A false eyelash system comprised of upper and lower eyelash assemblies, each including a magnetic and/or metallic element, the assemblies are frictionally secured through magnetic attraction to the wearer's natural eyelash which is sandwiched therebetween.

FIG. 4
NON-ADHESIVE FALSE EYELASH SYSTEM AND METHOD

CLAIM OF PRIORITY

This application is being filed as a non-provisional patent application under 35 U.S.C. §111(b) and 37 CFR §1.53(c). This application claims priority under 35 U.S.C. §111(e) to U.S. provisional patent application Ser. No. 62/105,089 filed on Jan. 19, 2015, the contents of which are incorporated herein by reference.

FIELD OF INVENTION

The invention relates generally to false eyelashes and in particular to false eyelashes that are secured to the wearer’s real eyelashes by non-adhesive means, such as by magnetic force.

BACKGROUND OF THE INVENTION

False eyelashes, and the reason for wearing them, are well known in the cosmetic arts. People are often dissatisfied with the look of their eyelashes or simply wish to don eyelashes that are more suitable to a particular occasion. False eyelashes can have different curl, color, fullness, length, or other physical characteristics which can enhance the appearance of the wearer. While eyelash-enhancing cosmetic products, such as mascara, are available to improve these characteristics, even greater enhancements are possible through the use of false eyelashes.

False eyelashes typically consist of synthetic, human or animal hairs that are attached or tied to an elongated substrate. The substrate can be a textile or non-woven material having a skin-facing surface and an outward-facing surface. The false eyelash hairs are tied or adhered to the outward-facing surface. The skin-facing surface is impregnated with a pressure-sensitive adhesive that is used to temporarily affix the false eyelash to the wearer’s eyelid. Alternatively, an adhesive substance can be applied directly to the eyelid and the false eyelash is then attached to the eyelid by placing the skin-facing surface over the adhesive substance.

False eyelashes in the prior art suffer from a number of disadvantages. These disadvantages include but are not limited to the following. First, they are typically single-use items. That is, once applied and removed they may not be reused. The act of applying adhesive and removing a false eyelash has a tendency to deform the substrate and/or eyelash hairs. Therefore, after one use, the false eyelash must usually be discarded. Second, false eyelashes are difficult to apply. Often, the false eyelash is not perfectly aligned with the wearer’s eyelid and must be re-applied. If the adhesive bond has set in, removing the eyelash in order to relocate it can result in deformation of the false eyelash and the need to use a new false eyelash. Third, the adhesive materials used in prior art false eyelashes can irritate some wearers’ eyes and/or skin and can often leave a residue on the wearer’s eyelid which is often difficult to remove. Fourth, the adhesive materials used in prior art false eyelashes can lose holding power as it is exposed throughout the day to oils secreted by the wearer’s eyelid, resulting in false eyelashes that come loose from the eyelid. Fifth, false eyelashes in the prior art are limited in the number of hairs that can be applied to the substrate and therefore sometimes do not add sufficient fullness to the wearer’s eyelashes.

SUMMARY OF THE INVENTION

It is an object of the present invention to overcome the disadvantages of existing false eyelash systems by providing a false eyelash that can be easily and conveniently reused. It is another object of the present invention to provide a false eyelash system that is easy to apply and inherently aligns itself to the wearers’ eyelids. It is still another object of the present invention to provide a false eyelash that does not use adhesives and does not irritate the wearer’s eye or eyelid skin and does not leave any residue on the user’s eyelid. It is a further object of the present invention to provide a false eyelash that does not physically contact the wearer’s eyelid when installed. It is yet another object of the present invention to provide a false eyelash with enhanced fullness relative to false eyelashes in the prior art.

These and other objects are achieved through the false eyelash system of the present invention as described in the following disclosure.

The false eyelash system of the present invention can be applied to the eyelash in the upper eyelid of the wearer and/or the lower eyelid of the wearer, and to either the left or right eye of the wearer. For ease of reference and to avoid redundant description, unless otherwise stated, the description in the present disclosure references application to the eyelash located in the upper eyelid of the wearer. Although there may be dimensional or ornamental differences in eyelashes applied to the various locations, the construction and method for application to each such location is essentially the same.

The false eyelash system of the present invention consists of two primary eyelash assemblies. An upper eyelash assembly and a lower eyelash assembly. Both the upper and the lower eyelash assemblies consist of a substrate strip of narrow and elongated construction. The substrate strip is long enough to substantially cover at least a portion of a wearer’s eyelid edge and, optimally, can be shaped to mirror the contour of the eyelid edge. Thus, the false eyelash system of the present invention may include false eyelashes that cover the entire length of the eyelash, a portion of the eyelash, eyelash tips, or even a single eyelash hair. The substrate can be composed of a textile, a non-woven material, a polymer, or other suitable material that is thin, flexible, lightweight, and can be readily adaptable to the adhesion of eyelash hairs and metallic components. Each substrate strip has an upward facing surface and an opposite downward facing surface.

Eyelash hairs (be they human, animal or synthetic) are attached to the surface of the substrate in a generally perpendicular direction relative to the longitudinal axis of the substrate strip. In the case of the upper eyelash assembly, the hairs are preferably attached to the upward facing surface of the substrate strip. In the case of the lower eyelash assembly, the hairs are preferably attached to the downward facing surface of the substrate strip. However, attachment to either surface of the substrate strip is acceptable.

One or more non-adhesive attractive elements, in one embodiment magnetic elements, are attached to the upper eyelash substrate strip, preferably to its downward facing surface. The magnetic elements can be placed at discrete locations along the substrate surface or can cover the entire substrate surface. The magnetic elements can be composed of an inherently magnetic material, such as neodymium. Alternatively, the magnetic element can be composed of a magnetizable material, such as magnetite or any other ferrous material, which is magnetized after application to the substrate,
and periodically re-magnetized. Because magnetic force will penetrate the substrate strip, when magnetic elements are used they may be attached to either surface of the substrate strip. Alternatively, the magnetic elements may be placed on the lashes.

[0012] The magnetic elements may be formed in one of several ways. One way is to magnetize a material such as magnetite or another ferromagnetic material that is embedded into a polymer in the substrate. One such method is to expose the magnetite or ferromagnetic material to a strong magnetic field. Other methods of magnetization exist and may be applicable to this invention.

[0013] Alternatively, the magnetic elements may be manufactured from inherently magnetic materials such as neodymium or samarium-cobalt. To produce a magnetic element, small uniform sized particles of the material can be incorporated into a polymer coating, such as a nylon-6 polymer or nitrocellulose which allows the magnetic field to penetrate beyond the substrate. After the particles have been incorporated into the coating, the coating is then cured. Then, the coating can be applied permanently to the substrate. Similar to a polymer coating, a plastic material can be embedded with such magnetic, or magnetizable, particles through methods that are known in the art.

[0014] In corresponding fashion, one or more metallic elements are attached to the lower eyelash assembly’s substrate strip, preferably to its upward facing surface. The metallic elements are composed of a material that is magnetically attractive, such as many ferrous materials, so as to engage the magnetic elements in the upper eyelash assembly. If the magnetic material is located at discrete locations along the length of the upper eyelash assembly’s substrate, then the metallic elements can be placed at corresponding locations along the length of the lower eyelash assembly’s substrate. Alternatively, the metallic element can cover the entire length of the lower eyelash assembly’s substrate. Alternatively, the magnetic elements may be placed on the lashes. The metallic elements described above can be manufactured using the same techniques as those described for the magnetic elements. As with the attractive elements in the upper eyelash, because magnetic force will penetrate the substrate strip, the metallic elements of the lower eyelash may be attached to either surface of the substrate strip.

[0015] Although the above embodiment describes an upper eyelash assembly with magnetic element(s), and a lower eyelash assembly with metallic element(s), the reverse embodiment is equally feasible. That is, the upper eyelash assembly can be equipped with metallic element(s) and the lower eyelash assembly with magnetic element(s). A third alternative embodiment is also possible in which both the upper and lower eyelash assemblies are equipped with magnetic elements having opposite polarities and thus ensuring magnetic attraction between them. Alternatively, the magnetic elements may be placed on the lashes.

[0016] In use, the false eyelashes of the present invention are applied by placing the upper eyelash assembly directly above the wearer’s natural eyelashes and along the edge of the wearer’s eyelid. Simultaneously, the lower eyelash assembly is placed directly below the wearer’s natural eyelashes and along the edge of the wearer’s eyelid. As the upper and lower assemblies are moved closer together, magnetic force between the magnetic and metallic elements in the assemblies cooperatively engage the two assemblies with the wearer’s natural eyelash “sandwiched” between the two assemblies. The magnetic force is sufficient to keep the two assemblies cooperatively engaged and frictionally secured to the wearer’s natural eyelash.

[0017] To remove the false eyelashes of the present invention, the two assemblies can be pulled apart until the magnetic force is overcome. Alternatively, the assemblies, still magnetically engaged, can be slid forward along the wearer’s natural eyelash until they disengage the natural eyelash. They can then be separated for storage.

[0018] It will be noted that the present invention achieves the above-stated objects by providing a fully-reusable, easy to apply remove and reapply, self-aligning false eyelash without the use of adhesives. Moreover, because both the upper and lower assemblies can contain eyelash hairs, twice the fullness can be achieved, when compared to false eyelashes in the prior art.

BRIEF DESCRIPTION OF THE DRAWINGS

[0019] FIG. 1 is a frontal view of a human eye in which a magnetic embodiment of the false eyelash system of the present invention is about to be installed on the upper eyelashes of the wearer.

[0020] FIG. 2 is a frontal view of a human eye showing a magnetic embodiment the false eyelash system of the present invention once installed on the upper eyelash of the wearer.

[0021] FIG. 3 is a frontal view of a human eye showing a magnetic embodiment of the false eyelash system of the present invention once installed on the upper and lower eyelashes of the wearer.

[0022] FIG. 4 is a cross sectional view of the upper eyelash assembly of an embodiment of the present invention in which magnetic elements are attached to the substrate strip.

[0023] FIG. 5 is a cross sectional view of the upper eyelash assembly of an embodiment of the present invention in which magnetic elements are embedded within a coating in the substrate strip.

[0024] FIG. 6 is a cross-sectional view of a human eye showing a magnetic embodiment of the false eyelash system of the present invention once installed on the upper eyelash of the wearer.

[0025] FIG. 7 is a perspective view of an eyelash assembly of an embodiment of the present invention in which magnetic elements are attached at discrete locations along the substrate strip.

[0026] FIG. 8 is a plan view of an eyelash assembly of an embodiment of the present invention in which magnetic elements are attached at discrete locations along the substrate strip.

[0027] FIG. 9 is a plan view of an eyelash assembly of FIG. 8, shown from the opposite side.

DETAILED DESCRIPTION OF THE INVENTION

[0028] Referring first to FIG. 1 of the drawings, shown therein is a frontal view of a human eye in which a magnetic embodiment of the false eyelash of the present invention is about to be installed on the upper eyelash (6) of the wearer. The upper eyelash assembly (2) and lower eyelash assembly (10) are in position, respectively above and below the upper eyelash (6) of the wearer. In order to apply the false eyelash, the upper eyelash assembly (2) is moved in a downward direction (4) towards the wearer’s upper eyelash (6) while the lower eyelash assembly (10) is moved in an upward direction (8) towards the towards the wearer’s upper eyelash (6). As the
upper and lower assemblies (2.10) approach each other, magnetic force urges them towards each other “sandwiching” the wearer’s upper eyelash (6).

FIG. 2 shows the upper and lower eyelash assemblies (2.10) magnetically engaged with each other and installed on the wearer’s upper eyelash (6). The assemblies are retained on the upper eyelash (6) by friction caused by the magnetic attraction between the two assemblies.

FIG. 3 shows an embodiment of the present invention incorporating assemblies for the upper and lower eyelashes of the wearer (not numbered). In addition to the upper and lower eyelash assemblies for the upper eyelash (2.10), upper and lower assemblies for the lower eyelash (3.5) are shown after installation in a similar fashion to that described above in connection with FIG. 1.

FIG. 4 shows a cross sectional view of the upper eyelash assembly (2) of one embodiment of the present invention. Shown are a substrate strip (14), false eyelash hairs (12), and an attractive element (26) attached to the substrate strip (14). The lower eyelash assembly (10) has similar construction. As indicated previously, the attractive element (26) can be magnetic, but of opposite polarities, on both the upper and lower eyelash assemblies (2.10) or can be magnetic in one assembly and metallic in the other.

FIG. 5 shows an alternative embodiment of the upper eyelash assembly in which a coating with embedded metallic or magnetic particles is used. Shown are a substrate strip (14), false eyelash hairs (12), and a magnetic and/or metallic particles (16) embedded within a polymer coating (15) applied to the substrate strip. The lower eyelash assembly (10) has similar construction. As indicated previously, particles (16) can be magnetic, but of opposite polarities, on both the upper and lower eyelash assemblies (2.10) or can be magnetic in one assembly and metallic in the other.

An alternative embodiment of the present invention, not shown on the drawings, can incorporate substrate strips which themselves are embedded with metallic or magnetic particles. The substrate strip, in such a case, may be composed of a polymer or a plastic which can be molded and embedded with the particles. Alternatively, the magnetic elements may be placed on the lashes themselves, such as by coating the lashes with a magnetic material.

FIG. 6 shows a cross sectional view of the installed upper eyelash on the wearer’s eye in accordance with FIG. 2 using discrete attractive elements (per FIG. 4). As illustrated, the upper and lower eyelash assemblies (2.10) sandwich the wearer’s upper eyelash (20). The attractive elements (26.28) attached to the substrate strips (14.24) are magnetically engaged and frictionally secured to the wearer’s natural eyelash (20).

FIGS. 7, 8 and 9 show various views of an eyelash assembly of an embodiment of the present invention in which magnetic elements are attached at discrete locations along the substrate strip in accordance with FIG. 4. As explained previously, eyelash hairs (12) are affixed to substrate strip (14) and metallic or magnetic elements (26) are attached to the substrate strip at discrete locations. In the shown embodiment, the metallic or magnetic elements (26) consist of rectangular plates, uniform in size, evenly spaced along the substrate strip (14). Of course, other suitable shapes can be used such as circular, polygonal, ovoid or even irregular shapes. In addition, all of the magnetic metallic elements (26) do not need to have the same shape or be placed in a regular pattern. Although in the shown embodiment the magnetic or metallic elements (26) are attached or bonded to the substrate strip (14) using adhesives, they could also be affixed thereto by alternative means, such as building suitable sized pouches to retain them in relation to the substrate strip (14).

Although the present invention is described above in connection with a magnetic false eyelash having a particular arrangement of upper and lower eyelash assemblies, and corresponding magnetic and metallic elements, these descriptions are not intended to be limiting as various modifications may be made therein without departing from the spirit of the invention and within the scope and range of equivalents of the following claims.

For example, although the described embodiments utilize magnetic and metallic elements to create an attractive force between the upper and lower eyelash assemblies, other types of elements, also creating an attractive force, may be used without departing from the spirit of the present invention. Non-limiting examples of such elements include: (a) hook and loop material (commercially known as Velcro®); (b) static-cling plastics (c) micro suction cups and similar micro-suction technology; or any number of other materials.

Although the invention is described herein in sufficient detail to enable those of ordinary skill in the relevant art to practice it, various modifications and structural changes may be made therein without departing from the spirit of the invention and within the scope and range of equivalents of the claims.

1. A false eyelash comprised of:
   1.1. A substrate strip having a first surface and a second surface,
   1.2. said substrate strip having a generally elongated shape and a longitudinal axis, said first surface and said second surface located on opposing sides of said substrate strip,
   1.3. a plurality of hairs affixed to, and extending from, said substrate strip,
   1.4. said hairs oriented substantially perpendicularly with respect to said longitudinal axis,
   1.5. or one or more flat metallic elements affixed to said substrate strip.

2. The false eyelash of claim 1 wherein said hairs are affixed to said first surface of said substrate strip and said metallic plates are affixed to said second surface of said substrate strip.

3. The false eyelash of claim 1 wherein said one or more metallic elements are inherently magnetic.

4. The false eyelash of claim 1 wherein said one or more metallic elements are magnetizable.

5. The false eyelash of claim 1 wherein said hairs are selected from the group comprised of: human hairs, animal hairs, synthetic hairs and combinations thereof.

6. A false eyelash comprised of:
   6.1. A substrate strip having a first surface and a second surface,
   6.2. said substrate strip having a generally elongated shape and a longitudinal axis, said first surface and said second surface located on opposing sides of said substrate strip,
   6.3. a plurality of hairs affixed to, and extending from, said substrate strip,
   6.4. said hairs oriented substantially perpendicularly with respect to said longitudinal axis,
   6.5. and said substrate strip having a magnetized coating, said magnetized coating comprising metallic particles embedded within a polymer or plastic binder.

7. The false eyelash of claim 6 wherein said hairs are affixed to said first surface of said substrate strip and said magnetized coating is applied to said second surface, of said substrate strip.
8. The false eyelash of claim 6 wherein said metallic particles are inherently magnetic.
9. The false eyelash of claim 6 wherein said metallic plates are magnetizable.
10. The false eyelash of claim 6 wherein said hairs are selected from the group comprised of: human hairs, animal hairs, synthetic hairs and combinations thereof.
11. A false eyelash system comprised of:
the upper false eyelash comprising a substrate strip having a first surface and a second surface, said substrate strip having a generally elongated shape and a longitudinal axis, said first surface and said second surface located on opposing sides of said substrate strip;
the upper false eyelash further comprising a plurality of eyelash hairs affixed to, and extending from, said upper false eyelash substrate strip, said hairs oriented substantially perpendicularly with respect to said longitudinal axis of said upper false eyelash substrate strip;
the lower false eyelash further comprising one or more flat metallic elements affixed to said upper false eyelash surface strip;
the lower false eyelash comprising a substrate strip having a first surface and a second surface, said substrate strip having a generally elongated shape and a longitudinal axis, said first surface and said second surface located on opposing sides of said substrate strip;
the lower false eyelash further comprising a plurality of eyelash hairs affixed to, and extending from said lower false eyelash substrate strip, said hairs oriented substantially perpendicularly with respect to said longitudinal axis of said lower false eyelash substrate strip; and
the lower false eyelash further comprising one or more flat metallic elements affixed to said lower false eyelash surface strip.
12. The false eyelash of claim 11 wherein said hairs are affixed to said first surfaces of said upper and lower false eyelash substrate strips and said metallic elements are affixed to said second surfaces of said upper and lower false eyelash substrate strips.
13. The false eyelash of claim 11 wherein said one or more metallic elements are inherently magnetic.
14. The false eyelash of claim 11 wherein said one or more metallic elements are magnetizable.
15. The false eyelash of claim 11 wherein said hairs are selected from the group comprised of: human hairs, animal hairs, synthetic hairs and combinations thereof.
16. A method for applying a Use eyelash system to a human eyelash comprising:
placing in close proximity to the upper part of the human eyelash a first false eyelash comprised of a first substrate, a plurality of hairs affixed to the first substrate, and one or more metallic elements affixed to the first substrate;
placing in close proximity to the lower part of the human eyelash a second false eyelash comprised of a second substrate, a plurality of hairs affixed to the second substrate, and one or more metallic elements affixed to the second substrate;
wherein one or more of the metallic elements in said first or second false eyelashes contain a magnetic charge;
converging said first and second false eyelashes onto said human eyelash until magnetic force engages said first false eyelash with said second false eyelash with said human eyelash in between.

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