

PROPRIOCEPTIVE SHAVER

FIELD OF THE INVENTION

The present invention is related to medical devices; to shaving devices for use in medical procedures; and more particularly, to a proprioceptive shaver for shaving intimate areas and designed to provide a safer intimate grooming experience in areas that are typically hard to shave safely.

BACKGROUND OF THE INVENTION

10 Use of shaving systems for removal of hair from a body is well known in the art. Typical type razors include those described by: U.S. Patent No. 10,513,041, U.S. Patent No. 10,137,586, U.S. Patent No. 10,137,585, U.S. Patent No. 9,713,879, U.S. Patent No. 8,726,528, U.S. Publication No. 2020/0223083, U.S. Publication No. 2014/0290066, WO Publication No. 2019/093931, or WO Publication No. 2012/107713.

20 Such devices, however, are not safe when used for grooming/shaving in areas that are typically hard to shave safely as they fail to provide the user the necessary or proper awareness of the position and movement of the parts of the body by means of sensory organs (proprioceptors) in the muscles and joints controlling the movement of the razor head.

25 SUMMARY OF THE INVENTION

The present invention relates to a shaving device, preferably for use in shaving intimate areas, configured to provide a safer intimate grooming experience in areas that are typically hard to shave safely. The proprioceptive shaver is configured to provide enhanced control of the

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razor blade as the razor blade is moved over or contacts an area of skin to be shaved or groomed.

In an illustrative embodiment, a proprioceptive shaver for shaving one or more portions of a body may comprise a
5 main body having a first end and a second opposing end; a user engagement member configured to provide, at multiple points, contact with a user's hand when in use; and a shaving assembly comprising a razor head having at least one or more cutting surfaces. The multiple points of
10 contact may include areas at or near the metacarpophalangeal joint, proximal interphalangeal joint and distal inferior phalange of the user's hand.

In an illustrate example, the multiple points of contact may include an area directly underneath the
15 metacarpophalangeal joint of two fingers of the same hand, an area just distal to the metacarpophalangeal joint and proximal to the proximal interphalangeal joint, a distal inferior phalanges (fingertips) of the same two fingers on the same hand, all three contact points, or any combination
20 thereof.

Accordingly, it is an objective of the invention to provide an improved shaving device.

It is a further objective of the invention to provide a shaving device configured to provide a safer intimate
25 grooming experience in areas that are typically hard to shave safely.

It is yet another objective of the invention to provide a proprioceptive shaver for shaving intimate areas.

It is a still further objective of the invention to
30 provide a proprioceptive shaver for shaving intimate areas, such as the human genitalia, and/or the surrounding area.

It is a further objective of the invention to provide a proprioceptive shaver for shaving intimate areas which provides a user three points of contact on two fingers of the same hand.

5 It is yet another objective of the invention to provide a proprioceptive shaver for shaving intimate areas which is configured to provide unique leverage and balance, allowing for control of the razor blade during shaving of intimate parts of the body.

10 It is a still further objective of the invention to provide a proprioceptive shaver for shaving intimate areas which is configured to provide a user with increased awareness of the position and movements of the razor as it is moved across the skin or shaving area.

15 It is a further objective of the invention to provide a proprioceptive shaver for shaving intimate areas which is configured to provide a user with increase proprioception of the position and movements of the razor as it is moved across the skin or shaving area.

20 Other objectives and advantages of this invention will become apparent from the following description taken in conjunction with any accompanying drawings wherein are set forth, by way of illustration and example, certain embodiments of this invention. Any drawings contained
25 herein constitute a part of this specification, include exemplary embodiments of the present invention, and illustrate various objects and features thereof.

BRIEF DESCRIPTION OF THE FIGURES

Figure 1 is a prospective view of an illustrative
30 embodiment of a proprioceptive shaver for shaving intimate areas;

Figure 2 is an alternative prospective view of the proprioceptive shaver for shaving intimate areas;

Figure 3 is a top view of the proprioceptive shaver for shaving intimate areas;

5 Figure 4 is a front view of the proprioceptive shaver for shaving intimate areas;

Figure 5 is a right side view of the proprioceptive shaver for shaving intimate areas;

10 Figure 6 is a left side view of the proprioceptive shaver for shaving intimate areas;

Figure 7 illustrates the proprioceptive shaver for shaving intimate areas in a first, non-extended position;

Figure 8 illustrates the proprioceptive shaver for shaving intimate areas in a second, extended position;

15 Figure 9A is a perspective view of the shaving assembly portion/member of the proprioceptive shaver for shaving intimate areas;

20 Figure 9B is an alternative perspective view of the shaving assembly portion/member of the proprioceptive shaver for shaving intimate areas;

Figure 10A is a top view of the proprioceptive shaver main body, shown with the shaving assembly removed;

Figure 10B illustrates one of the internal surfaces of the proprioceptive shaver main body;

25 Figure 11 is a bottom view of the proprioceptive shaver main body, shown with the shaving assembly removed;

Figure 12 illustrates the razor portion of the shaving assembly portion/member shown rotated from a first shaving position;

30 Figure 13 illustrates the razor portion of the shaving assembly portion/member shown rotated from a first shaving position;

Figure 14 illustrates the proprioceptive shaver for shaving intimate areas secured in a user's hand; and

Figure 15 illustrates an alternative view of the proprioceptive shaver for shaving intimate areas secured in
5 a user's hand.

DETAILED DESCRIPTION OF THE INVENTION

While the present invention is susceptible of embodiment in various forms, there is shown in the drawings and will hereinafter be described a presently preferred,
10 albeit not limiting, embodiment with the understanding that the present disclosure is to be considered an exemplification of the present invention and is not intended to limit the invention to the specific embodiments illustrated.

15 Referring to Figures 1-6, an illustrative embodiment of a proprioceptive shaver for shaving/grooming intimate areas, referred to generally as a proprioceptive shaver 10, is shown. The proprioceptive shaver 10 is configured to provide enhanced control of the razor blade as the razor
20 blade is moved over or contacts an area of skin to be shaved or groomed. While the proprioceptive shaver 10 will be described as being useful in shaving grooming intimate areas, such as human genitals and/or surrounding areas, such as a vagina, penis, or testicles, the proprioceptive
25 shaver 10 can be used on other parts of a body as well. Moreover, while the proprioceptive shaver 10 may have particular use in surgical settings or procedures, such use is not intended to be limiting. The proprioceptive shaver 10 comprises a main body 12 separating a first end 14 and a
30 second, opposing end 16. The first end 14 comprises a user engagement portion or member 18 integrally formed from or

attached thereto. At the second end 16, a shaving assembly 20 extends therefrom.

Referring to Figures 9A and 9B, an embodiment of the shaving assembly 20 is shown. The shaving assembly 20 comprises a body 22, illustrated herein as an elongated shaft or arm, secured to a razor head 24 via a joint 26. The shaving assembly shaft or arm 22 may be straight or contain a curvature. The shaving assembly shaft or arm 22 is sized and shaped to fit and move within the interior portion or region (to be described later) of the proprioceptive shaver main body 12. The razor head 24 may comprise a first surface 28 having one or more gripping surfaces 30, shown herein as ridges to allow a user's fingers to grip the razor head 24 when in use, i.e. grooming or shaving. A second, opposing surface 32 may contain one or more cutting surfaces 34, such as razor blades. The shaving assembly shaft or arm 22 may contain an opening 36 sized and shaped to receive and store therein a locking member 38, illustrated herein as a pin (see Figure 1). Once inserted, the pin 38 locks the shaving assembly shaft or arm 22 in place (at various positions) within the proprioceptive shaver main body 12.

Referring to Figures 10A-13, the proprioceptive shaver main body 12 is shown with the shaving assembly 20 removed. The proprioceptive shaver main body 12 may comprise an opening 40, illustrated herein as an open slit or channel, exposing the interior portion or region 42. The interior portion or region 42 is preferably hollow or partially hollow and sized and shaped to allow at least a portion of the shaving assembly shaft or arm 22 to fit within, and to move, preferably slidably in a linear direction therein. A user simply inserts at least a portion of the shaving

assembly shaft or arm 22 into the proprioceptive shaver main body second end opening 44. Once in a desired position, the user places the pin 38 into the shaving assembly shaft or arm opening 36. The bottom surface 46
5 (see Figures 10A and 10B) of the proprioceptive shaver main body 12 may contain a plurality of spaced apart pin receiving members 48, illustrated herein as dimples or small openings.

When at least a portion of the pin 38 (preferably a
10 pointed portion) is oriented to and rests within the pin receiving members 48, the shaving assembly shaft or arm 22 is locked in place. To orientate and position the shaving assembly shaft or arm 22 in another location within the proprioceptive shaver main body 12, the user removes the
15 pin 38, slides the shaving assembly shaft or arm 22 to the left or right (further or closer to the first end 14), see Figure 7, the proprioceptive shaver for shaving intimate areas in a first, non-extended position and Figure 8, the proprioceptive shaver for shaving intimate areas in a
20 second, extended position. Once in the desired position, the user simply places the pin 38 into and through opening 36. A portion of the pin 38 rests within one of the pin receiving members 48, locking the shaving assembly shaft or arm 22 in place.

25 The user engagement portion or member 18 is configured to provide the user unique control of the razor head 24 during the grooming or shaving process. Such control is vital for areas such as the human genitals, or surrounding area, that are difficult for an individual to shave
30 themselves safely and effectively. The user engagement portion or member 18 is configured so the proprioceptive shaver 10 provides users with increased awareness of the

position and movement of the parts of the body by means of sensory organs (proprioceptors) in the muscles and joints controlling the movement of the razor head 24. Accordingly, the proprioceptive shaver 10 is configured to
5 provide multiple, preferably three, points of contact on two fingers of the same hand. The three points of contact include areas at or near the metacarpophalangeal joint 50, proximal interphalangeal joint 52, and distal inferior phalanges (fingertips) 54 of the user's hand 55, see Figure
10 14. More specifically, the three points of contact include:

1. The area directly underneath the metacarpophalangeal joint of two fingers of the same hand;
2. The area just distal to the metacarpophalangeal
15 joint and proximal to the proximal interphalangeal joint which acts as a fulcrum with no finger contact until #3; and
3. The distal inferior phalanges (fingertips) of the same two fingers on the same hand, which is connected to
20 number two by a flexible adjustable shaft (to be described later).

As a result, a unique leverage is created between the metacarpophalangeal joint and the distal two inferior phalanges (fingertips) on the same hand. This unique and
25 exaggerated leverage creates an increased proprioception and awareness of the position and movement of the razor while it is being moved across intimate skin. This increased proprioception of the razor blades allows for a much safer intimate grooming experience in areas that are
30 difficult to shave safely, see Figures 14 and 15.

The user engagement portion or member 18 may include an upper portion 56, a lower portion 58, and a bridge 60

connecting the upper portion 56 and the lower portion 58. The upper portion 56 and the lower portion 58 are preferably arranged in a parallel or generally parallel arrangement, separated by a first opening 62 (to the left of bridge 60) and a second opening 64 (to the right of bridge 60). The upper portion distal ends 66 and 68 may have a partial curvature and extend down towards (but do not touch, thus forming an open or partial ring configuration) lower portion distal ends 70 and 72. The lower portion distal ends 70 and 72 may also have a partial curvature and extend upwards) towards (but do not touch, thus forming an open or partial ring configuration) upper portion distal ends 66 and 68. Both areas define the size and shape of openings 62 and 64, which are sized and shaped to fit, receive and support portions of a user's fingers. The upper portion 56 and the lower portion 58, particularly the upper portion distal ends 66 and 68 and the lower portion distal ends 70 and 72 may be made of a flexible material so that they can accommodate different sized fingers. Alternatively, the upper portion distal ends 66 and 68 and the lower portion distal ends 70 and 72 may connect, thus forming a closed ring structure.

Positioned away from the upper portion 56 and the lower portion 58 is a leverage bar 74. The leverage bar 74 is attached to or is integrally formed from a portion of the lower portion 58 as an intermediate member 76, illustrated herein as an elongated body. The intermediate member 76 is shown having a curved surface 78, see Figure 5, which positions the leverage bar 74 away from the upper portion 56 and the lower portion 58 of the user engagement portion or member 18 via a distance or gap 80, and orientating the leverage bar 74 so it 1) is parallel or

generally parallel to the upper portion 56 and the lower portion 58, and 2) when in use, rests in the area directly underneath the metacarpophalangeal joint of two fingers of the same hand. Accordingly, the size (and shape) of the leverage bar 74 must be sufficient to rest and/or span in the area directly underneath the metacarpophalangeal joint of two fingers of the same hand. The distance or gap 80 must be sufficient, so when in use (placed on two fingers), the upper portion 56 and the lower portion 58 aligns with or rests at the area just distal to the metacarpophalangeal joint and proximal to the proximal interphalangeal joint, acting as a fulcrum with no finger contact until distal inferior phalanges (fingertips) of the same two fingers on the same hand contact the razor head 24.

The proprioceptive shaver 10 may also comprise a razor head 24 which is configured to rotate (greater than 0 degrees to 360 degrees). Figure 12 illustrates the razor head 24 rotated 90 degrees from a first position (as shown in Figure 1). Figure 13 illustrates the razor head 24 rotated 180 degrees from the first position. Such rotation allows a user to shave with the grain or against the grain, allowing the user to push or pull while shaving. The razor head 24 may rotate simply by rotating the shaving shaft or arm 22 and locking in place as described above. Alternatively, the razor head 24 may be designed to pivot and rotate about the shaving shaft or arm 22.

All patents and publications mentioned in this specification are indicative of the levels of those skilled in the art to which the invention pertains. All patents and publications are herein incorporated by reference to the same extent as if each individual publication was

specifically and individually indicated to be incorporated by reference.

It is to be understood that while a certain form of the invention is illustrated, it is not to be limited to
5 the specific form or arrangement herein described and shown. It will be apparent to those skilled in the art that various changes may be made without departing from the scope of the invention and the invention is not to be considered limited to what is shown and described in the
10 specification and any drawings/figures included herein.

One skilled in the art will readily appreciate that the present invention is well adapted to carry out the objectives and obtain the ends and advantages mentioned, as well as those inherent therein. The embodiments, methods,
15 procedures and techniques described herein are presently representative of the preferred embodiments, are intended to be exemplary, and are not intended as limitations on the scope. Changes therein and other uses will occur to those skilled in the art which are encompassed within the spirit
20 of the invention and are defined by the scope of the appended claims. Although the invention has been described in connection with specific preferred embodiments, it should be understood that the invention as claimed should not be unduly limited to such specific embodiments.
25 Indeed, various modifications of the described modes for carrying out the invention which are obvious to those skilled in the art are intended to be within the scope of the following claims.

CLAIMS

What is claimed is:

Claim 1. A proprioceptive shaver for shaving one or more portions of a body comprising:

a main body having a first end and a second, opposing end;

a user engagement member configured to provide at multiple points of contact with a user's hand when in use; and

a shaving assembly comprising a razor head having at least one or more cutting surfaces.

Claim 2. The proprioceptive shaver for shaving one or more portions of a body according to Claim 1, wherein said one or more cutting surface is a razor blade.

Claim 3. The proprioceptive shaver for shaving one or more portions of a body according to Claim 1, wherein said multiple points of contact include areas at or near the metacarpophalangeal joint, proximal interphalangeal joint, and distal inferior phalange of the user's hand.

Claim 4. The proprioceptive shaver for shaving one or more portions of a body according to Claim 1, wherein said multiple points of contact include an area directly underneath the metacarpophalangeal joint of two fingers of the same hand.

Claim 5. The proprioceptive shaver for shaving one or more portions of a body according to Claim 1, wherein said multiple points of contact include an area just distal to

the metacarpophalangeal joint and proximal to the proximal interphalangeal joint.

Claim 6. The proprioceptive shaver for shaving one or more portions of a body according to Claim 1, wherein said multiple points of contact include distal inferior phalanges (fingertips) of two fingers on the same hand.

Claim 7. The proprioceptive shaver for shaving one or more portions of a body according to Claim 1, wherein said user engagement member includes a leverage bar.

Claim 8. The proprioceptive shaver for shaving one or more portions of a body according to Claim 7, wherein said leverage bar, when in use, is positioned to rest in an area directly underneath the metacarpophalangeal joint of two fingers of a user's same hand.

Claim 9. The proprioceptive shaver for shaving one or more portions of a body according to Claim 7, wherein said leverage bar is a sufficient size and shape to rest or span in the area directly underneath metacarpophalangeal joint of two fingers of the same hand of user.

Claim 10. The proprioceptive shaver for shaving one or more portions of a body according to Claim 1, wherein said user engagement member comprises an upper portion and a lower portion, sized and shaped to engage with two separate fingers of a user's hand.

Claim 11. The proprioceptive shaver for shaving one or more portions of a body according to Claim 10, wherein said upper portion and said lower portion form two partially open ring shaped structures.

Claim 12. The proprioceptive shaver for shaving one or more portions of a body according to Claim 10, wherein a leverage bar connects to a portion of said lower portion via an intermediate portion.

Claim 13. The proprioceptive shaver for shaving one or more portions of a body according to Claim 1, wherein said shaving assembly further comprises a shaft.

Claim 14. The proprioceptive shaver for shaving one or more portions of a body according to Claim 13, wherein said shaving assembly shaft is sized and shaped to fit and move within the interior region of said proprioceptive shaver main body.

Claim 15. The proprioceptive shaver for shaving one or more portions of a body according to Claim 1, wherein said shaving assembly razor head is rotatable.

Claim 16. The proprioceptive shaver for shaving one or more portions of a body according to Claim 15, wherein said shaving assembly razor head is rotatable to position said one or more cutting surfaces in push or pull orientation.

Claim 17. The proprioceptive shaver for shaving one or more portions of a body according to Claim 1, wherein said shaving assembly is traversable between a first position and at least a second position.