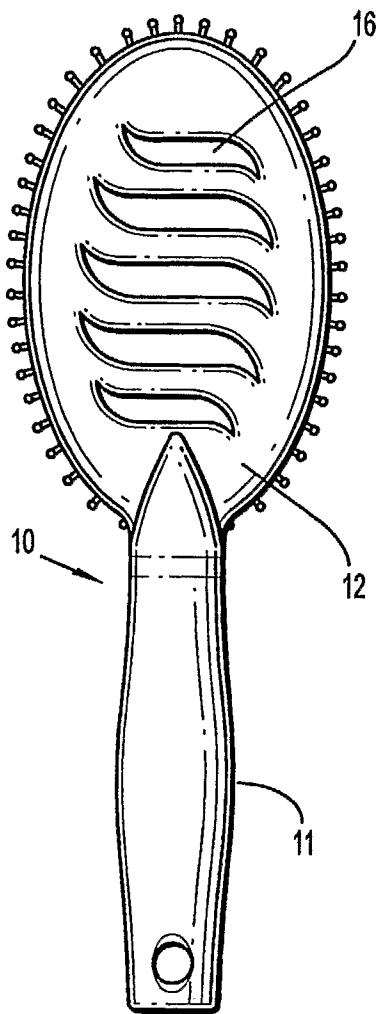


FIG. 1A

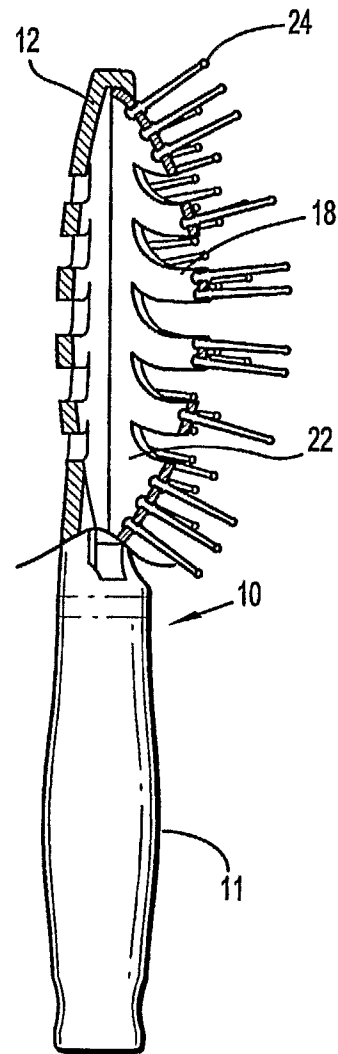


FIG. 1B

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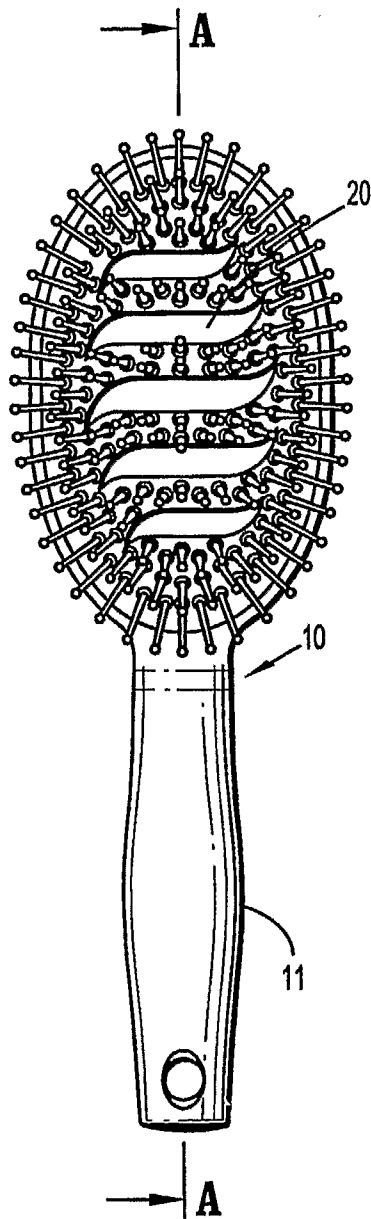


FIG. 1C

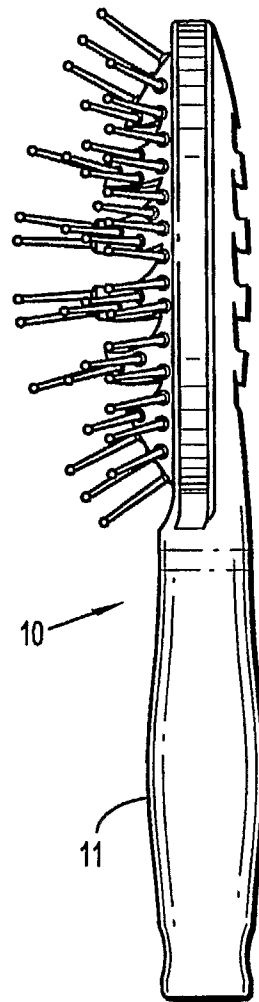


FIG. 1D

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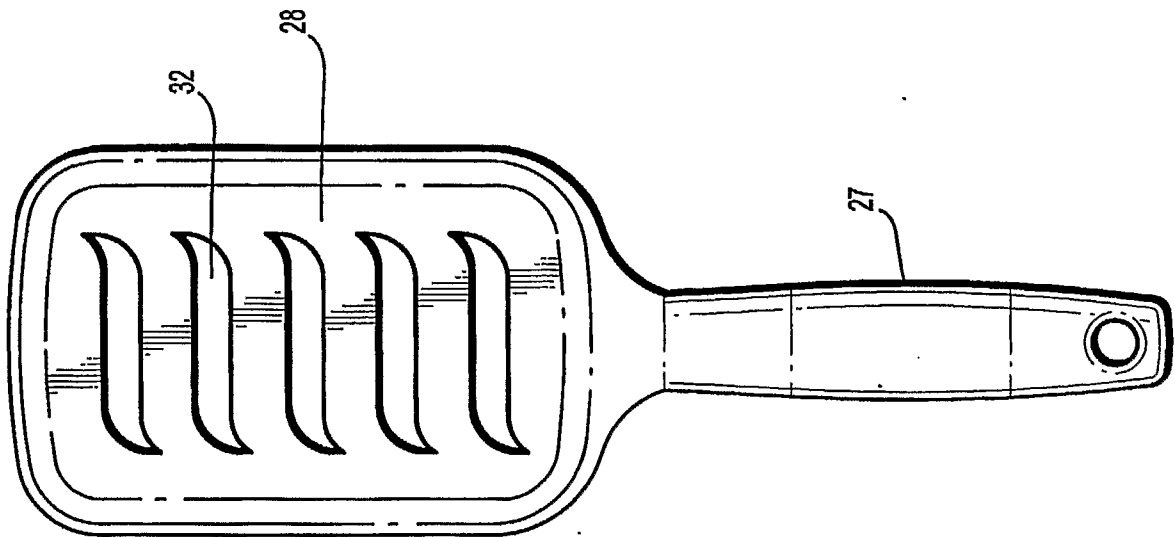


FIG. 2B

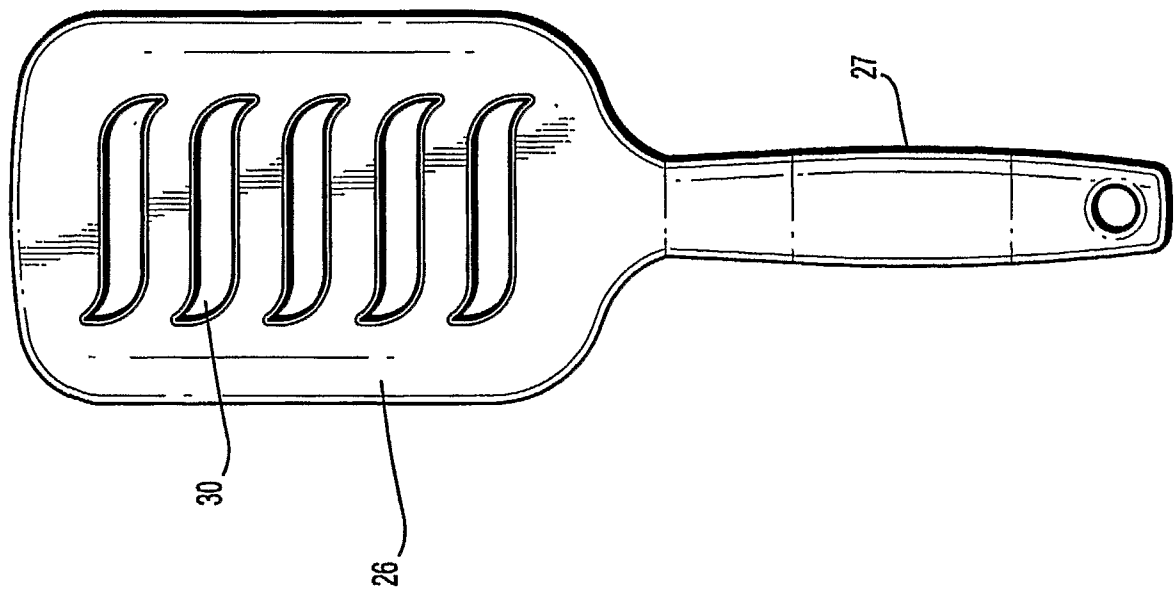


FIG. 2A

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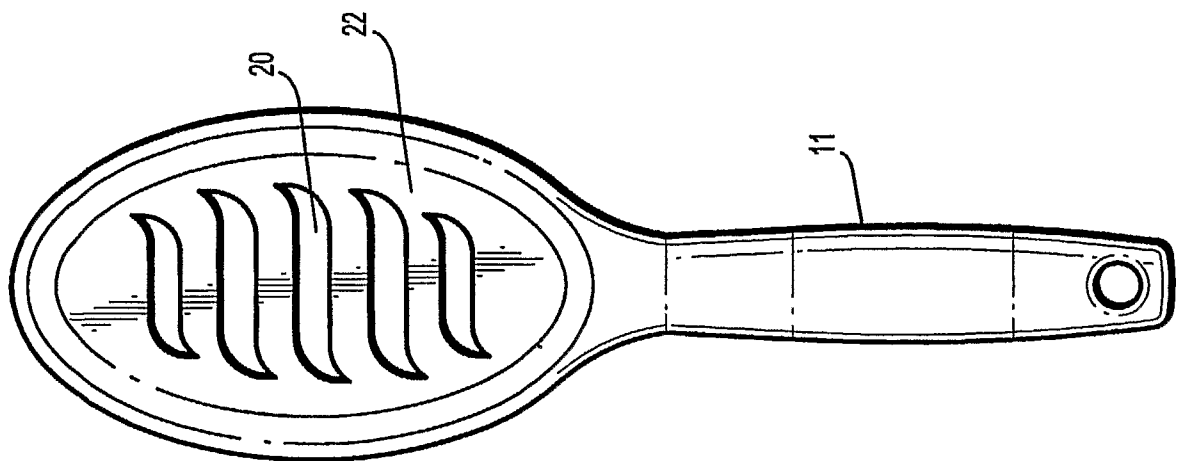


FIG. 3B

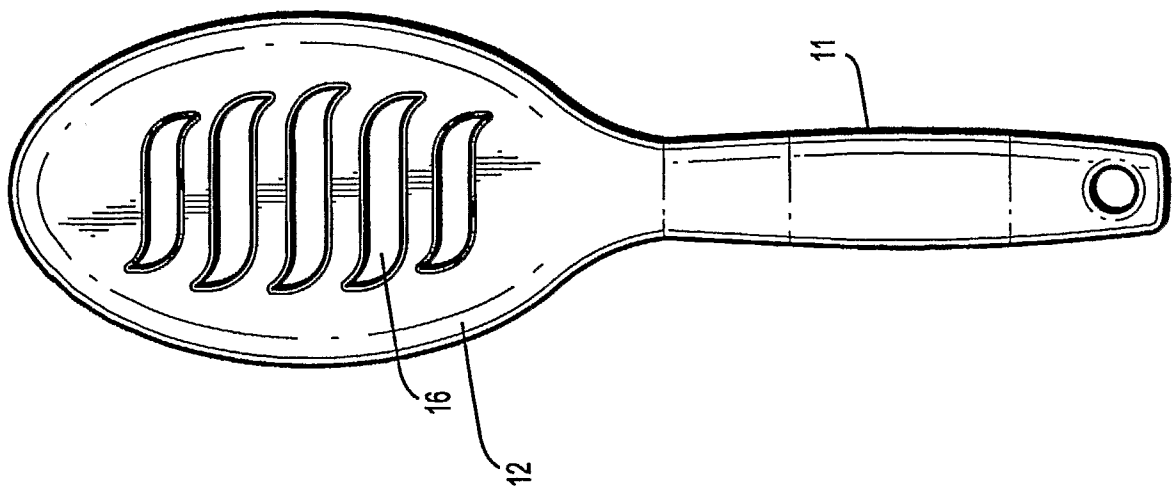


FIG. 3A

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/04716

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **A46B 7/00**(2006.01),**7/06**(2006.01);**A45D 24/16**(2006.01)

USPC: 15/186,187,201;132/120

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 15/186,187,188,201,205.2,159.1,160; 132/120; 601/136,137;

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,327,611 (BALSTER et al) 12 July 1994 (12.07.1994), figures, column 6 lines 33-43.	1-8
X	US 4,118,823 (AXELROD) 10 October 1978 (10.10.1978), figures, column 2 lines 15-24, 39-44.	1-8
X	US 6,006,395 (TIRAMANI et al) 28 December 1999 (28.12.1999), figures.	1-2, 4-8



Further documents are listed in the continuation of Box C.



See patent family annex.

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"P"	document published prior to the international filing date but later than the priority date claimed		

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