Title: HAIR THREADING APPARATUS AND METHOD

Abstract: A protective device for protecting the fingers of a user from cuts while hair threading is presented. The protective device has a guard configured to overlie at least a portion of a finger of the user. The thread for hair threading is wrapped around a portion of the guard so that the thread does not directly come into contact with the skin. The guard has an attachment member configured to maintain the thread in the desired position relative to the finger of the user.
HAIR THREADING APPARATUS AND METHOD

FIELD OF THE INVENTION

[0001] Presented herein are devices and methods for protecting the hands of a user while hair threading. In particular, a protective device for protecting the fingers from cuts in the skin while hair threading is presented.

BACKGROUND OF THE INVENTION

[0002] The personal grooming market is a large segment of the American economy. People spend millions of dollars each year nation-wide to look beautiful. Hair removal on the legs and eyebrows is very popular around the world and many apparatuses and procedures have been developed therefore.

[0003] Hair threading is a popular method of hair removal whereby thread is used to remove hair. To perform hair threading, the thread is often held in a loop fashion, as illustrated in Figure 1. A twist is put in the thread, as shown in Figure 2, and the twist moves right or left to catch the hair and pulls it from the root (as a method of hair removal). While this technique is effective for hair removal, the thread movement across the skin often causes thread cuts to the fingers of the user holding the thread. That is, as the thread is manipulated, the thread can cut into the skin because the thread is taut and thin so that it readily digs into and cuts the skin. These cuts put the user, such as a salon technician and the like, and the person having the hair removed, such as a client and the like, at risk due to cuts that result in blood or wound exposure, including blood borne or environmental pathogens.

[0004] Eyebrow threading is quite popular and one of the fastest growing beauty trends. Many spas and salons are using the technique. As such, there is a great risk to the community and the spa personnel, if steps are not taken to prevent thread cuts. Men performing threading hair removal on oneself, one can also suffer thread cuts to the fingers. This too puts persons at risk for infection.
Accordingly, there is a need for a protective device to protect the fingers of a user from thread cuts caused by contact of the thread with the skin of a user during hair threading.

**SUMMARY**

Presented herein is a protective device for protecting the fingers of a user from cuts while hair threading. The protective device comprises a guard configured to overlie at least a portion of a finger of a user. The thread for hair threading can be coupled to and/or wrap around a portion of the guard so that the thread does not directly come into contact with the skin. That is, the guard can act as a barrier to the friction from the thread that causes thread cuts.

In one aspect, the guard can comprise at least one attachment member configured to maintain the thread in the desired position relative to the finger of the user. That is, the attachment member can position the thread and prevent or restrict the thread from contacting the skin of the user. Optionally, the at least one attachment member can comprise a pair of arms. For example, the thread can wrap around an outer surface of a central portion of the pair of arms to position the thread as desired.

In another aspect, a slot, a channel and the like can be defined between the attachment member and a portion of a body of the guide so that the thread can be positioned in the slot or channel. For example, a distal end of the attachment member can be coupled to the body, and a proximal end of the attachment member can be spaced from the body a predetermined distance to form the slot. In another example, the distal end and the proximal end of the attachment member can be coupled to the body and a central portion of the attachment member can be spaced from the body a predetermined distance to form the channel.

Related methods of operation are also provided. Other apparatuses, methods, systems, features, and advantages of the protective device and the method of its use will be or become apparent to one with skill in the art upon examination of the following figures and detailed description. It is intended that all such additional
apparatuses, methods, systems, features, and advantages be included within this description, be within the scope of the protective device and the method of its use, and be protected by the accompanying claims.

DETAILED DESCRIPTION OF THE DRAWINGS

[0010] The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate certain aspects of the instant invention and together with the description, serve to explain, without limitation, the principles of the invention. Like reference characters used therein indicate like parts throughout the several drawings.

[0011] FIG. 1 is a side elevational view of a thread held in a loop fashion for hair threading, showing the thread contacting the skin of the fingers of the user;

[0012] FIG. 2 is a side elevational view of the thread of Figure 1 with a twist put into the thread;

[0013] FIG. 3 is a side elevational view of one aspect of a protective device for protecting the hands of a user while hair threading;

[0014] FIG. 4 is a side elevational view of a second aspect of a protective device for protecting the hands of a user while hair threading;

[0015] FIG. 5 is a side elevational view of a third aspect of a protective device for protecting the hands of a user while hair threading; and

[0016] FIG. 6 is a side elevational view of a fourth aspect of a protective device for protecting the hands of a user while hair threading.

DETAILED DESCRIPTION OF THE INVENTION

[0017] The present invention can be understood more readily by reference to the following detailed description, examples, and claims, and their previous and following description. Before the present system, devices, and/or methods are disclosed and described, it is to be understood that this invention is not limited to the
specific systems, devices, and/or methods disclosed unless otherwise specified, as such can, of course, vary. It is also to be understood that the terminology used herein is for the purpose of describing particular aspects only and is not intended to be limiting.

[0018] The following description of the invention is provided as an enabling teaching of the invention in its best, currently known aspect. Those skilled in the relevant art will recognize that many changes can be made to the aspects described, while still obtaining the beneficial results of the present invention. It will also be apparent that some of the desired benefits of the present invention can be obtained by selecting some of the features of the present invention without utilizing other features. Accordingly, those who work in the art will recognize that many modifications and adaptations to the present invention are possible and can even be desirable in certain circumstances and are a part of the present invention. Thus, the following description is provided as illustrative of the principles of the present invention and not in limitation thereof.

[0019] As used herein, the singular forms "a," "an" and "the" include plural referents unless the context clearly dictates otherwise. Thus, for example, reference to a "thread" includes aspects having two or more threads unless the context clearly indicates otherwise.

[0020] Ranges can be expressed herein as from "about" one particular value, and/or to "about" another particular value. When such a range is expressed, another aspect includes from the one particular value and/or to the other particular value. Similarly, when values are expressed as approximations, by use of the antecedent "about," it will be understood that the particular value forms another aspect. It will be further understood that the endpoints of each of the ranges are significant both in relation to the other endpoint, and independently of the other endpoint.

[0021] As used herein, the terms "optional" or "optionally" mean that the subsequently described event or circumstance may or may not occur, and that the
description includes instances where said event or circumstance occurs and instances where it does not.

[0022] Terms used herein, such as "exemplary" or "exemplified," are not meant to show preference, but rather to explain that the aspect discussed thereafter is merely one example of the aspect presented.

[0023] The term "substantially," as used herein, may be applied to modify any quantitative representation which could permissibly vary without resulting in a change in the basic function to which it is related.

[0024] Presented herein are a protective device and method for protecting the hands of a user while hair threading. In one aspect and as illustrated in Figures 3-6, the protective device 10 comprises a guard 12 configured to overlie at least a portion of a finger 14 of a user (as used herein, the term "finger" can include a pointer finger, a thumb 22 and/or any other finger of the user). In use, the thread 16 for hair threading can be coupled to a portion of the guard so that the thread does not directly come into contact with the skin. That is, the guard can act as a barrier to space the thread from the skin of the user.

[0025] The guard 12 can comprise at a body 18 defining a longitudinal passageway 20 therethrough. In one aspect, the longitudinal passageway can be sized and shaped to fit the finger 14 of the user so that the guard can be worn on the finger. That is, an inner wall of the longitudinal passageway 20 can be configured to couple the guard 12 to the finger of the user when the finger is positioned in the longitudinal passageway. In one aspect, the longitudinal passageway 20 can be sized and shaped to form a friction fit between the guard and the finger. That is, a finger 14 inserted into the longitudinal passageway can frictionally engage the body 18 to prevent or restrict the guard 12 from sliding off the finger. Optionally, in another aspect, the guard can be clipped or attached to the finger with an adhesive material, such as adhesive tape, glue and the like. In use, for example, the finger 14 can slide through the longitudinal
passageway 20 until the guard 12 is positioned as desired relative to a distal end 24 of the finger.

[0026] In one aspect, at least a portion of the body 18 of the guard 12 can be configured to engage the thread 16. That is, in this aspect, the thread can wrap around a portion of an outer surface 26 of the body to maintain the thread in the desired position without contacting the skin of the user (i.e., spaced from the skin of the user). In another aspect, the guard can further comprise at least one attachment member 28 having an outer surface 30, wherein the attachment member is configured to engage a portion of the thread 16 and maintain the thread in the desired position relative to the skin of the user. In this aspect, the attachment member can be coupled to a portion of the body 18. In another aspect, a portion of the thread can engage the outer surface 30 of the attachment member, and a portion of the thread 16 can engage the outer surface 26 of the body.

[0027] Referring now to Figures 3 and 4, in one aspect, the attachment member 28 can comprise a pair of arms 32. As illustrated in Figure 3, in one aspect, a longitudinal axis of a first arm 34 of the pair of arms can be at an arm angle relative to the longitudinal axis of a second arm 36 so that at least a portion of the first arm intersects the second arm. In a further aspect, the arm angle can be an acute angle, or optionally, a right angle. In use, the thread 16 can wrap around a portion of the outer surface 30 of at least one arm of the pair of arms 32 to maintain the thread in the desired position. Optionally, in one aspect the thread can wrap around the outer surface of a central portion 38 of the pair of arms.

[0028] Referring now to Figure 4, in another aspect, the longitudinal axis of the first arm 34 of the pair of arms 32 can be substantially parallel to the longitudinal axis of the second arm 36. In this aspect, the first arm can be spaced from the second arm by the central portion 38. In use, the thread 16 can wrap around a portion of the outer surface 30 of at least one arm of the pair of arms 32 to maintain the thread in the desired position. Optionally, in one aspect, the thread can wrap around the outer surface of the central portion 38 of the pair of arms.
In one aspect, a slot 40, channel 42, and the like can be defined between a portion of the attachment member 28 and the outer surface 26 of the body 18. For example, a distal end 44 of the attachment member can be coupled to a portion of the body 18, and a proximal end 46 of the attachment member 28 can be spaced from the body a predetermined distance to form the slot, as illustrated in Figure 5. As such, the slot 40 can then be defined between the attachment member 28 and a portion of the outer surface 26 of the body 18 so that a portion of the thread 16 can be positioned in the slot. In another aspect, a longitudinal axis of the proximal end of the attachment member can be substantially parallel to the longitudinal axis of the longitudinal passageway 20 of the body.

In another example, the distal end 44 and the proximal end of 46 of the attachment member 28 can be coupled to the body 18 and the central portion 38 of the attachment member can be spaced from the body a predetermined distance, as illustrated in Figure 6. As such, the channel 42 can then be defined between the central portion 38 of the attachment member 28 and the outer surface 26 of the body 18 so that a portion of the thread 16 can be positioned in the channel. In another aspect, at least a portion of the attachment member can be an arcuate attachment member.

In one aspect, the protective device 10 can be a disposable device. That is, the device can be manufactured inexpensively so that upon use removing the hair of a person, the device can be discarded or recycled.

In another aspect, the protective device 10 can commonly be placed on the thumb and the pointer finger of a user, but placement on any other finger as needed to perform the threading technique is also contemplated.

In a further aspect, at least a portion of the protective device 10 can be formed from a material that can resist thread cuts. For example, at least a portion of the protective device can be formed from metallic materials such as stainless steel and the like, or polymeric materials such as polycarbonate, polypropylene, high density polyethylene, acetyl, ABS, nylon 66, polystyrene, and the like.
In use, the finger 14 of the user can be inserted through the longitudinal pathway 20 of the body 18 until the guard 12 is positioned as desired relative to the distal end 24 of the finger. A portion of the thread 16 can be wrapped around a portion of the outer surface 26 of the body and/or the outer surface 30 of the attachment member 28 so that the thread is held in the desired position by the body and/or the attachment member. A second, third, fourth, or more protective device 10 can be positioned on additional fingers of the user as described herein, so that each finger or thumb that could come in contact with a portion of the thread can be protected by a guard 12. Thus, the skin of the user can be protected from cuts by the thread, and the user can thread hair conventionally without the risk of thread cuts.

Although several aspects of the invention have been disclosed in the foregoing specification, it is understood by those skilled in the art that many modifications and other aspects of the invention will come to mind to which the invention pertains, having the benefit of the teaching presented in the foregoing description and associated drawings. It is thus understood that the invention is not limited to the specific aspects disclosed hereinabove, and that many modifications and other aspects are intended to be included within the scope of the appended claims.

Moreover, although specific terms are employed herein, as well as in the claims that follow, they are used only in a generic and descriptive sense, and not for the purposes of limiting the described invention.
CLAIMS

What is claimed is:

1. A protective device for protecting the fingers of a user from cuts formed in the skin of the fingers from a thread used in hair threading, the protective device comprising:

   a guard having a body defining a longitudinal passageway therethrough, wherein a portion of the finger of the user is insertable through the longitudinal passageway to couple the guard to the finger, and wherein the thread can be engage a portion of an outer surface of the body to maintain the thread in a desired position spaced from the skin of the user.

2. The protective device of claim 1, further comprising an adhesive material configured to adhere the finger to the body to prevent the guard from sliding off the finger.

3. The protective device of claim 1, wherein at least a portion of the body frictionally engages the finger inserted through the longitudinal to prevent the guard from sliding off the finger.

4. The protective device of claim 1, wherein the guard comprise at least one attachment member coupled to a portion of the body, and wherein the attachment member is configured to engage a portion of the thread and maintain the thread in the desired position spaced from the skin of the user.

5. The protective device of claim 4, wherein the attachment member comprises at least a first arm having a longitudinal axis and a second arm having a longitudinal axis.
6. The protective device of claim 5, wherein the longitudinal axis of the first arm is at an acute arm angle relative to the longitudinal axis of the second arm such that at least a portion of the first arm intersects the second arm at a central portion, and wherein a portion of the thread wraps around an outer surface of the central portion.

7. The protective device of claim 5, wherein the longitudinal axis of the first arm is substantially normal to the longitudinal axis of the second arm such that at least a portion of the first arm intersects the second arm at a central portion, and wherein a portion of the thread wraps around at least a portion of an outer surface of the central portion.

8. The protective device of claim 5, wherein the longitudinal axis of the first arm is substantially parallel to the longitudinal axis of the second arm, wherein the first arm is spaced from the second arm by a central portion, and wherein a portion of the thread wraps around at least a portion of an outer surface of the central portion.

9. The protective device of claim 4, wherein the attachment member comprises a distal end and a proximal end, wherein the distal end is coupled to the body and the proximal end is spaced from the body a predetermined distance such that a slot is defined between the attachment member and the body, and wherein a portion of the thread is positionable in the slot.

10. The protective device of claim 9, wherein a longitudinal axis of the proximal end of the attachment member is substantially parallel to the longitudinal axis of the longitudinal passageway of the body.
11. The protective device of claim 4, wherein the attachment member comprises a distal end and a proximal end, wherein the distal end and the proximal end are coupled to the body, wherein a central portion of the attachment member is spaced from the body a predetermined distance such that a channel is defined between the attachment member and the body, and wherein a portion of the thread is positionable in the channel.

12. The protective device of claim 4, wherein at least a portion of the attachment member is an arcuate attachment member.

13. The protective device of claim 1, wherein the device is disposable.

14. The protective device of claim 1, wherein the device is formed from polymeric materials.

15. A method for protecting the fingers of a user from cuts formed in the skin of the fingers from a thread used in hair threading, the method comprising:

   providing a protective device comprising a guard having a body defining a longitudinal passageway therethrough, wherein a portion of the finger of the user is insertable through the longitudinal passageway to couple the guard to the finger; and

   positioning a portion of the thread around an outer surface of the body to maintain the thread in a desired position spaced from the skin of the user while hair threading.

16. The method of claim 15, wherein the guard comprise at least one attachment member coupled to a portion of the body, and wherein the attachment member is configured to engage a portion of the thread.
INTERNATIONAL SEARCH REPORT

International application No. PCT/US 16/22714

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A45D 26/00 (2016.01)
CPC - A45D 26/00

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)

IPC (8): A45D 26/00 (2016.01)
CPC: A45D 26/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC (8): A61B 17/50, A45D 7/00, D05B91/04, A41D13/08 (2016.01)
CPC: A45D 7/00, A45D 2007/007, D05B91/04, A41D1 3/087, A45D44/02 (keyword limited; terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PatBase; Google Web; Google Patents;
Search Terms Used: Hair, fur, wool, remove, epilation, pluck, tweezer, pull, protection, guard, cover, glove, thimble, wrap, finger, hand, user, shield, thimble, thread, string, slot, channel, path, insert, thumb, thornability, facial, adhesive, luul

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tr>
<td>X</td>
<td>US 8,856,963 B2 (Nagda et al.) 14 October 2014 (14.10.2014), entire document, especially fig. 2-3, figs. 5a-5e; col. 1, in 25-55; col. 4, in 24-col. 5, in 59;</td>
<td>1-5, 8-10, 12-16, 11</td>
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<td>Y</td>
<td>US 8,506,579 B1 (Barelli et al.) 13 August 2013 (13.08.2013), entire document, especially figure 1</td>
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<td>US 4,991,410 A (Donatelli) 12 February 1991 (12.02.1991), entire document, especially abstract, fig. 11</td>
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<td>US 6,479,748 B1 (Satir) 9 July 2013 (09.07.2013), entire document</td>
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Further documents are listed in the continuation of Box C.

Date of the actual completion of the international search
10 May 2016 (10.05.2016)

Date of mailing of the international search report
21 JUN 2016

Name and mailing address of the ISA/US
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PCT Helpdesk: 571-272-4300
PCT OSP 571-272-7774

Authorized officer:
Lee W. Young

Form PCT/ISA/210 (second sheet) (January 2015)
**DOCUMENTS CONSIDERED TO BE RELEVANT**

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