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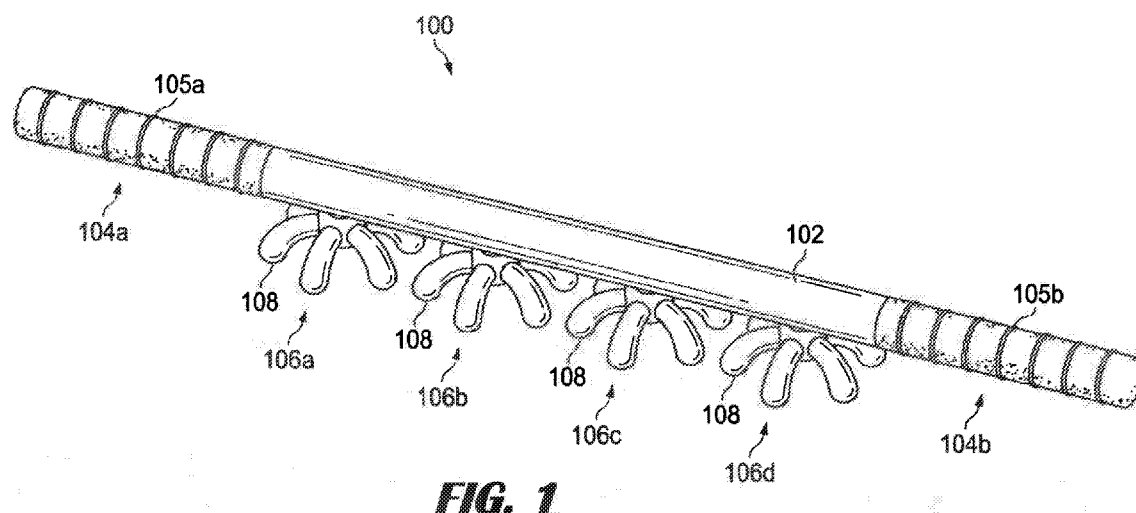


FIG. 1

(57) Abstract: A fascia tissue fitness device may include a bar member, at least one flower member connected to the bar member along a plane, where the flower member(s) include multiple finger members that are rigid and extend outward from the bar member. Means for dispensing a lubricant from the bar member



**TITLE OF THE INVENTION**  
**FASCIA TISSUE FITNESS DEVICES**

**RELATED APPLICATIONS**

[0001] This application claims priority to co-pending U.S. Provisional Application having serial no. 62/332,403 filed on May 5, 2017; the contents of which are hereby incorporated by reference in their entirety.

**BACKGROUND**

[0002] Fascia tissue is a layer of fibrous tissue that operates as a connective tissue that surrounds muscles, groups of muscles, nerves, blood vessels, etc. The tissue allows for proper functioning of muscles with respect to one another (e.g., sliding past one another). When fascia tissue becomes damaged through injury, tissue knots, medical reasons, or otherwise, the fascia tissue can take time to correct itself or require manipulation to release the fascia tissue and allow for proper functioning of the tissue to allow the underlying muscle to properly operate. In some cases, the fascia tissue can be released or corrected without much difficulty, while in other cases, restoring the fascia tissue to its proper form can take considerably more effort. Other reasons for releasing fascia tissue may include cosmetic reasons, especially for people who have dimpled skin, which is often caused by fascia tissue extending through fat cells, thus causing dimples to appear on the skin. Often, when the fascia tissue is properly released, the dimples can be considerably reduced or eliminated.

[0003] In treating fascia tissue, a lubricant, typically in the form of oil, is generally applied to skin of a person being treated to enable the person or treater to manipulate and release the fascia, especially if a treatment device is being utilized. The lubricant may be stored in a bottle, such as a spray bottle, to enable the user to spray the lubricant on his or her skin prior to treatment. Spray bottles, however, are typically small in size to enable a user to more easily use them. A non-spray bottle, such as a pump dispenser bottle, would allow for lubricant to be stored in bulk, but would require a user to touch the lubricant with his or her hands, which is messy and often undesirable. Accordingly, another technique to store and apply lubricant to a person's skin is needed.

[0004] Still yet, the use of a tissue fitness device by a user is quite possible and relatively easy to self-treat fascia tissue. However, because a user may not be mechanically inclined, unskilled or untrained in the use of fascia tissue manipulation, or otherwise, the user may be

receive an adequate or optimum tissue fitness. Moreover, depending on the locations at where the fascia is to be treated, the use of a standard fascia tissue fitness device may not be suitable.

## SUMMARY

[0005] A device may be configured to provide for fitness of fascia tissue. The device may include a bar along which "flower" members having a number of "finger" or "leg" members are fixedly positioned. In one embodiment, the bar may have handle regions at each end with a certain number, such as four, of flower members linearly positioned thereon. The bar and handle regions may be molded as a single piece of material. The handle regions may be defined by grippers formed of rubber or other material over the handle regions with protrusions to provide for additional gripping for a user. The handle regions may have the same or different circumference as the bar. The handle regions may be positioned about the width of human shoulders. The material of the flower members may be PVC, acrylic, or any other material that provides for rubbing across human skin without cutting or scratching. As a lubricant is generally used during usage of the device, a variety of different materials for the finger members may be utilized.

[0006] A fascia tissue fitness device may include a bar and multiple flower members connected to the bar along a plane. The flower members may each include multiple finger members that are stiff and extend outward from the bar.

[0007] One method of manufacturing a fascia tissue fitness device may include providing a bar, providing multiple flower members, and connecting the flower members to the bar.

[0008] One embodiment of an apparatus may include a first linear bar member inclusive of a first connector mechanism. At least one first flower member may be connected to the first linear bar member, where the first flower member(s) include a plurality of first finger members that are rigid and extend outward from the first bar member. A second linear bar member may include a second connector mechanism. At least one second flower member may be connected to the second linear bar member, where the second flower member(s) include multiple second finger members that are rigid and extend outward from the second bar member. The first linear bar member and the second linear bar member may be connectable such that when the first and second linear bar members are connected by the first

and second connector mechanisms, a rigid, linear bar may be formed with the first and second flowers being aligned along a plane.

**[0009]** One embodiment of a fascia tissue fitness device may include a bar member, at least one flower member connected to the bar member along a plane, where the flower member(s) include multiple finger members that are rigid and extend outward from the bar member. Means for dispensing a lubricant from the bar member.

**[0010]** Another embodiment of a fascia tissue fitness device may include a bar member, at least one flower member connected to the bar member along a plane. The flower member(s) may include multiple finger members that are rigid and extend outward from the bar member. The bar member may define a hollow portion in which a lubricant is stored and dispensed via an opening further defined by the bar member.

**[0011]** Another fascia tissue fitness device may include a bar member and at least one flower member connected to the bar member along a plane. The flower member(s) may include multiple finger members that are rigid and extend outward from the bar member. A handle may be disposed on an end of the bar member, where the handle may define (i) a hollow portion configured to store a lubricant, (ii) an opening through which the lubricant is dispensed, and (iii) an activation mechanism that, when depressed, causes the lubricant to be dispensed via the opening.

**[0012]** A fascia tissue fitness device may include a bar member, at least one flower member may be connected to the bar member along a plane. The flower member(s) may include multiple finger members that are rigid and extend outward from the bar member. A heater element may be disposed within the bar member, and be in thermal communication with the flower member(s) to cause the fingers to be heated when the heater element is activated.

**[0013]** Another embodiment of a fascia tissue fitness device may include a bar member, at least one flower member connected to the bar member along a plane. The flower member(s) may include multiple finger members that are rigid and extend outward from the bar member. A vibration generation mechanism may be disposed within the bar member, and be configured to cause the flower member(s) to vibrate.

**[0014]** Another fascia tissue fitness device may include a bar member and at least one flower member connected to the bar member along a plane. The flower member(s) may

include multiple finger members that are rigid and extend outward from the bar member. A translation member may be disposed within the bar member onto which the flower member(s) are affixed. An actuator may be coupled to the translation member, and be configured to cause the translation member to repeatedly move axially back and forth within the bar member.

[0015] Another fascia tissue fitness device may include a bar member and at least one flower member connected to the bar member along a plane. The flower member(s) may include multiple finger members that are rigid and extend outward from the bar member. The bar member may be configured to removably secure a treatment accessory mechanism.

### BRIEF DESCRIPTION

[0016] A more complete understanding of the method and apparatus of the present invention may be obtained by reference to the following Detailed Description when taken in conjunction with the accompanying Drawings wherein:

[0017] **FIG. 1** is an illustration of a rear isometric view of an illustrative fascia tissue fitness device;

[0018] **FIG. 2** is another illustration of a rear isometric view of the illustrative fascia tissue fitness device of **FIG. 1**;

[0019] **FIG. 3** is an illustration of a front isometric view of the illustrative fascia tissue fitness device of **FIG. 1**;

[0020] **FIG. 4** is an illustration of a close-up view of a "flower" member mounted to the bar of the illustrative fascia tissue fitness device of **FIG. 1**;

[0021] **FIG. 5** is an illustration of an illustrative device inclusive of a first linear bar member and a second linear bar member;

[0022] **FIG. 6** is an illustration of an illustrative fascia tissue fitness device;

[0023] **FIG. 7** is an illustration of a fascia tissue fitness device shown to include a bar member inclusive of a first handle and a second handle;

[0024] **FIG. 8** is an illustration of an alternative embodiment of a fascia tissue fitness device shown to include a bar member that defines an hollow region in which a lubricant may be disposed;

[0025] **FIG. 9** is an illustration of an illustrative implement configured to massage or otherwise treat fascia tissue in a localized region, such as a hand;

[0026] **FIG. 10** is an illustration of an alternative illustrative implement configured to massage or otherwise treat fascia tissue in a localized region, such as a hand;

[0027] **FIG. 11** is an illustration of an illustrative implement that may operate as a skin stimulator;

[0028] **FIG. 12** is an illustration of an illustrative implement that is configured as a fascia traction device;

[0029] **FIG. 13** is an illustrative fascia tissue fitness device inclusive of a bar member and handles;

[0030] **FIG. 14** is an illustration of an illustrative fascia tissue fitness device shown to include a bar member defining a hollow portion in which at least one heating element, such as a heating coil, may be disposed, and configured to heat at least one flower member;

[0031] **FIG. 15** is an illustration of an illustrative fascia tissue fitness device configured to provide vibration during treatment;

[0032] **FIG. 16** is an illustration of an illustrative fascia tissue fitness device that includes a bar member that defines a hollow region;

[0033] **FIG. 17** is an illustration of an illustrative fascia tissue fitness device that includes a bar member that defines a hollow region;

[0034] **FIG. 18** is an illustration of an illustrative fascia tissue fitness device that includes a bar member and one or more flower members;

[0035] **FIG. 19** is an illustration of another illustrative fascia tissue fitness device that includes a bar member and one or more flower members;

[0036] **FIG. 20** is an illustration of an illustrative fascia tissue fitness device that is a scaled model of the fascia tissue treating device of **FIG. 19**;

[0037] **FIG. 21** is an illustration of an illustrative fascia tissue fitness device that is formed of a bar member inclusive of a handle;

[0038] **FIGS. 22A, 22B and 22C** are three illustrations of an illustrative fascia tissue fitness device;

[0039] **FIGS. 23A, 23B, and 23C** are illustrations of an illustrative fascia tissue fitness device;

[0040] **FIG. 24** is a flow diagram of an illustrative process for manufacturing a fascia tissue fitness device;

[0041] **FIG. 25** is a flow diagram of an illustrative process for manufacturing another configuration of a fascia tissue fitness device inclusive of electronic and/or electromechanical components in the fascia tissue fitness device; and

[0042] **FIGS. 26A-26H** are illustrations of an alternative embodiment of a fascia tissue fitness device inclusive of nine "flower" members.

### DETAILED DESCRIPTION OF THE DRAWINGS

[0043] With regard to **FIG. 1**, an illustration of a rear isometric view of an illustrative fascia tissue fitness device **100** is shown. The device **100** may include a bar **102** having handle regions **104a** and **104b** (collectively **104**). The handle regions **104** may have grippers **105a** and **105b** (collectively **105**) formed or applied thereto. The grippers **105** may be formed of rubber or other material to provide gripping in a secure manner to prevent rotation of the bar **102**. The handle regions **104** may have the same or different diameter as the bar **102**. The length of the bar **102** may be such that the handle regions **104** are positioned about the distance of human shoulders (e.g., 30 inches). As such, there may be multiple lengths of the device **100**. In one embodiment, the bar **102** may be extendible formed of one or more elements to be and use a variety of techniques for locking the element(s) to be a fixed length, thereby enabling people with different widths of shoulders to more easily use the device. As shown, however, the bar **102** and handle regions **104** are formed by a molding process that forms a single unit.

[0044] The bar **102** should be stiff or rigid, thereby minimizing bending during usages, such as self-usage. Although the bar **102** is shown to have a straight tube profile, it should be understood that alternative configurations of the bar **102** may be utilized. For example, the bar may have a square profile, hexagonal profile, or another geometric or non-geometric profile. Still yet, the bar **102** may be curved, circular, oval, or otherwise to assist in better addressing different modalities and anatomical regions, such as backs, arms, calves, feet, and hands. In an alternative embodiment, rather than using a bar, a board (e.g., circular flat board) having flower members extending from one side of the board may be utilized. To

enable a user to use the board, a handgrip and/or hand strap connected to the board may be utilized. Whether a support for the flower members **106** is in a bar, board, or other configuration, an embodiment may provide for the flower members **106** to be in a linear or non-linear alignment with respect to one another.

[0045] In one embodiment, and as shown, flower members **106a-106d** (collectively **106**) are shown to be mounted to the bar **102**. The flower members **106** may be formed of acrylic, PVC, hard rubber, or any other material that is stiff and does not cut or scrape skin of a person on which the device **100** is being utilized to help treat or adjust fascia tissue. In the configuration of **FIG. 1**, there are four flower members. Alternative number of flower members may be utilized. The flower members **106** are shown to be evenly spaced along a plane extending along the bar **102**. Alternative spacing of the flower members **106** may be utilized. The flower members **106** are also shown to be substantially identical. Alternative configurations of the flower members **106** may be utilized to provide for treating different size anatomical regions. It should be understood that a different number of flower members **106** may be utilized depending on the dimensions of the flower members **106** and other factors. In one embodiment, the bar **102** may have flower members **106** of different sizes so as to be available to treat different anatomical regions or different sized individuals. As an example, different sized flower members **106** may be positioned on opposite sides, for example of the bar **102** and facing away from one another to allow a single device to be used to treat the different anatomical regions and/or different sized individuals.

[0046] The flower members **106** shown are about 1 ½ inches in diameter. However, the diameter of the flower members **106** may have a fairly wide range (e.g., ½ inch to 4 inches in diameter). Illustrative finger members **108** shown are about ¾ of an inch long and have heads or tips that are about 3/8 of an inch across. The dimensions and configurations (e.g., curves) of the flower members **106**, finger members **108**, and tips of the finger members **108** may vary depending on the anatomical region on which the device **100** is to be used. The tips of the finger members **108** may have one or more same or different dimensions as the finger members (e.g., the tips may have a larger diameter by being bulbous). The finger members **108** are shown to be curved. Alternative configurations, such as finger members **108** being straight, may be utilized, as well. The flower members **106** are also shown to be a single member. However, flower members **106** may be formed of multiple elements. Still yet, rather than the device **100** using flower members **106** that have a flower-like appearance (i.e.,

central portion with extending finger members), flower members **106** with non-flower-like appearance may be utilized, as well, that still provides a user with a number of closely spaced pressure-point elements that can be pressed and guided along a person's skin to cause fascia tissue to be released or perform a non-therapeutic function. The finger members **108** may be substantially the same length (e.g., less than 0.1 inch difference in length between finger length) such that the tips of the finger members **108** are substantially co-planer so that a pressure load applied to the skin and fascia tissue is substantially equally applied by each of the finger members **108**.

[0047] Each of the flower members **106** are shown to have six finger members **108**. Alternative numbers of finger members **108** may be utilized. The finger members **108** may be stiff or rigid, thereby having minimum bend or deformation during usage of the device on fascia tissue of a person. Moreover, the finger members **108** may be curved inward, as shown, so as to have a "claw-like" shape. This shape provides for forces to be applied in a more radial direction relative to the bar **102**, when being applied to fascia tissue so that higher vertical forces may be applied to the fascia tissue by a user. Although the flower members **106** are shown to extend along one side of the bar **102**, additional flower members have the same or different configurations as the flower members **106** may be included to allow for a single device **100** to provide for different size and configuration of flower members to be used on different anatomical regions.

[0048] The bar **102** may have openings (not shown) defined by the bar **102** through which a screw or other fastening mechanism may extend through flower members **106** into the bar **102**. After fastening the flower members **106** to the bar **102**, glue or other fastening material, such as epoxy, may be utilized to secure the flower members **106** to the bar **102**. A cover (not shown) above the fastening mechanisms may be utilized to limit the ability for someone to access or remove the fastening mechanisms of the flower members **106**. Alternatively, the flower members **106** may be configured to allow for a user to more easily replace the flower members **106** to change size, replace broken flower members, or otherwise. Other attachments that may be flower members or non-flower members (e.g., roller) may also be connected to the bar **102** in alternative embodiments.

[0049] **FIG. 2** is another illustration of a rear isometric view of the illustrative fascia tissue fitness device **100** of **FIG. 1**.

[0050] **FIG. 3** is an illustration of a front isometric view of the illustrative fascia tissue fitness device **100** of **FIG. 1**.

[0051] **FIG. 4** is an illustration of a close-up view of a "flower" mounted to the bar of the illustrative fascia tissue fitness device of **FIG. 1**.

[0052] While certain features of the device **100** are configured to be optimal usage on fascia tissue, the features also provide for ornamental appearance. For example, the number of flower members **106**, configuration of the bar **102**, configuration of the handle regions **104**, grippers **105**, number of finger members **108** on the flower members **106**, shape of the finger members **108**, and so forth. As such, the overall and certain ornamental features are included in the device **100** in some embodiments. It should be understood that utilizing the device **100** may be used for increasing overall myo-fascial fitness to loosen fascia tissue that is constrained, improve health and/or beauty purposes (e.g., provide a satisfactory feeling to a user and/or alter the appearance of cellulite and skin smoothness). Moreover, usage of the fascia tissue fitness device may open, loosen, restore, and/or revitalize fascia tissue of men and women, young and old.

[0053] With regard to **FIG. 5**, an illustration of an illustrative device **500** inclusive of a first linear bar member **502a** and a second linear bar member **502b** (collectively **502**) is shown. A hinge **504** may be coupled to both the first and second linear bar members **502** at a first end **506a** of the first bar member **502a** and a first end **506b** of the second bar member **502b**. The hinge **504** may be utilized to enable the bar members **502** to be (i) in a collapsed or folded state when not being used, and (ii) in a linear, extended or use state, such as shown in **FIG. 1**, when being used. Although the hinge **504** may provide for the two linear bar members **502** to be held together, it should be understood that alternative coupling mechanisms may be utilized to maintain the bars together, including bands, lines, bungee cords, chains, or other mechanisms that may directly or indirectly be secured to the bar members **502**.

[0054] The device **500** further includes handles **508a** and **508b** at opposite ends from the first ends **506a** and **506b** of the bar members **502a** and **502b**, respectively. When the bars **502** are in the folded state, the bars **502** may have adjacent sides **512a** and exterior sides **512b**. Flower members **510a** and **510b** may be positioned on the exterior sides **512b** of the respective bar member **502a** and **502b** so that the flower members **510a** and **510b** do not interfere with the device **500** being positioned in the folded state. In use, the device **500** is be

configured in the linear state such that the ends **506a** and **506b** are in contact with one another. To maintain the device in the linear state, a latch **514** may engage a clasp **516**. Alternative mechanisms for maintaining the device **500** in the linear state may be used. Because the flower members **510a** and **510b** are positioned on the opposite side of the hinge **504**, when in use, the device **500** remains extended and the hinge **504** does not rotate due to forces on the handles being applied to the side of the hinge **504**.

[0055] With regard to **FIG. 6**, an illustration of an illustrative device **600** is shown. Rather than using a hinge or other mechanism that is attached to a first bar member **602a** and second bar member **602b** (collectively **602**), corresponding retention features may be formed on the bar members **602**. The retention features may be in the form of multi-threaded screw features, such as a male screw feature **604a** on the first bar member **602a** and a female screw feature **604b** on the second bar member **602b**. The threads of the screw features **604a** and **604b** (collectively **604**) are to be aligned so that when the two bar members **602** are attached, flower members **606a** and **606b** are aligned along a plane to provide for proper operation of the device **600**. Although screw features **604** may be utilized, it should be understood that alternative retention features may be utilized, such as lugs or otherwise that are capable of securing the two bar members **602** together. In an embodiment, a clevis pin, screw, or other anti-rotation member (not shown) may be used to extend through aligned openings (not shown) defined by at least a portion of the two bar members when connected to one another.

[0056] With regard to **FIG. 7**, an illustration of a fascia tissue fitness device **700** is shown to include a bar member **702** inclusive of a first handle **704a** and a second handle **704b** (collectively **704**). In one embodiment, the first handle **704a** is fixedly attached or formed on the bar member **702** and the second handle **704b** may be configured to be removably attached to the bar member **702**. The bar member **702** may include a threaded feature **706a**, for example, and the second handle **704b** may include a complementary threaded feature **706b** that enables the handle to be secured to the bar member **702**. The bar member **702** may define at least one hollow region **708** in which a lubricant **710**, such as oil, may be positioned. In positioning the lubricant **710**, the lubricant **710** may be poured or injected into the hollow region **708** via an opening (not shown) defined by the bar member **702**. In one embodiment, a receptacle member (not shown), such as a 1-way valve, may be disposed in the opening to allow the lubricant **710** to be injected into the hollow region **708**, but prevent the lubricant **710** to be released. In an alternative embodiment, a cap or plug (not shown) may enable the

lubricant **710** to be poured or injected into the hollow region **708**, and prevent the lubricant **710** from draining when secured in or above an opening.

[0057] As shown, a pump **712** may be used by a user to push the lubricant **710** from the hollow region **708** out of the bar member **702**. One or more openings (not shown) defined by the bar member **702** may allow for the lubricant **710** to be output from the bar member **702**. In one embodiment, the openings may be positioned at or near one or more flower members **714** positioned on the bar member **702**. Rather than the hollow region **708** being configured to have the lubricant **710** be poured or injected, the hollow region **708** may be configured to receive and store a cartridge (not shown) inclusive of the lubricant **710**. The pump **712** may be part of the cartridge, part of the bar member **702**, or a separate mechanism. If a cartridge is used, the cartridge may be fit onto or pierced by an implement that may be used to receive and transfer the lubricant **710** when the pump **712** is depressed. In an alternative embodiment, rather than the bar member **702** defining a hollow region **708**, the handle **704b** may define a hollow region configured to receive the lubricant **710** or receive a cartridge **716** inclusive of the lubricant **710**. In the event of the handle including the lubricant **710**, an opening may be defined by the handle (e.g., on the end opposite from the bar member **702**).

[0058] As shown, the cartridge **716** is not symmetric and is keyed to ensure that the cartridge **716** is positioned in the hollow region **708** in a correct orientation to enable a pump or other mechanism to engage the cartridge **716**. In one embodiment, a tube (not shown) may be connected to a needle, spout, or other mechanism that punctures the cartridge **716** as the user inserts the cartridge into the hollow region **708**. It should be understood that a wide variety of mechanisms may be utilized to enable a cartridge containing lubricant to be utilized. It should further be understood that the cartridge **716** is illustrative and that alternative configurations may be utilized to provide for the function of enabling lubricant to be dispensed from the fitness device **700**. A pump mechanism (not shown) may be included to force the lubricant from the cartridge **716** via an opening defined by the bar member **702** or handle(s) **704**.

[0059] With regard to **FIG. 8**, an illustration of an alternative embodiment of a fascia tissue fitness device **800** is shown to include a bar member **802** that defines an hollow region **804** in which a lubricant **806** may be disposed. As described with regard to **FIG. 7**, the lubricant **806** may be disposed by pouring or injecting the lubricant **806** into the hollow region **804** if configured as a reservoir. Alternatively, the lubricant **806** may be stored in a

cartridge (not shown) that may be inserted into the hollow region **804**. As shown, access to the hollow region **804** may be via an opening **808** defined by the bar member **802** adjacent to the hollow region **804** and sealed by a removable cover **810**. In one embodiment, openings (not shown) may be defined by the bar member **802** and/or flower members **812**, such as through the base **814**, fingers **816**, and/or tips **818** of the flower members **812** to enable the lubricant **806** to be output via the opening(s).

[0060] With regard to **FIG. 9**, an illustration of an illustrative implement **900** configured to massage or otherwise treat fascia tissue in a localized region, such as a hand, is shown. The implement **900** may have a tapered shape from a base **902** to a tip **904**. The profile of the implement **900** may be conical or narrow. Other shapes of the implement **900** may be used. As shown, the height of the implement **900** may be approximately 1cm and the curve of the tip **904** may be approximately 2cm. It should be understood that alternative dimensions may be utilized. The implement **900** may be formed of a rigid material, such as hard plastic, metal, wood, or other rigid material that is resistant to bending when applied to tissue of a person. The base **902** may include a connection member **906**, such as a threaded screw, that may be used to secure to an end of a handle (not shown) or a bar member (not shown) having a complementary connection member, such as a female connection member.

[0061] With regard to **FIG. 10**, an illustration of an alternative illustrative implement **1000** configured to massage or otherwise treat fascia tissue in a localized region, such as a hand, is shown. The implement **1000** may be used to treat fascia in a different way and in different regions than those ways and regions of the implement **900** of **FIG. 9**. The implement **1000** may have a tapered shape from a base **1002** to a tip **1004**. The profile of the implement **1000** may be conical or narrow. Other shapes of the implement **1000** may be used. As shown, the height of the implement **1000** may be approximately 1 inch and the curve of the tip **1004** may be approximately 1cm. It should be understood that alternative dimensions may be utilized. The implement **1000** may be formed of a flexible material, such as rubber, silicon, or other flexible material that is bends or flexes when applied to tissue of a user or other person. In an embodiment, the tip **1004** may be soft or flexible and the remainder of the implement **1000** may be rigid. The base **1002** may include a connection member **1006**, such as a threaded screw, that may be used to secure to an end of a handle (not shown) or a bar member (not shown) having a complementary connection member, such as a female connection member.

[0062] With regard to **FIG. 11**, an illustration of an illustrative implement **1100** that may operate as a skin stimulator is shown. The implement **1100** may include a base **1102** and fingers **1104** that may be rigid, semi-rigid, or flexible. In one embodiment, the fingers **1104** may be approximately 1 inch. Other lengths, such as between approximately ½ inch and 1 ½ inches, of the fingers **1104** may be utilized. In one embodiment, the fingers **1104** may be made of a flexible material, such that the fingers **1104** deflect or bend a predetermined amount when applied to the skin of a user. Alternative amounts of flexibility of the fingers **1104** may be available for different types of skin stimulators. The base **1102** may include a connection member **1106**, such as a threaded screw, that may be used to secure to an end of a handle (not shown) or a bar member (not shown) having an opposing connection member **1106**.

[0063] With regard to **FIG. 12**, an illustration of an illustrative implement **1200** that is configured as a fascia traction device is shown. The implement **1200** may be configured with a pair of fingers **1202a** and **1202b** (collectively **1202**) that are separated by a distance D. The distance D may be approximately 2 inches, in one embodiment. Alternative distances, such as between approximate 1 inch and approximately 4 inches, may be utilized, as well. To provide for traction functionality, the fingers **1202** may have finger tips **1204a** and **1204b** inclusive of a rubber or other slide resistance material. A base **1206** may include a connection member **1208**, such as a threaded screw or otherwise, for securing the implement **1200** to a fascia tissue fitness device.

[0064] With regard to **FIG. 13**, an illustrative fascia tissue fitness device **1300** inclusive of a bar member **1302** and handles **1304a** and **1304b** is shown. At the end of each of the handles is the implement **1100** (skin stimulator) and implement **900** (rigid fascia tissue fitness device). Each of the handles **1304a** and **1304b** may include a connection member (not shown) on the end to enable the implements **1100** and **900** to be removably attached thereto. In an alternative embodiment, rather than having handles, the bar member **1302** may have flat or other shaped ends onto which the implements **1100** and **900** may be removably attached.

[0065] With regard to **FIG. 14**, an illustration of an illustrative fascia tissue fitness device **1400** is shown to include a bar member **1402** defining a hollow portion **1404** in which at least one heating element **1406**, such as a heating coil, may be disposed, and configured to heat at least one flower member **1408**. To power the heating element(s) **1406**, a battery **1410**, or other power supply (e.g., transformer with a cord that plugs into a wall socket) (not shown)

may be utilized. The battery **1410** may be a rechargeable battery or non-rechargeable battery, as understood in the art. As shown the heating element(s) **1406** may be thermally coupled to a base of each of the flower member(s) **1408** that include a thermally conductive material, such as steel, that extends through fingers **1412** of the flower member(s) **1408** to heat tips **1414** of the fingers **1412**. In one embodiment, the heating element(s) **1406** may be calibrated to heat the tips **1414** of the fingers **1412** to be approximately 105 degrees Fahrenheit. Alternative temperatures may be utilized, such as between 95 degrees Fahrenheit and 120 degrees Fahrenheit. In an embodiment, an ON/OFF switch **1416** may be disposed on the bar device **1400** (e.g., along the bar member **1402** or end of either handle **1418a** and **1418b**). In addition to the ON/OFF switch, a temperature control mechanism **1420** may be used to set the temperature either at a specific temperature or at a relative temperature (e.g., "warm," "hotter," "hot") to provide more flexibility to a user in using the device **1400**. Although not shown, it should be understood that a reservoir or hollow region in which lubricant may be stored and ejected from the device **1400**, as described hereinabove, may be included.

[0066] With regard to **FIG. 15**, an illustration of an illustrative fascia tissue fitness device **1500** is shown. The device **1500** may include a bar member **1502** defining a hollow portion **1504** in which at least one vibration generation mechanism **1506** configured to vibrate one or more flower members **1508** may be positioned. The vibration generation mechanism(s) **1506** may be fixedly attached (e.g., screwed, glued, or otherwise coupled) to the bar member **1502**, thereby causing the entire device **1500**, including the flower members **1508**, to vibrate. In one embodiment, rather than being on the inside of the bar member **1502**, the vibration generation mechanism(s) **1506** may extend through or be positioned on the bar member **1502**. The flower members **1508** may be fixedly or removably attached to the vibration generation mechanism(s) **1506**, but should be connected in such a way that a maximum amount of vibration is transferred from the vibration generation mechanism(s) **1506** to the flower members **1508**. A battery **1510** may be utilized for powering the vibration generation mechanism(s) **1506**. Alternative power sources may be utilized for powering the vibration generation mechanism(s) **1506**, as well. In an alternative embodiment, the device **1500** may have one vibration generation mechanism connected to one or more elements onto which the flower members **1508** are connected. It should be understood that the device **1500** may include one or more flower members **1508**.

[0067] With regard to **FIG. 16**, an illustration of an illustrative fascia tissue fitness device **1600** that includes a bar member **1602** that defines a hollow region **1604** is shown. The bar member **1602** may define a slot or track **1606** through which flower members **1608** may connect with a translation member **1610** within the hollow region **1604**. An actuator **1612** may be configured to drive the translation member **1610** back and forth within the bar member **1602**. As shown flower members **1608** may be connected to the translation member **1610** so that as the translation member **1610** moves axially back and forth, the flower members **1608** also move back and forth. A power source **1614** may be electrically connected to the actuator **1612** to energize the actuator **1612**.

[0068] The actuator **1612** may be an electromechanical, pneumatic, hydraulic, or other motor or actuator that is configured to cause a translation motion of the translation member **1610** that may range have a distance of approximately one-half inch to approximately three inches or more. Alternative translation distances may also be possible depending on the size of the bar member **1602**, actuator **1612**, and/or flower members **1608**. It should be understood that the device **1600** may alternatively include a single flower member. It should also be understood that alternative members other than a flower member may be attached to the translation member **1610**. The translation member **1610** may be directly or indirectly connected to the actuator **1612**. A power switch **1616** may be configured to turn ON and OFF the actuator **1612**. A speed control selector **1618** may enable a user to alter speed of the actuator **1612** and a distance control selector **1620** may enable a user to alter distance that the translation member **1610** may be driven by the actuator **1612**.

[0069] In operation, a user may hold handles **1622a** and **1622b** in a position that allows the flower members **1608** to be moved back and forth against fascia tissue of a user in performing a modality. Depending on the particular fascia tissue being treated, the user may alter speed and travel distance of the flower members **1608**. As an example, if the user is treating fascia tissue at the top of a leg, then a maximum speed and distance may be set. If the user is treating an arm or calf, then a lower speed and distance may be set. If the user turns off the actuator **1612**, then the user may use the device **1600** as a device with fixed flower members, as previously described.

[0070] With regard to **FIG. 17**, an illustration of an illustrative fascia tissue fitness device **1700** that includes a bar member **1702** that defines a hollow region **1704** is shown. One or more flower members **1706** may be coupled to the bar member **1702** via pressure sensor(s)

**1708.** The pressure sensor(s) **1708** may be configured to determine pressure or force that a user is placing on his or her body (or another person's body) when using the device **1700**. In one embodiment, an electronic circuit **1710**, which may include a processing device, may be in communication with the pressure sensor(s) **1708**, and may be configured to receive pressure sensor signal(s) **1712** from the pressure sensor(s) **1708** via a communications channel **1714**. Responsive to receiving the pressure signal(s) **1712**, the electronic circuit **1710** may determine whether the pressure signal(s) **1712** are within a range, such as between approximately 10 lbs/sq-in and approximately 40 lbs/sq-in<sup>2</sup>, of pressures for appropriate use of the device **1700**. Alternative pressure ranges may be utilized. The pressure ranges and levels may also vary based on gender, age, pain tolerance, treatment type, modality, body part, injury, and so forth.

[0071] In one embodiment, a pressure sensor setting function may be available via a control mechanism **1716**, such as a knob, dial, switch, or otherwise, to enable the user to adjust the pressure range or set the pressure sensor setting function to a particular modality. The pressure range may be different depending on the modality being performed. For example, pressure for a leg may be different than pressure for neck or arm. The electronic circuit **1710** may be configured to sense that the pressure being applied is within the desired pressure range and to generate a desired pressure signal **1718** to cause a device **1720** to dynamically generate a sound (e.g., tone at one or more frequencies, click, Geiger sensor sound, or otherwise), vibration, light (via one or more LED that may include different colors, such as red, yellow, green), pressure on an electronic display, or combination thereof so that the user knows when he or she is applying an appropriate amount of pressure. In one embodiment, if an electronic display or other indicator (e.g., series of LEDs) is utilized, then a maximum pressure may be stored and displayed for the user to view to see a maximum pressure applied during a treatment session. A reset button or other mechanism **1722** may be pressed to clear or reset the maximum pressure.

[0072] With regard to **FIG. 18**, an illustration of an illustrative fascia tissue fitness device **1800** that includes a bar member **1802** and one or more flower members **1804** is shown. In one embodiment, the flower member(s) may be sized as previously described. Alternative sizes of flower member(s) may be utilized. As shown, a handle **1806** may be affixed to or formed on the bar member **1802**. On an end **1808** of the bar member **1802** opposite the handle **1806**, a curved tip **1810** may be provided. The curved tip **1810** may have a defined

curve, such as an approximately 1 cm curve. Alternative diameter curves may be utilized. The curved tip **1810** may be formed as part of the bar member **1802** or may be an attachment or implement that is permanently or removably attached to the bar member **1802**. The curved tip **1810** may be utilized to treat fascia tissue that is smaller or positioned in smaller or more isolated regions, such as a user's hand or foot.

[0073] With regard to **FIG. 19**, an illustration of another illustrative fascia tissue fitness device **1900** that includes a bar member **1902** and one or more flower members **1904** is shown. The flower members **1904** may be a standard size, such as previously described, or smaller with the same or similar configuration (e.g., finger shapes, finger tip size, material, etc.). In this configuration, the bar member **1902** is shorter than a bar member with handles, such as shown in **FIG. 1**, and is meant to be directly gripped by a user. Diameter of the bar member **1902** may be the same or different from that shown in **FIG. 1**. Length of the bar member **1902** may be approximately 3 inches long. Alternative lengths, such as between approximately 2 inches and approximately 6 inches. Such as device **1900** may be used by a user on his or her shoulders, calves, arms, neck, face, or other areas in which a smaller fascia tissue fitness device can be more effective and manageable than a larger fascia tissue fitness device. One or both ends **1906a** and **1906b** of the bar member **1902** may be shaped to be functional, as well as being ornamental. As an example, one end **1906a** may be shaped with an approximate 2 cm curve, and the other end **1906b** may be shaped with an approximate 1cm curve. Alternative shaped curves may be utilized, as well. In another embodiment, a more ornamental shape, such as a bullet shape, of the bar member **1902** may be utilized. Although the bar member **1902** is shown as a tube, it should be understood that alternative shapes or profiles may be utilized.

[0074] With regard to **FIG. 20**, an illustration of an illustrative fascia tissue fitness device **2000** that is a model of the fascia tissue treating device **1900** of **FIG. 19** is shown. The device **2000** includes a bar member **2002** shown to have symmetric ends **2004a** and **2004b** (collectively **2004**). The ends **2004** as shown are not sized to be used for small fascia tissue regions, such as hands or feet, but may have alternative configurations with small diameters (e.g., approximately 1 cm to approximately 3 cm) to be used for treating fascia tissue in smaller or more focused areas. As described with regard to **FIG. 19**, flower members **2006** may have regular or smaller dimensions and be formed of stiff or rigid materials.

[0075] With regard to **FIG. 21**, an illustration of an illustrative fascia tissue fitness device **2100** that is formed of a bar member **2102** inclusive of a handle **2104** is shown. In this case, the bar member **2102** may have an end **2106** opposite to the handle **2104** that may have a removable implement **2108** or shaped tip **2110** (e.g., about a 2 cm curve) that is configured to provide for specific treatment usage, such as to treat fascia in a hand. As shown, the bar member **2102** may be configured to have one or more different implements **2112** removably attached thereto. The implements **2112** may include a flower member **2112a**, "nugget" implement **2112b**, "nugget" implement **2112c**, skin stimulator **2112d**, and/or fascia traction member **2112e**, which are described hereinabove.

[0076] With regard to **FIGS. 22A, 22B and 22C**, three illustrations of an illustrative fascia tissue fitness device **2200** are shown. **FIG. 22A** is a top view of the device **2200**, **FIG. 22B** is a side view of the device **2200**, and **FIG. 22C** is a perspective view of the device **2200**. The device **2200** is shown to include a handle member **2202** and a bar member **2204** being connected to one another. In an alternative embodiment, the handle member **2202** and bar member **2204** are formed from a single piece of material. A flower member **2206** may be connected to the bar member **2204**, and have the same or similar dimensions and profile as described hereinabove. Moreover, the flower member may be formed of a rigid or stiff material, as previously described. In this embodiment, an end portion **2208** may have an implement **2210** that has a tip **2212** with a curved profile, such as a 2 cm curve. Rather than being an implement **2210**, the end portion **2208** may be integral with the bar member **2204**, thereby being formed from a single piece of material. However, for manufacturing purposes, the use of a separate implement may be less expensive to produce. Moreover, the implement **2210** may be removably attached so that alternative implements may be attached to the tip **2212**. As further shown, the flower member **2206** may be attached to the bar member **2204** via a base **2214** that fixedly or removably attaches the flower member **2206** to the bar member **2204**. In one embodiment, a screw or other fastening member (not shown) may be utilized to secure the base **2214** to the bar member **2204**. The handle member **2202** is shown to include a series of notches **2216** that may be used to improve a grip of the device **2200** by a user.

[0077] With regard to **FIGS. 23A, 23B, and 23C**, illustrations of an illustrative fascia tissue fitness device **2300** are shown. **FIG. 23A** is a side view of the device **2300**, **FIG. 23B** is a top view of the device **2300**, and **FIG. 23C** is a side view of the device **2300**. The device

**2300** is shown to include a bar member **2302** to which a first implement **2304a** and a second implement **2304b** (collectively **2304**) are connected. The implements **2304** may be removably attached to the bar member **2302**. The implements **2304** may be tapered and have the same or different profiles as one another. One or more flower members **2306** may be attached to the bar member **2302** via a base member **2308**, and be removably attached to the bar member **2302**. By being removably attached, the flower member(s) **2306** may be removed and replaced in the event that (i) one or more break or (ii) a different type of flower member or implement is to be connected to the bar member **2302**. Length of the bar member **2302** may range from a couple of inches to six inches or more, and the flower members **2306** may be standard size or smaller, as previously described. If smaller, fingers **2310** may have tips **2312** that may be the approximately the same dimensions as standard flower members or may be smaller for use on fascia tissue that may be on smaller anatomical regions.

[0078] With regard to **FIG. 24**, a flow diagram of an illustrative process **2400** for manufacturing a fascia tissue fitness device is shown. The process **2400** may start at step **2402**, where a bar member inclusive of a hollow portion may be received. The bar member may be tubular or any other shape, and optionally be configured with handle members on each end of the bar member. At step **2404**, at least one flower member may be attached to the bar member. The flower member may have a "claw-like" shape with multiple fingers, such as six.

[0079] At step **2406**, a pump mechanism may be attached to the bar member, where the pump mechanism may be pneumatically coupled to the hollow portion. In one embodiment, the hollow portion may be configured as a reservoir in which lubricant, such as oil, may be disposed. The pump mechanism may be used to cause the lubricant to be discharged, such as sprayed, from the bar member. In one embodiment, the bar member may define an opening through which the lubricant may be expelled. A spray nozzle may be positioned at the opening and, optionally, tube may extend between the opening hollow portion to enable the lubricant to be transported from the hollow portion to the opening and sprayed via the nozzle. The bar member may further define an opening through which the lubricant may be poured or injected into the hollow portion. A cap or stopper may be used to seal the lubricant in the hollow portion.

[0080] In an alternative embodiment, the hollow portion may be configured to receive a cartridge in which the lubricant is contained, and the pump mechanism may engage the

cartridge so as to cause the lubricant stored in the cartridge to be released or ejected via an opening (and spray nozzle) defined by the bar member. In one embodiment, the bar member may include handles that may be removably attached to the bar member, and the hollow portion may be within the handles such that the lubricant or a cartridge containing the lubricant may be contained within one or both of the handles. In one embodiment, if a cartridge is used, the cartridge may be "keyed" so as to allow the user to insert the cartridge in a proper configuration to align the cartridge with a tube, opening, or other member used to expel the lubricant from the device, and to enable the pump mechanism to cause the lubricant to be discharged from the cartridge.

[0081] With regard to **FIG. 25**, a flow diagram of an illustrative process **2500** for manufacturing a fascia tissue fitness device is shown. The process **2500** may start at step **2502**, where a bar member inclusive of a hollow portion may be received. The bar member may be tubular or any other shape, and optionally be configured with handle members on each end of the bar member. At step **2504**, at least one flower member may be attached to the bar member. The flower member may have a "claw-like" shape with multiple fingers, such as six.

[0082] At step **2506**, at least one electronic and/or electromechanical device may be disposed within the hollow portion. As an example, the electronic device may include a battery, transformer, processing unit, analog circuitry, digital circuitry, sensor(s) (e.g., pressure sensor, motion sensor, temperature sensor), heating element, combination thereof, and/or any other electronic device configured to support the functionality described herein. The electromechanical device may include an actuator, such as an electromechanical actuator, motor, translation mechanism, rotational mechanism, electromagnetic device, and so on. The electronic device(s) may be configured to interact with the electromechanical device(s) to support functions, as previously described.

[0083] With regard to **FIGS. 26A-26H**, illustrations of an alternative embodiment of a fascia tissue fitness device **2600** inclusive of nine "flower" members **2602a-2602i** (collectively **2602**) are shown. **FIG. 26A** is a bottom perspective view of the fascia tissue fitness device **2600**. **FIG. 26B** is a left-end view of the fascia tissue fitness device **2600**. **FIG. 26C** is a right-end view of the fascia tissue fitness device. **FIG. 26D** is a left-side view of the fascia tissue fitness device **2600**. **FIG. 26E** is a right-side view of the fascia tissue fitness device **2600**. **FIG. 26F** is a bottom view of the fascia tissue fitness device **2600**.

**FIG. 26G** is a top view of the fascia tissue fitness device **2600**. **FIG. 26H** is a top perspective view of the fascia tissue fitness device **2600**. In an embodiment, the "flower" members **2602** are approximately half the dimensions as the "flower" members **106** of **FIG. 1** on the approximately same sized bar **2604** as the bar **102** of **FIG. 1**. Such sized "flower" members **2602** may provide for a higher resolution of treatment of fascia tissue. Moreover, the smaller "flower" members **2602** may allow for treatment on smaller anatomical regions, such as arms and necks, along with smaller individuals, such as children.

[0084] A variety of different configurations of tissue fitness devices have been described hereinabove. It should be understood that the various configurations may be combined in ways that provide for two or more of the features of the different devices described herein to be available to a user. As an example, a tissue fitness device may combine multiple features so as to be configured with one or more hollow portions in which a reservoir or cartridge for lubricant may be stored along with heating elements to heat flower members may be positioned. In another example, a tissue fitness device may be configured with multiple features, such as an actuator and a translation mechanism that are configured to automatically translate one or more flower members along with a reservoir and pump mechanism for storing and spraying a lubricant via an opening defined by a bar or handle member of the tissue fitness device.

[0085] The previous description is of a preferred embodiment for implementing the invention, and the scope of the invention should not necessarily be limited by this description. The scope of the present invention is instead defined by the following claims.

## CLAIMS

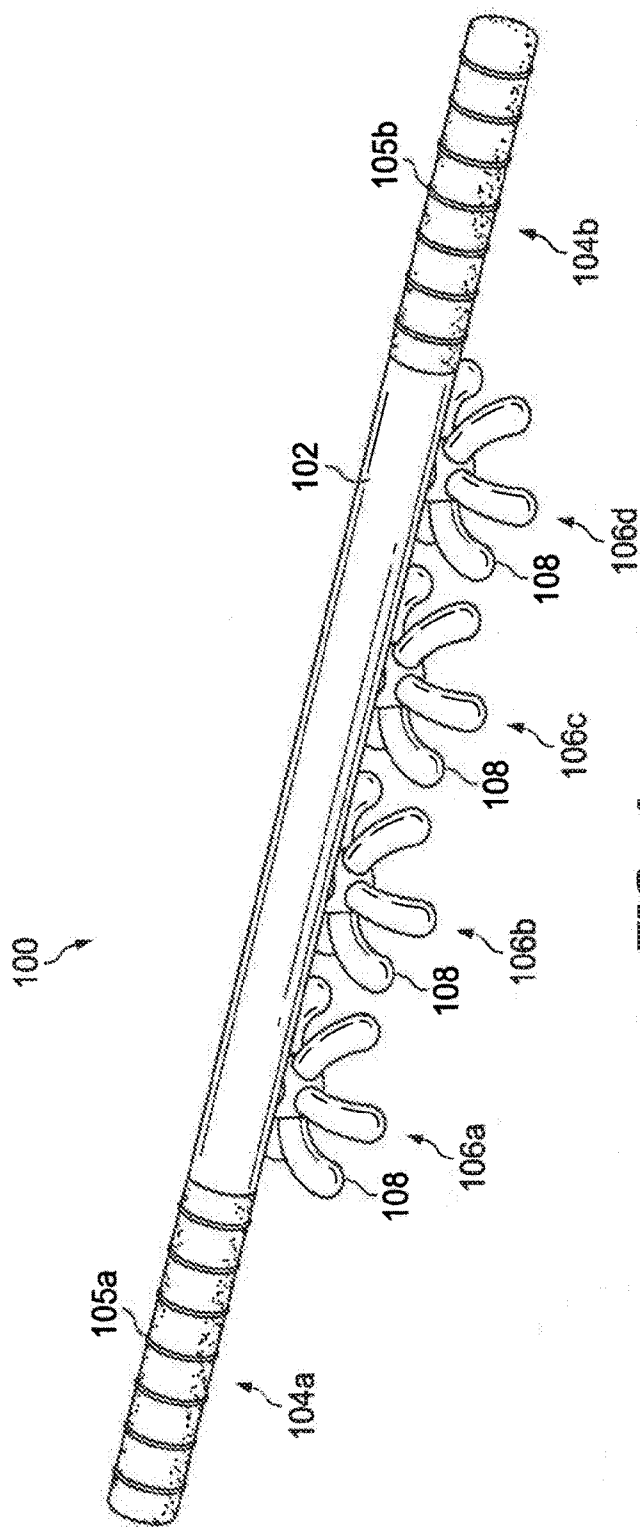
1. An apparatus, comprising:
  - a first linear bar member inclusive of a first connector mechanism;
  - at least one first flower member connected to said first linear bar member, the at least one first flower member including a plurality of first finger members that are rigid and extend outward from the first bar member;
  - a second linear bar member inclusive of a second connector mechanism;
  - at least one second flower member connected to said second linear bar member, the at least one second flower member including a plurality of second finger members that are rigid and extend outward from the second bar member; and
  - said first linear bar member and said second linear bar member being connectable such that when said first and second linear bar members are connected by the first and second connector mechanisms, a rigid, linear bar is formed with the first and second flowers being aligned along a plane.
2. The apparatus according to claim 1, wherein the first and second connector mechanisms are male and female threaded mechanisms.
3. The apparatus according to claim 1, further including a hinge member attached to said first and second connector mechanisms.
4. The apparatus according to claim 3, wherein said hinge positioned on an opposite side of the first and second flower members.
5. A fascia tissue fitness device, comprising:
  - a bar member;
  - at least one flower member connected to said bar member along a plane, said at least one flower member including a plurality of finger members that are rigid and extend outward from said bar member; and
  - means for dispensing a lubricant from said bar member.
6. The fascia tissue fitness device according to claim 5, further comprising a cartridge inclusive of the lubricant, said cartridge being configured to engage said means for dispensing the lubricant.
7. The fascia tissue fitness device according to claim 5, further comprising a removable member, wherein said bar member includes a first end and a second end, and wherein

- at least one of said first and second ends are adapted to receive said removable member.
8. The fascia tissue fitness device according to claim 7, wherein said removable member has a tapered shape with a curved tip.
  9. A fascia tissue fitness device, comprising:
    - a bar member;
    - at least one flower member connected to said bar member along a plane, said at least one flower member including a plurality of finger members that are rigid and extend outward from said bar member; and
    - said bar member defining a hollow portion in which a lubricant is stored and dispensed via an opening further defined by said bar member.
  10. The fascia tissue fitness device according to claim 9, wherein the hollow portion defines a reservoir into which the lubricant is inserted.
  11. The fascia tissue fitness device according to claim 10, further comprising an aperture defined by said bar member that, when a cap that seals the aperture is removed, the reservoir is exposed to enable a user to pour the lubricant into the reservoir.
  12. The fascia tissue fitness device according to claim 9, wherein the opening is positioned along a plane in which the flowers are positioned.
  13. The fascia tissue fitness device according to claim 9, further comprising a pump mechanism that, when activated by a user, causes the lubricant to be expelled from the opening.
  14. The fascia tissue fitness device according to claim 9, further comprising:
    - a first handle and a second handle disposed on opposite ends of said bar member;
    - and
    - wherein at least one of said first and second handles is configured with a removable end having a tapered profile and rounded tip.
  15. The fascia tissue fitness device according to claim 14, wherein the rounded tip is flexible and has a 1 cm curved tip.
  16. The fascia tissue fitness device according to claim 9, wherein the hollow portion defines a reservoir in which a cartridge inclusive of the lubricant is inserted.

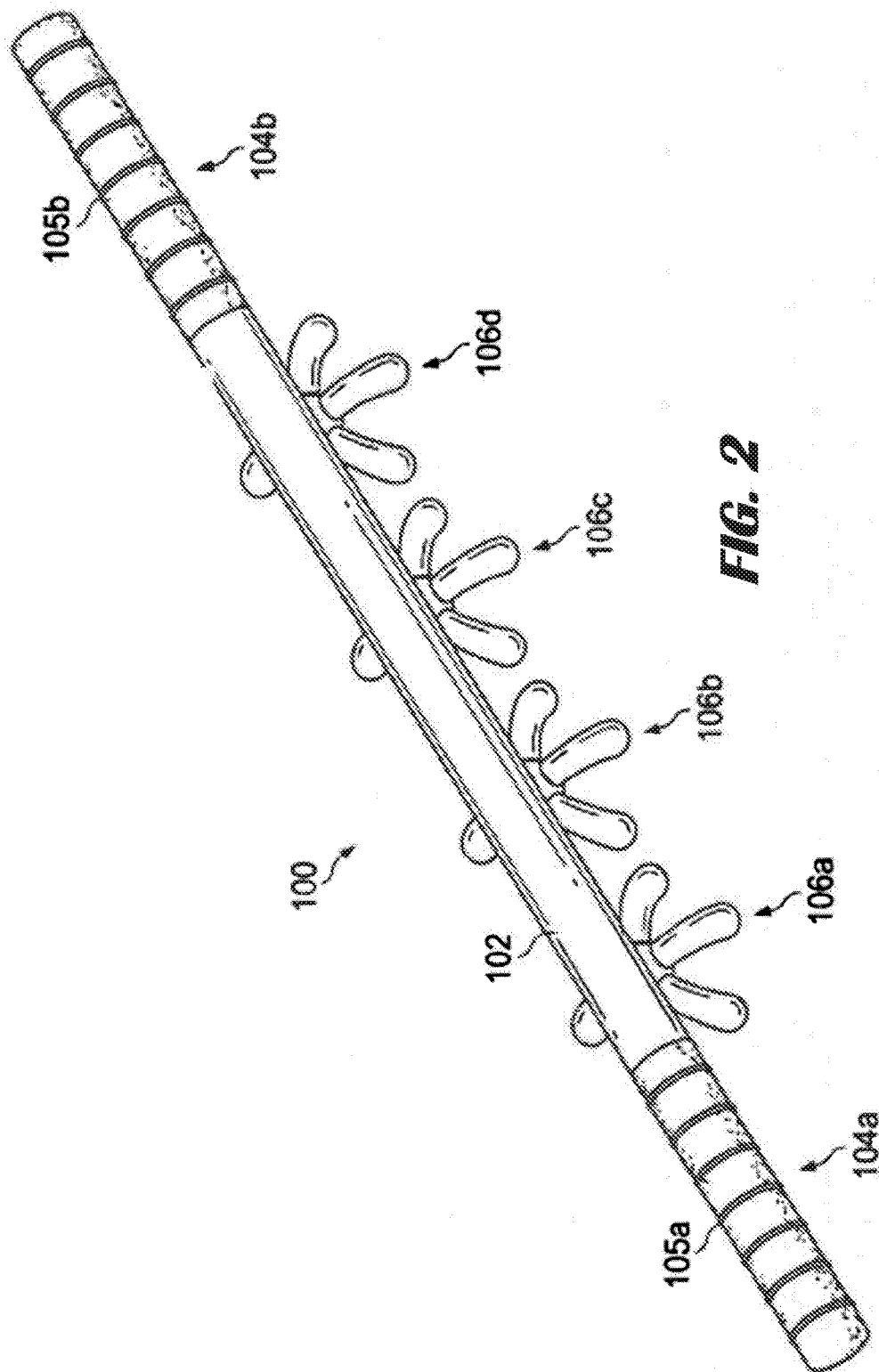
17. A fascia tissue fitness device, comprising:
  - a bar member;
  - at least one flower member connected to said bar member along a plane, the at least one flower member including a plurality of finger members that are rigid and extend outward from said bar member; and
  - a handle disposed on an end of said bar member, said handle defining (i) a hollow portion configured to store a lubricant, (ii) an opening through which the lubricant is dispensed, and (iii) an activation mechanism that, when depressed, causes the lubricant to be dispensed via the opening.
18. The fascia tissue device according to claim 17, further comprising a nozzle that is aligned with the opening, said nozzle being configured to cause the lubricant to be sprayed when dispensed.
19. The fascia tissue device according to claim 17, wherein the hollow portion is configured to receive a cartridge inclusive of the lubricant.
20. A fascia tissue fitness device, comprising:
  - a bar member;
  - at least one flower member connected to said bar member along a plane, the at least one flower member including a plurality of finger members that are rigid and extend outward from said bar member; and
  - a heater element disposed within said bar member, and in thermal communication with said at least one flower member to cause the fingers to be heated when said heater element is activated.
21. The fascia tissue fitness device according to claim 20, wherein said heater element is configured to heat tips of the finger members to a temperature between approximately 90 degrees Fahrenheit and approximately 115 degrees Fahrenheit.
22. The fascia tissue fitness device according to claim 20, further comprising a heat transfer element extending from said heater element to a base of said at least one flower member connected to said bar member.
23. A fascia tissue fitness device, comprising:
  - a bar member;

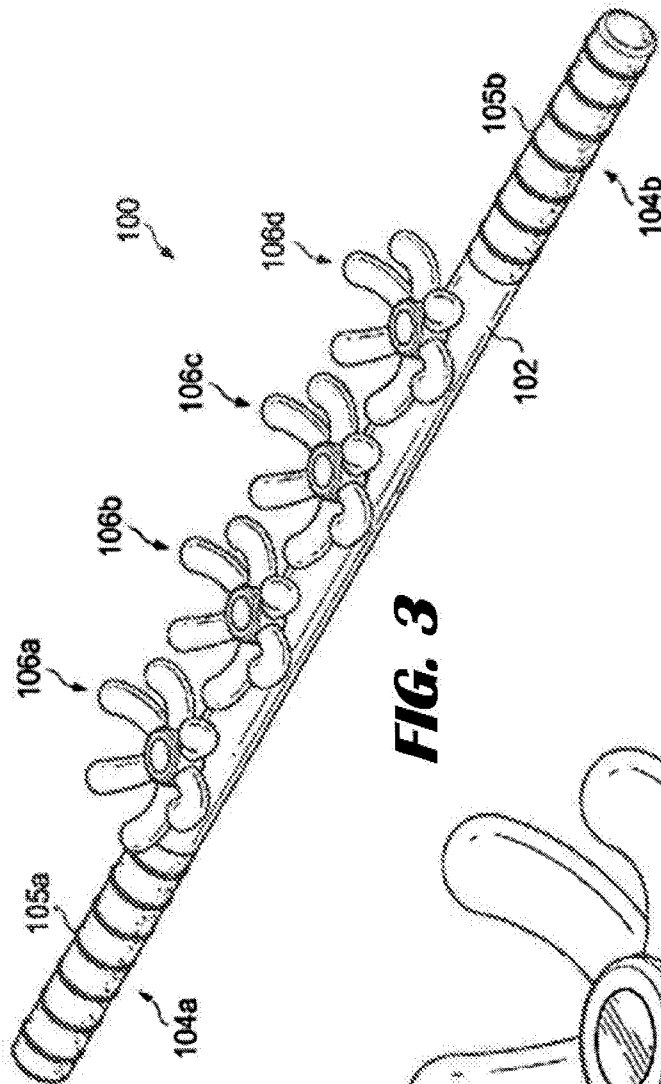
- at least one flower member connected to said bar member along a plane, the at least one flower member including a plurality of finger members that are rigid and extend outward from said bar member; and
- a vibration generation mechanism disposed within said bar member, and configured to cause said at least one flower member to vibrate.
24. The fascia tissue fitness device according to claim 23, wherein said vibration generation mechanism is fixedly attached to said bar member, thereby causing said bar member and said at least one flower member to vibrate.
25. The fascia tissue fitness device according to claim 23, further comprising a power source within said bar member to power said vibration generation mechanism.
26. A fascia tissue fitness device, comprising:
- a bar member;
  - at least one flower member connected to said bar member along a plane, the at least one flower member including a plurality of finger members that are rigid and extend outward from said bar member; and
  - a translation member disposed within said bar member onto which said at least one flower member is affixed; and
  - an actuator coupled to said translation member, and configured to cause said translation member to repeatedly move axially back and forth within said bar member.
27. The fascia tissue fitness device according to claim 26, wherein said bar member is linear.
28. The fascia tissue device according to claim 26, wherein said actuator is electrically powered and electrically coupled to a power cord configured with a plug for insertion into a wall power socket.
29. A fascia tissue fitness device, comprising:
- a bar member; and
  - at least one flower member connected to said bar member along a plane, the at least one flower member including a plurality of finger members that are rigid and extend outward from said bar member, said bar member being configured to removably secure a treatment accessory mechanism.

30. The fascia tissue fitness device according to claim 29, wherein said bar member being configured to removably secure a treatment accessory mechanism includes said bar member defining an opening that enables the treatment accessory mechanism to be removably secured thereto.
31. The fascia tissue fitness device according to claim 29, wherein the treatment accessory mechanism has a tapered shape with a curved tip.
32. The fascia tissue fitness device according to claim 31, wherein the treatment accessory mechanism is rigid and has an approximately 2 cm curved tip.
33. The fascia tissue fitness device according to claim 31, wherein the treatment accessory mechanism is flexible and has an approximately 1 cm curved tip.
34. The fascia tissue fitness device according to claim 29, wherein the treatment accessory mechanism is a skin stimulator inclusive of a plurality of fingers.
35. The fascia tissue fitness device according to claim 34, wherein the fingers are formed of a flexible material.
36. The fascia tissue fitness device according to claim 34, wherein the fingers are between approximately  $\frac{3}{4}$  of an inch and approximately 1  $\frac{1}{2}$  inches.
37. The fascia tissue fitness device according to claim 29, wherein the treatment accessory mechanism is a fascia traction member inclusive of a pair of fingers.
38. The fascia tissue fitness device according to claim 37, wherein the pair of fingers include rubber disposed on tips of the fingers.
39. The fascia tissue fitness device according to claim 37, wherein the pair of fingers are between approximately 1  $\frac{1}{2}$  inches and approximately 2  $\frac{1}{2}$  inches long.

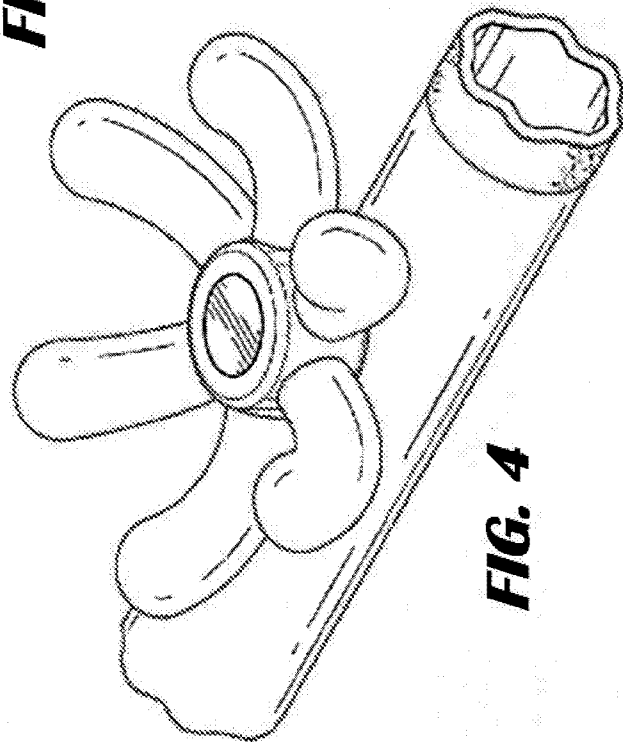


**FIG. 1**

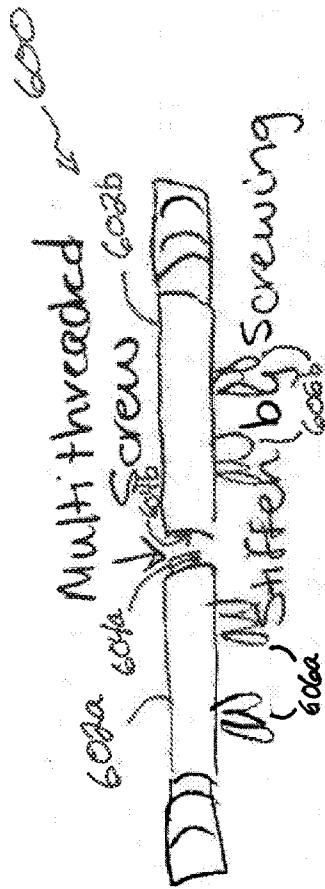
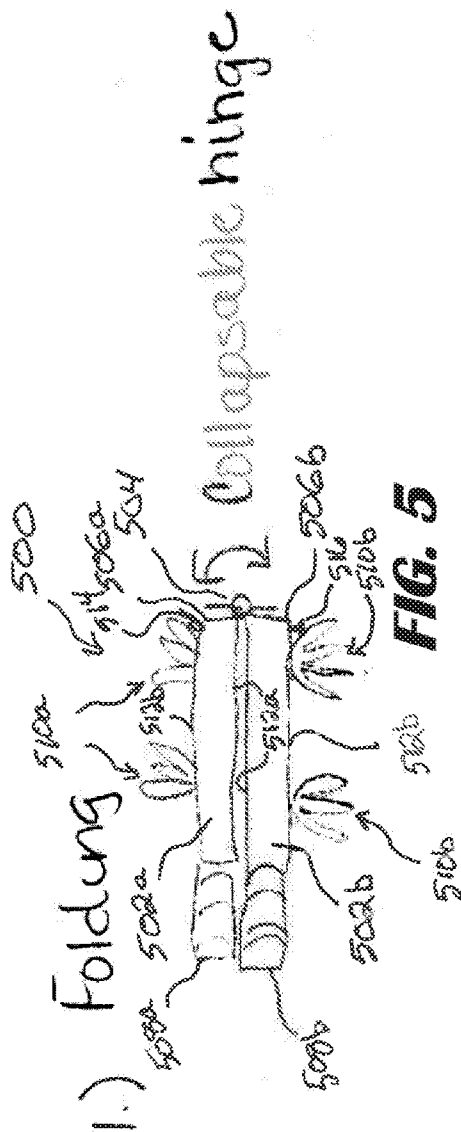




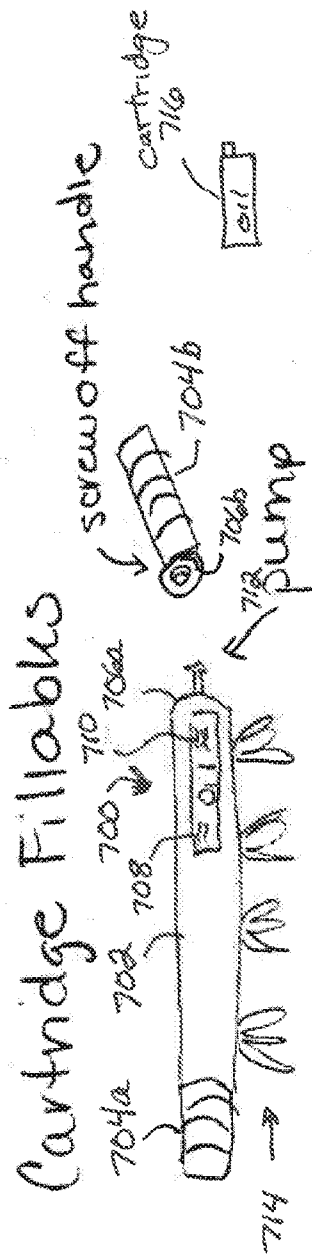
**FIG. 3**



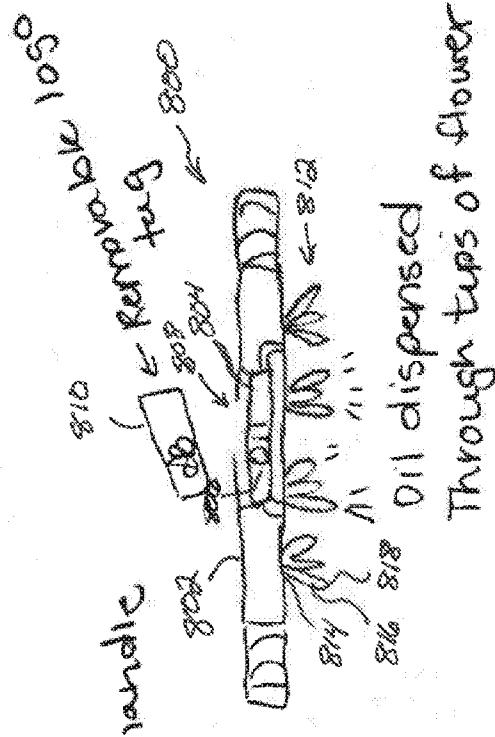
**FIG. 4**



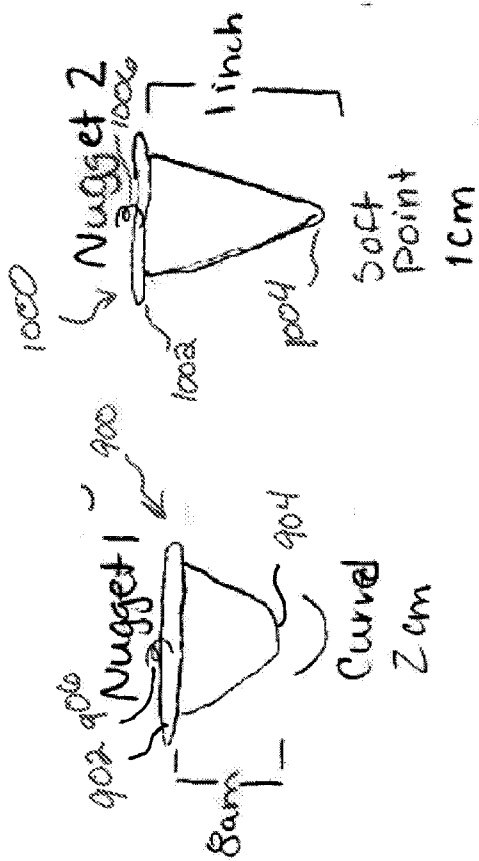
**FIG. 6**



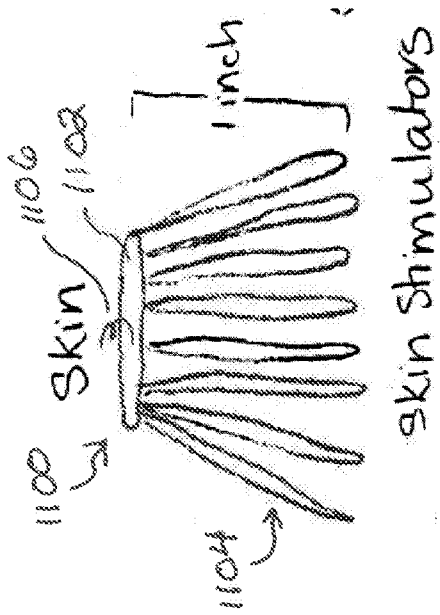
**FIG. 7**



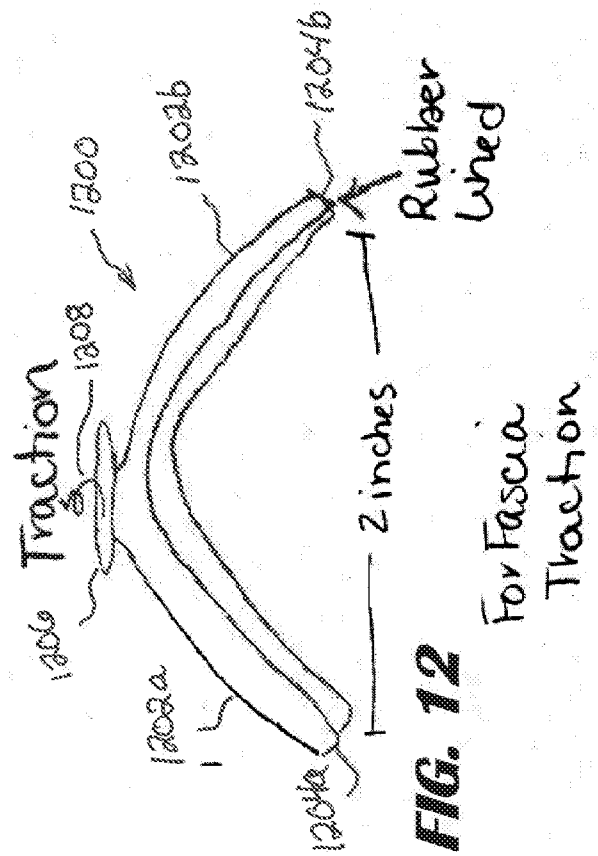
**FIG. 8**



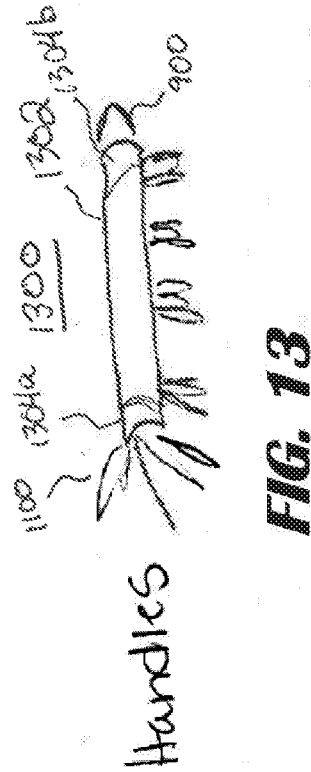
**FIG. 9**



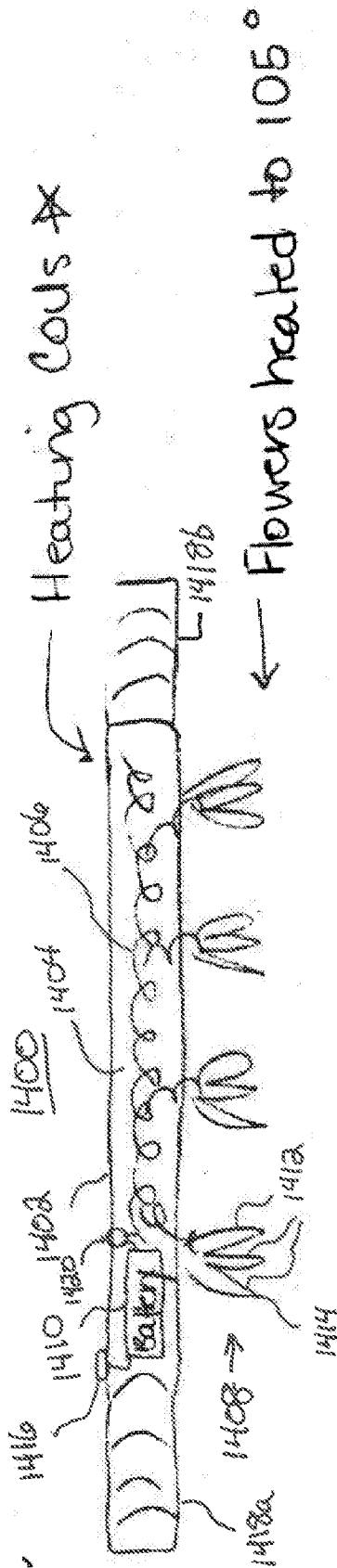
**FIG. 10**



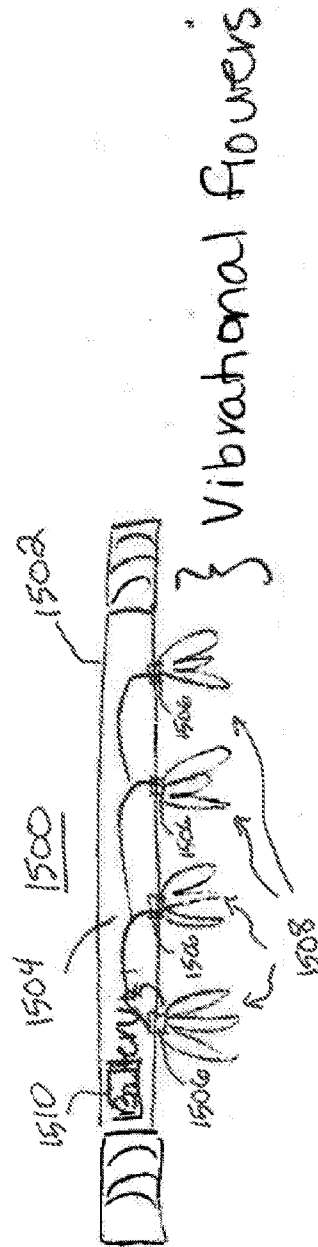
**FIG. 11**



**FIG. 12**



**FIG. 14**



**FIG. 15**

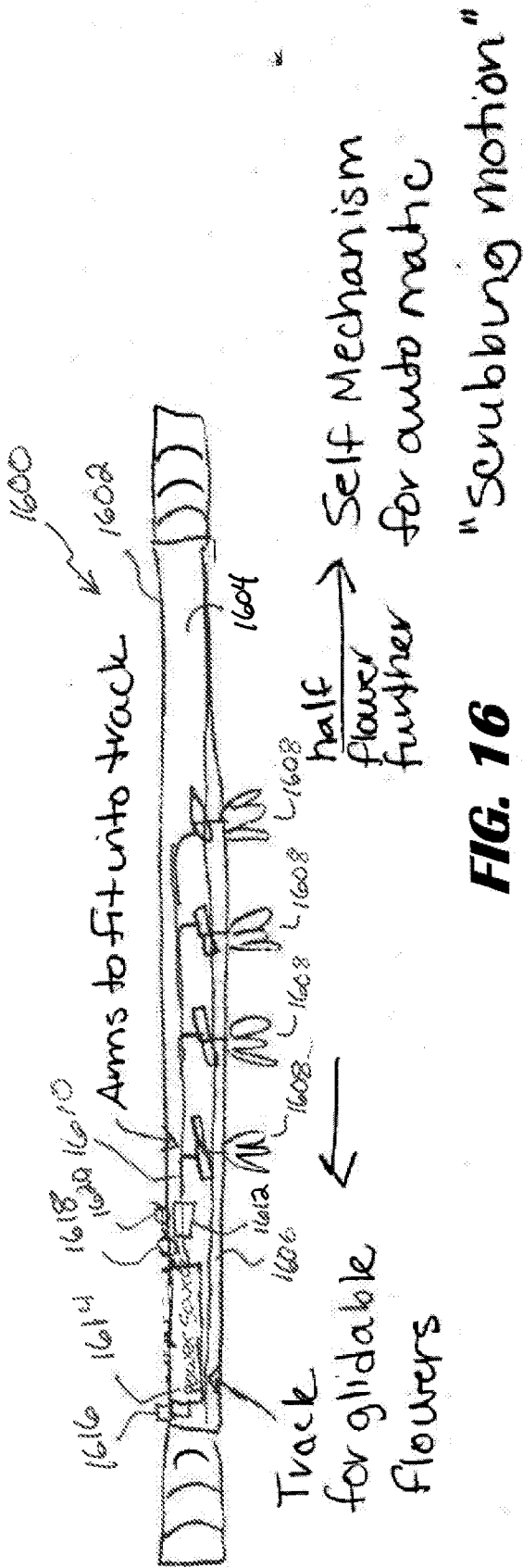


FIG. 16

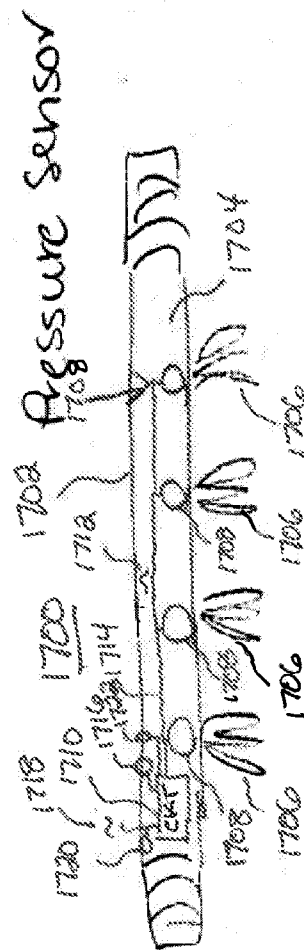


FIG. 17

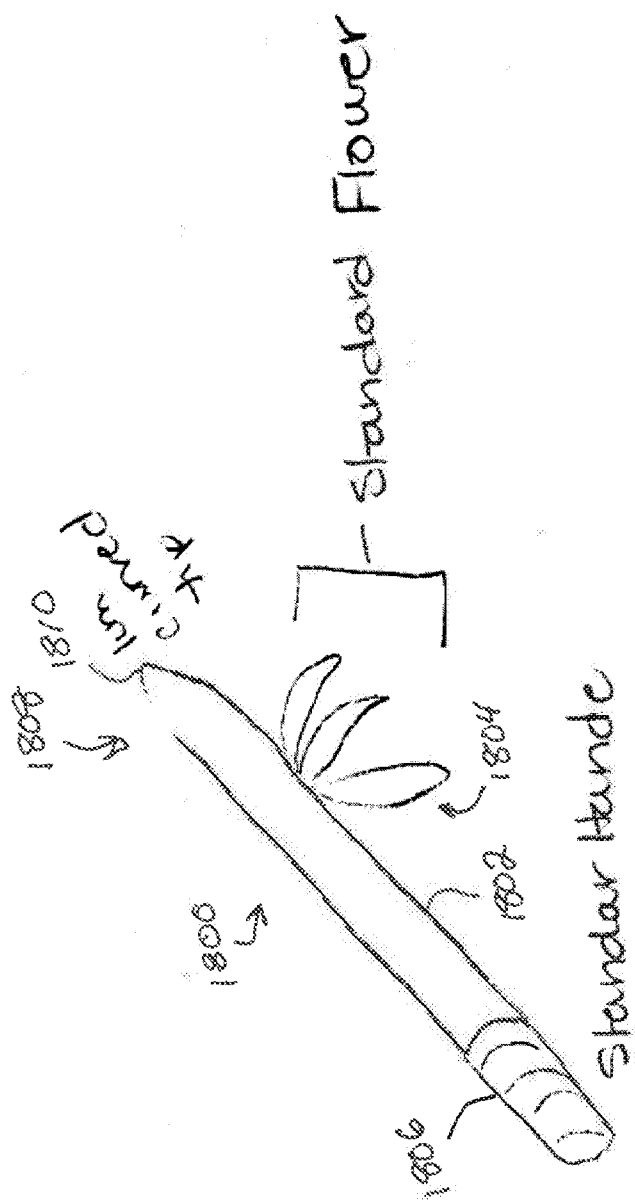
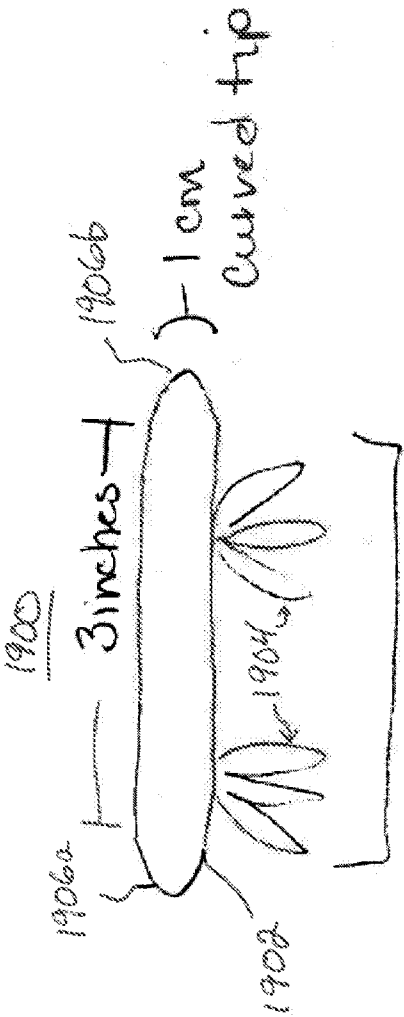
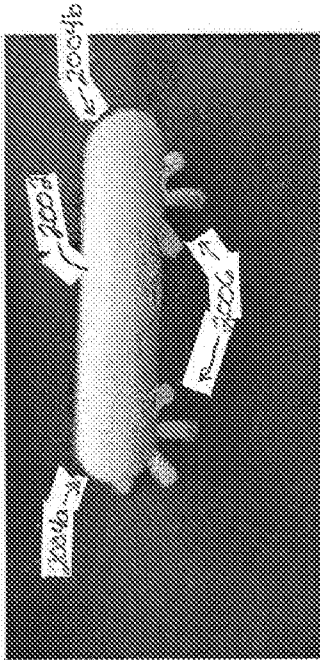


FIG. 18



**FIG. 19**



**FIG. 20**

Fascial Fascia Blaster

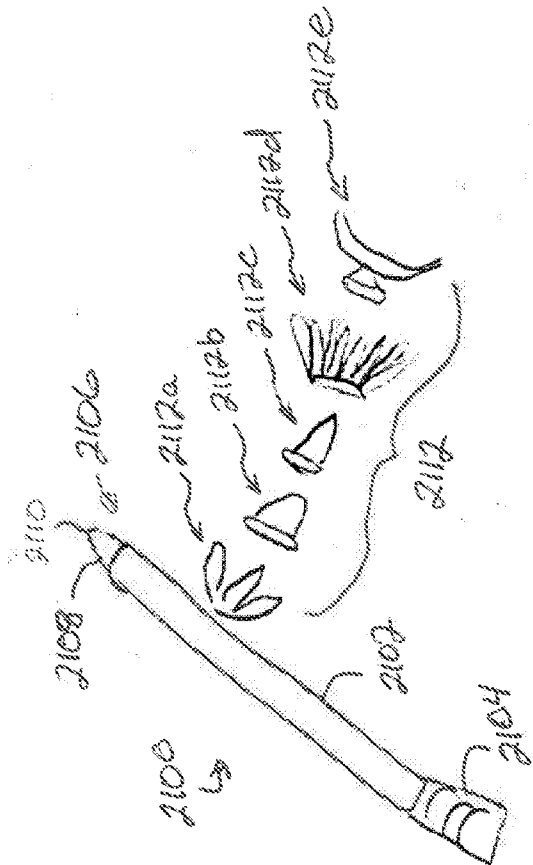
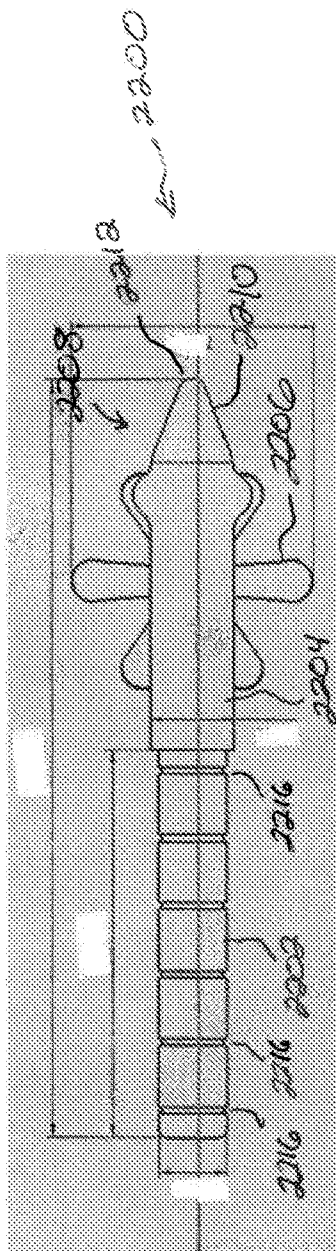
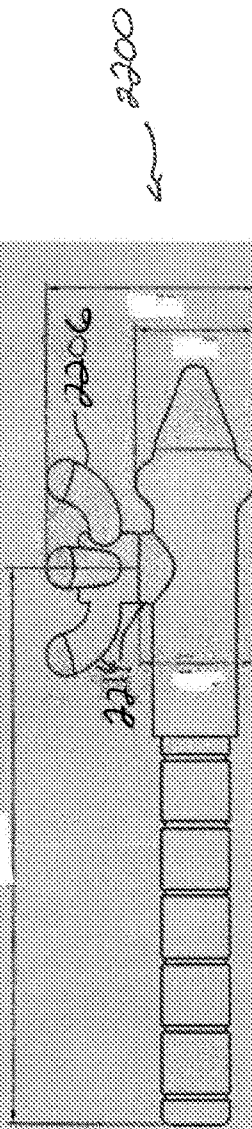


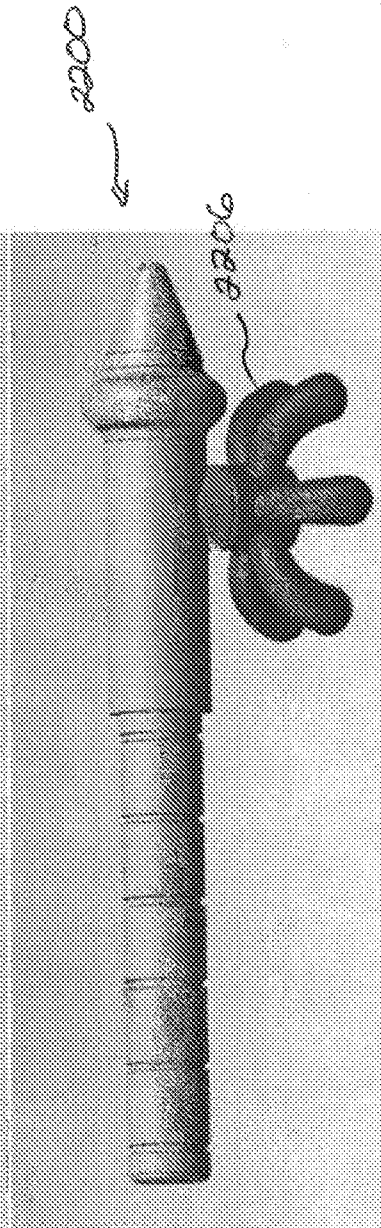
FIG. 21



**FIG. 22A**

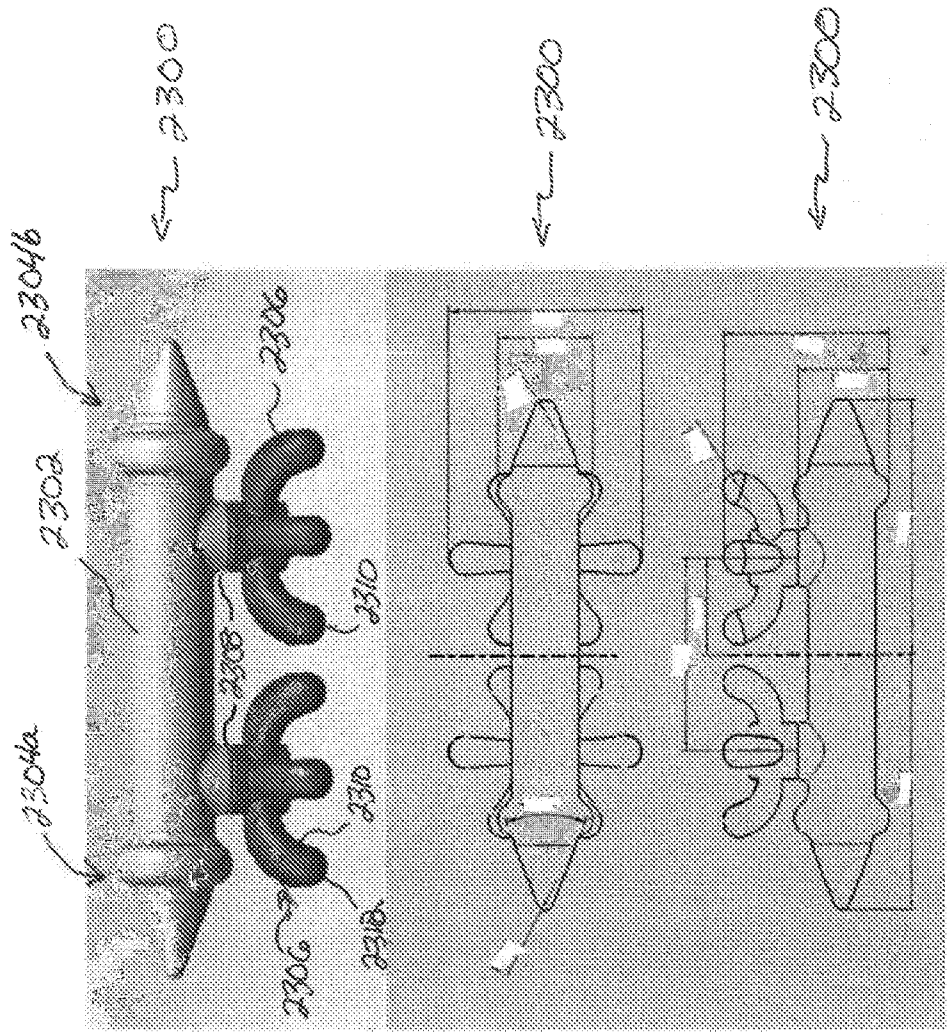


**FIG. 22B**



**FIG. 22C**



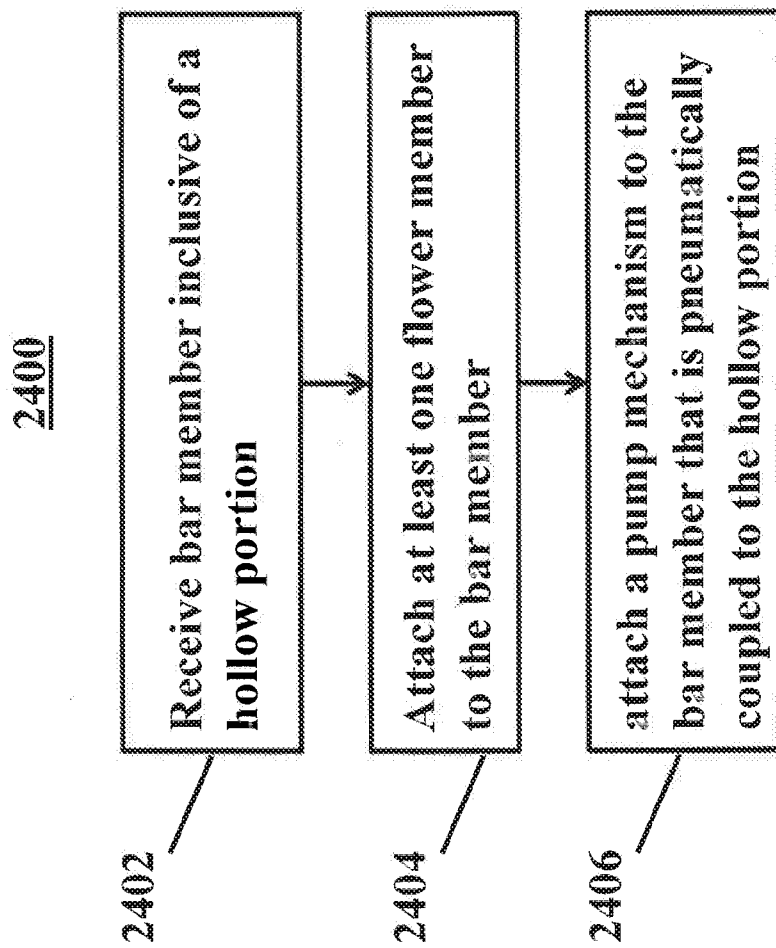


**FIG. 23A**

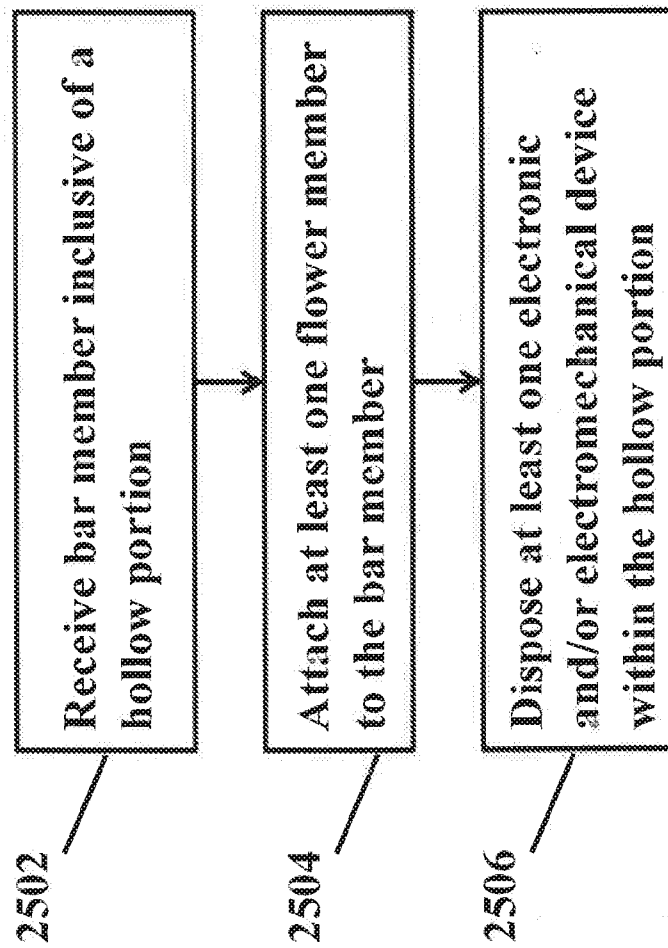
**FIG. 23B**

**FIG. 23C**

**FIG. 23**

**FIG. 24**

2500



**FIG. 25**

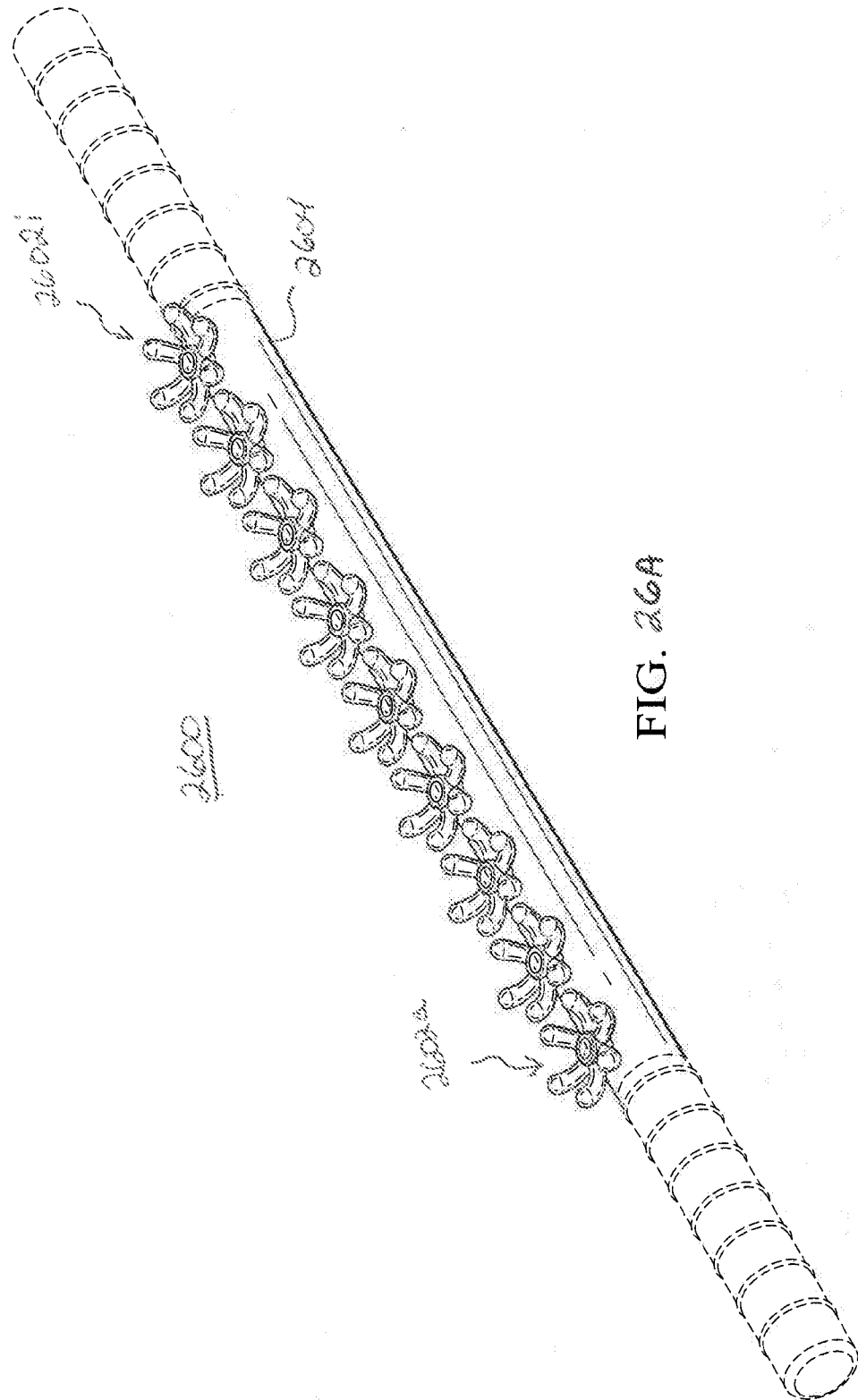


FIG. 26A



FIG. 26C

FIG. 26B

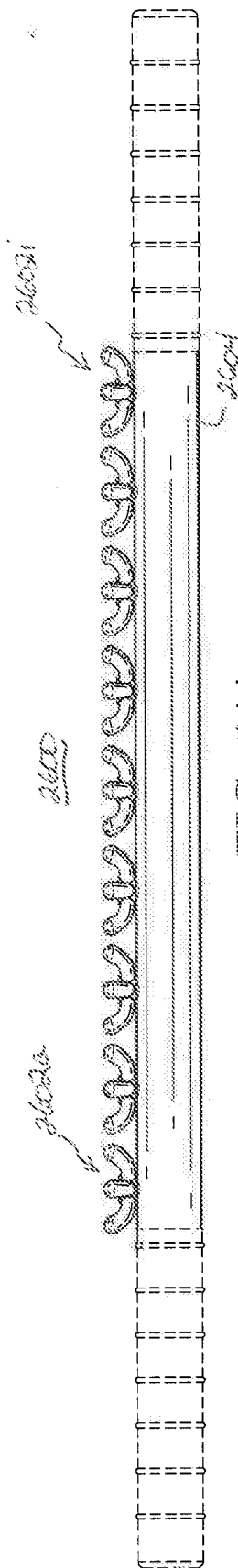


FIG. 26D

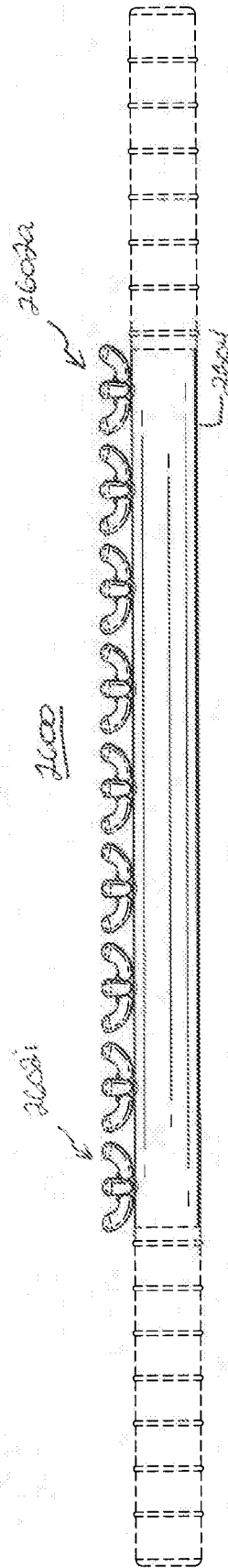


FIG. 26E

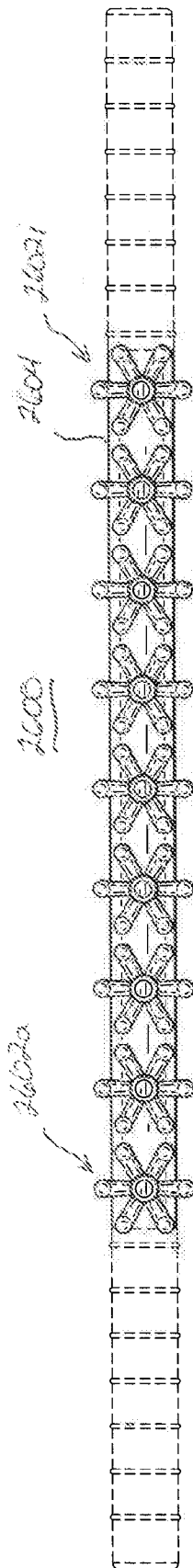


FIG. 26F

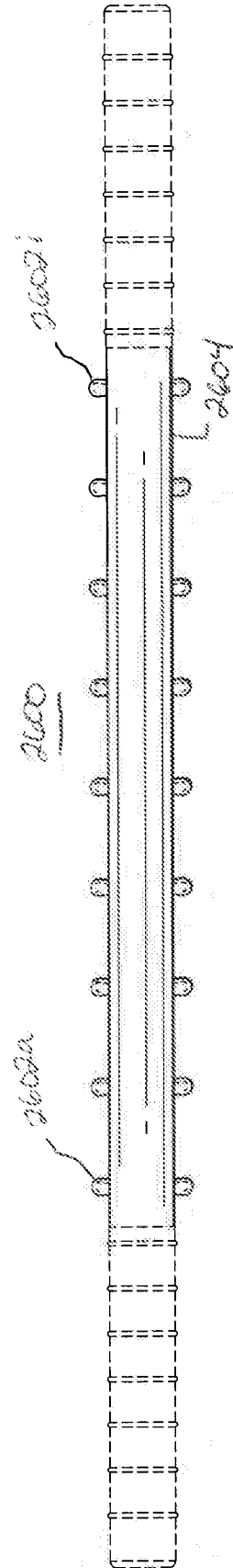


FIG. 26G

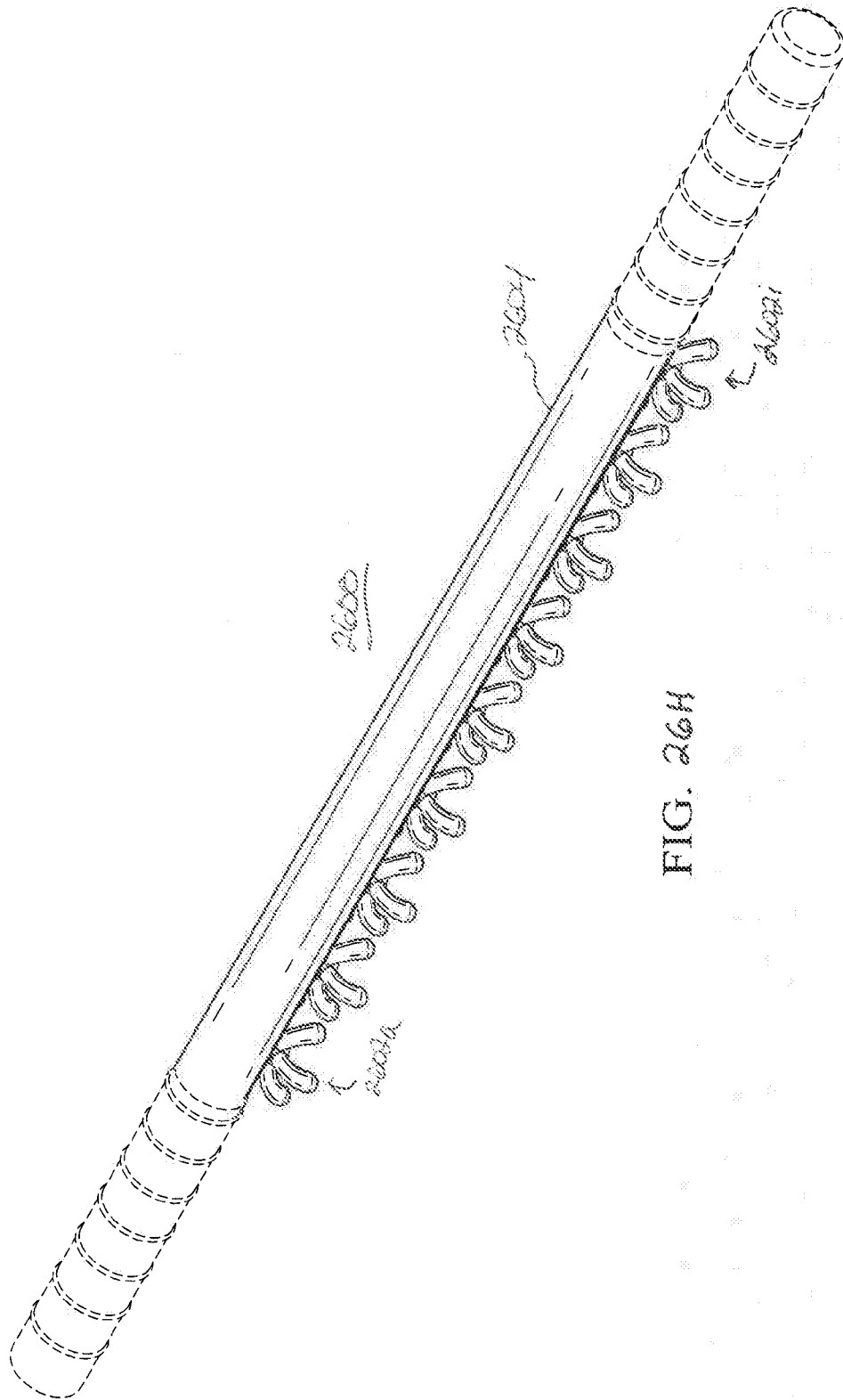


FIG. 26H

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2017/031384

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61H 7/00 (2017.01)

CPC - A61H 7/007; A61H 7/003; A61H 7/005; A61H 2201/1253; A61H 2207/00 (2017.08)

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)

See Search History document

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

USPC - 601/72; 601/73 (keyword delimited)

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

See Search History document

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|------------------------------------------------------------------------------------|-----------------------|
| X         | US 5,730,708 A (SPRATT) 24 March 1998 (24.03.1998) entire document                 | 1, 3, 4               |
| X         | US 2013/0190664 A1 (JOHNSON) 25 July 2013 (25.07.2013) entire document             | 1                     |
| ---       |                                                                                    | ---                   |
| Y         |                                                                                    | 2                     |
| Y         | US 2004/0024336 A1 (LIN) 05 February 2004 (05.02.2004) entire document             | 2                     |
| A         | US 2014/0243718 A1 (BLACK) 28 August 2014 (28.08.2014) entire document             | 1-4                   |
| A         | US 2,168,975 A (CLARKE) 08 August 1939 (08.08.1939) entire document                | 1-4                   |
| A         | US 2008/0255486 A1 (LUDLOW) 16 October 2008 (16.10.2008) entire document           | 1-4                   |

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

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

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

28 August 2017

Date of mailing of the international search report

14 SEP 2017

Name and mailing address of the ISA/US

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Authorized officer

Blaine R. Copenheaver

PCT Helpdesk: 571-272-4300  
PCT OSP: 571-272-7774

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2017/031384

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:  
See extra sheet(s).

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1-4

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

Continued from Box No. III Observations where unity of invention is lacking

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees need to be paid.

Group I, claims 1-4 are drawn to an apparatus comprising a second linear bar.

Group II, claims 5-19 are drawn to a device comprising a lubricant.

Group III, claims 20-22 are drawn to a device comprising a heater element.

Group IV, claims 23-25 are drawn to a device comprising a vibration generation mechanism.

Group V, claims 26-28 are drawn to a device comprising a translation member.

Group VI, claims 29-39 are drawn to a device comprising a bar member being configured to removably secure a treatment accessory mechanism.

The inventions listed in Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1, because under PCT Rule 13.2 they lack the same or corresponding special technical features for the following reasons:

The special technical features of Group I, an apparatus comprising a second linear bar member inclusive of a second connector mechanism, at least one second flower member connected to said second linear bar member, the at least one second flower member including a plurality of second finger members that are rigid and extend outward from the second bar member, and a first linear bar member and said second linear bar member being connectable such that when said first and second linear bar members are connected by the first and second connector mechanisms, a rigid, linear bar is formed with the first and second flowers being aligned along a plane, are not present in Groups II-VI; the special technical features of Group II, a device comprising means for dispensing a lubricant, are not present in Groups I, III-VI; the special technical features of Group III, a device comprising a heater element disposed within a bar member, and in thermal communication with at least one flower member to cause fingers to be heated when said heater element is activated, are not present in Groups I, II, IV-VI; the special technical features of Group IV, a device comprising a vibration generation mechanism disposed within a bar member, and configured to cause at least one flower member to vibrate, are not present in Groups I-III, V, VI; the special technical features of Group V, a device comprising a translation member disposed within a bar member onto which at least one flower member is affixed, and an actuator coupled to said translation member, and configured to cause said translation member to repeatedly move axially back and forth within said bar member, are not present in Groups I-IV, VI; and, the special technical features of Group VI, a device comprising a bar member being configured to removably secure a treatment accessory mechanism, are not present in Groups I-V.

Groups I-VI share the technical features of a fascia tissue fitness device, comprising a bar member, at least one flower member connected to said bar member along a plane, said at least one flower member including a plurality of finger members that are rigid and extend outward from said bar member. However, these shared technical features do not represent a contribution over the prior art. Specifically, US 2014/0243718 A1 to Black teaches of a fascia tissue fitness device (100, Fig. 1; Abstract), comprising a bar member (102, Fig. 1), at least one flower member (106a, Fig. 1) connected to said bar member along a plane (Fig. 1), said at least one flower member including a plurality of finger members (108, Fig. 1) that are rigid and extend outward from said bar member (Fig. 1; Para. [0015] regarding the finger members 108 may be stiff or rigid).

Since none of the special technical features of the Groups I-VI inventions are found in more than one of the inventions, unity is lacking.