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(54) **CUTICLE TOOL SHARPENING SYSTEM AND METHOD**

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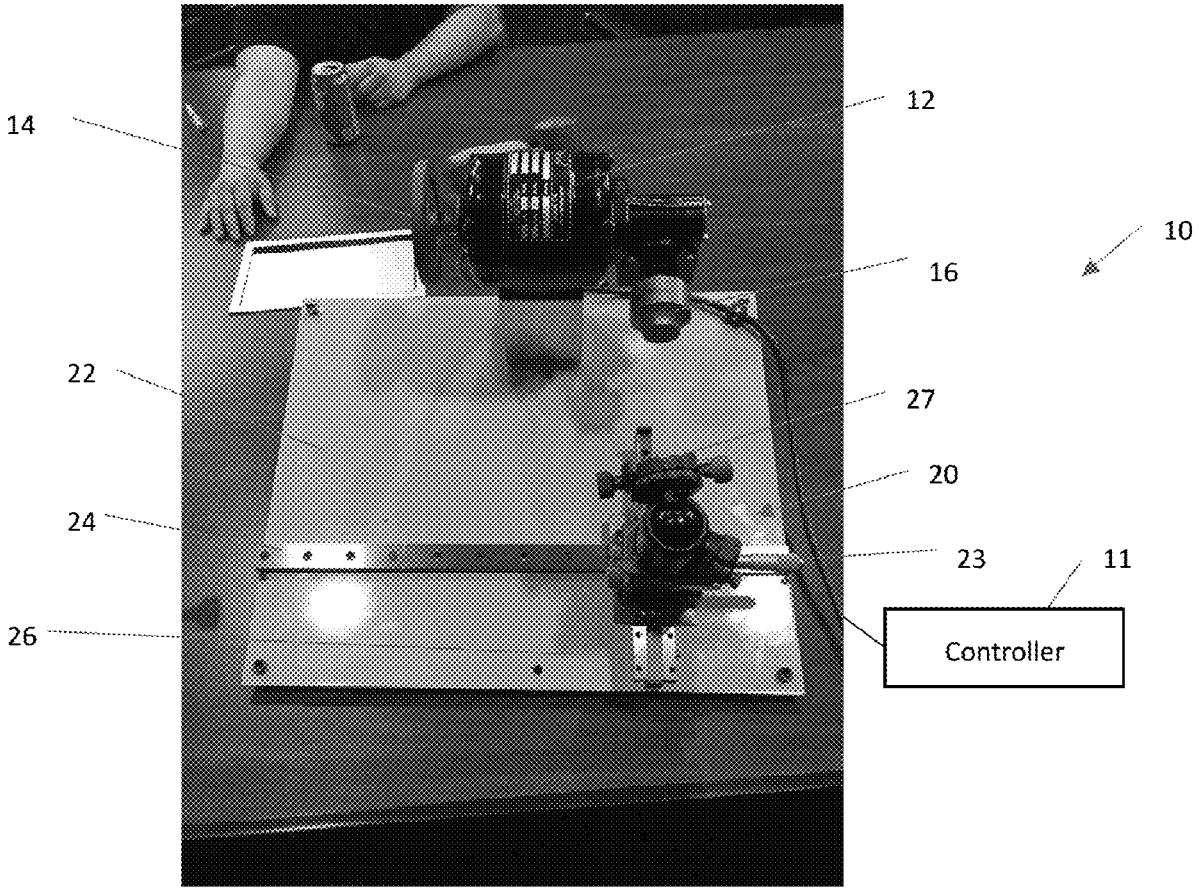
(57) **ABSTRACT**

A system and method for sharpening a tool, such as a cuticle nipper, is provided. A first abrasive component has first abrasive surface and a second abrasive component has a second abrasive surface. A motor drives the first and second abrasive components. A securing device secures the tool. A positioning device receives the securing device and permits movement of the securing device relative to the first and second abrasive devices.



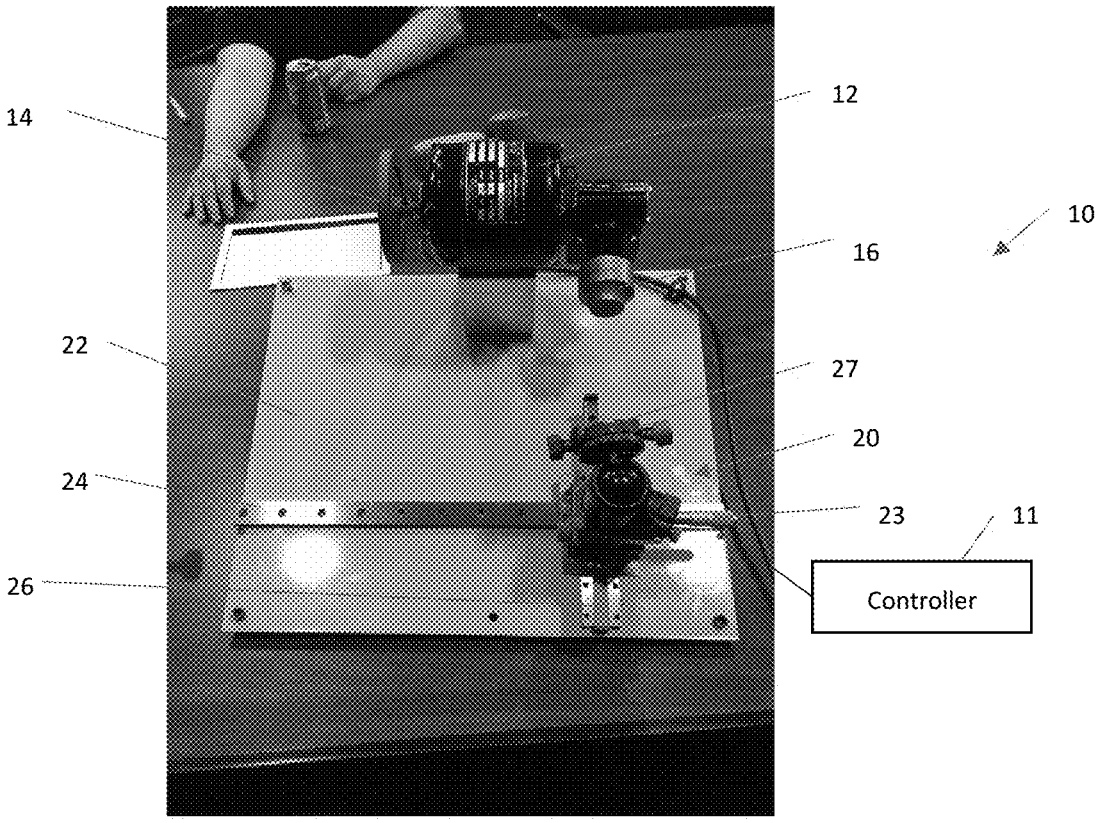


Figure 1

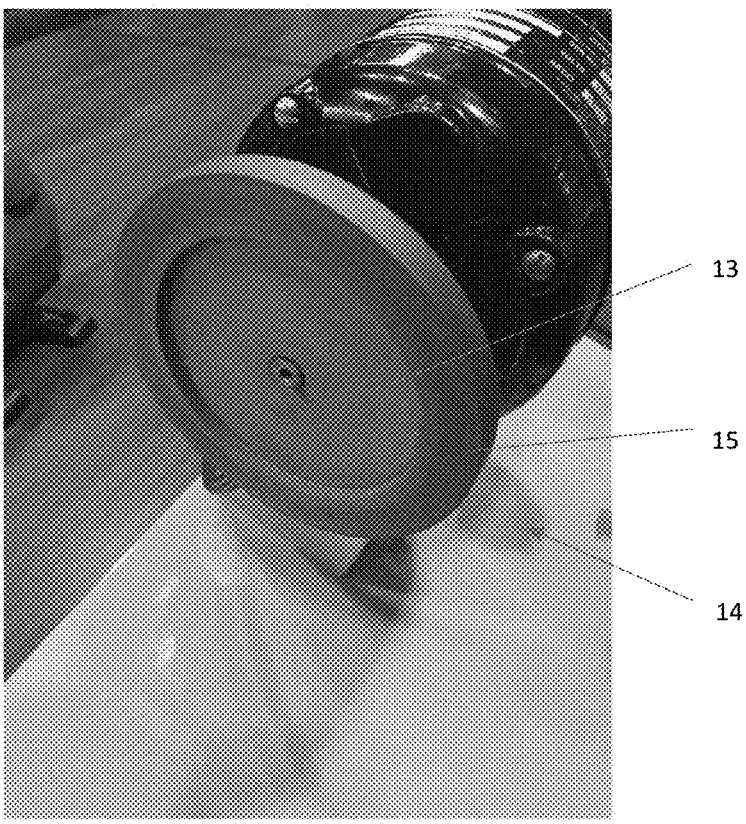


Figure 2A

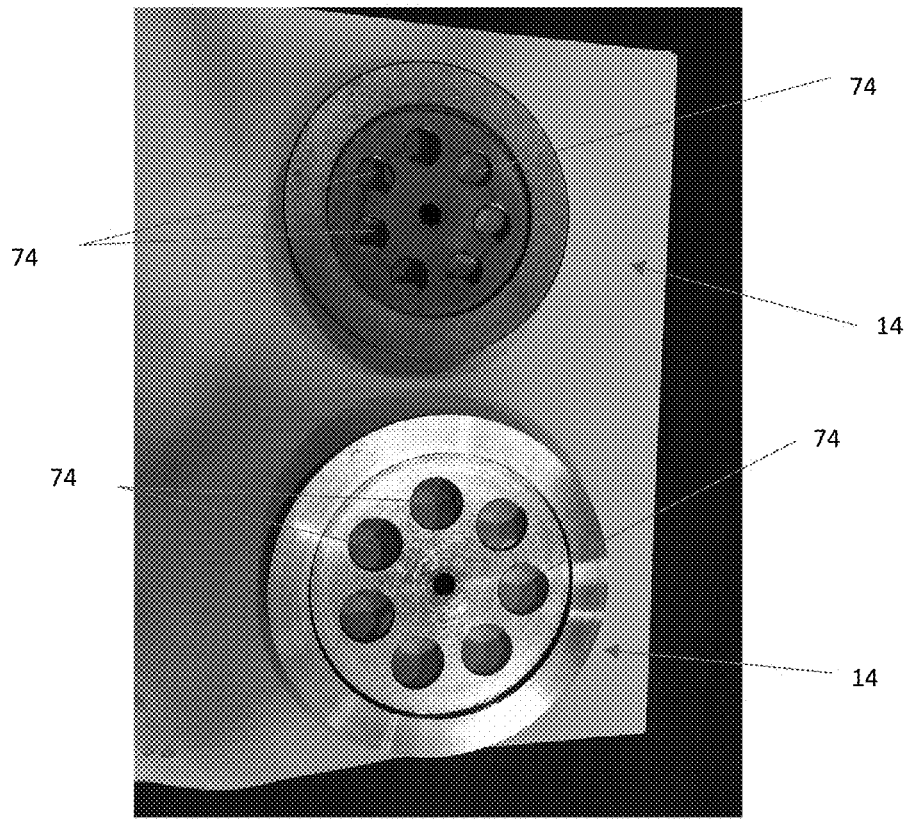


Figure 2B

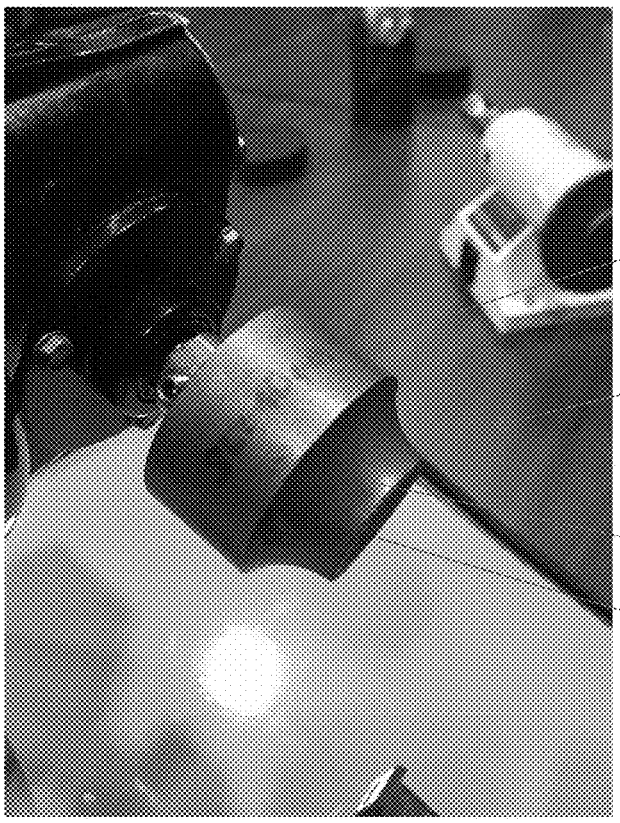


Figure 3A

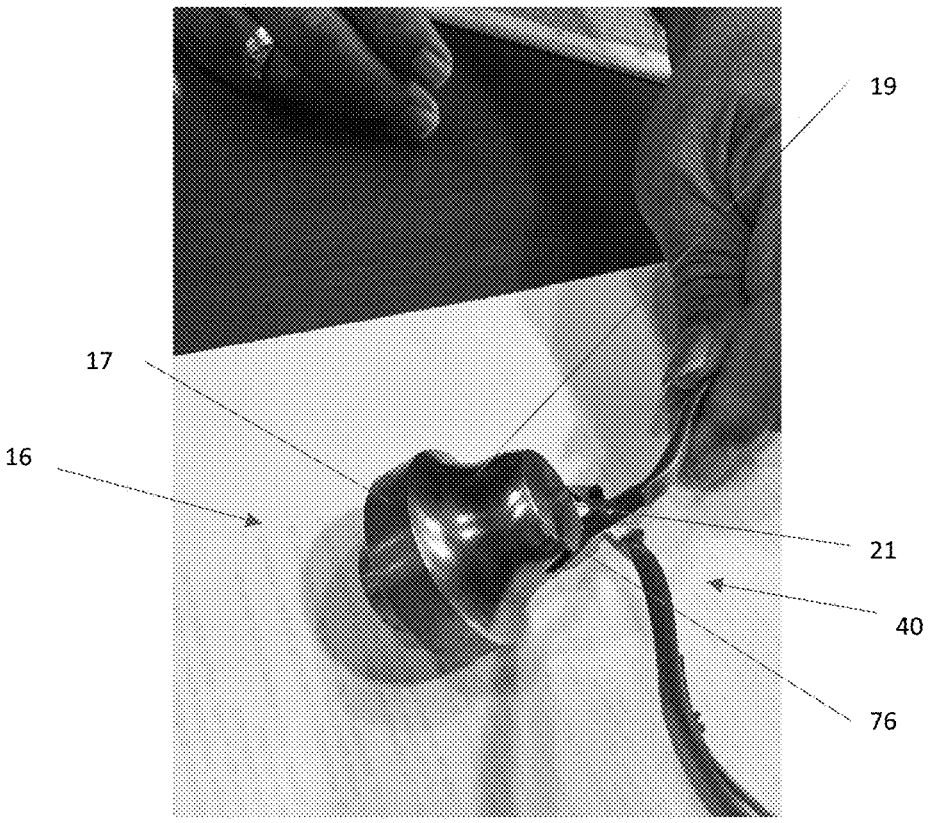


Figure 3B

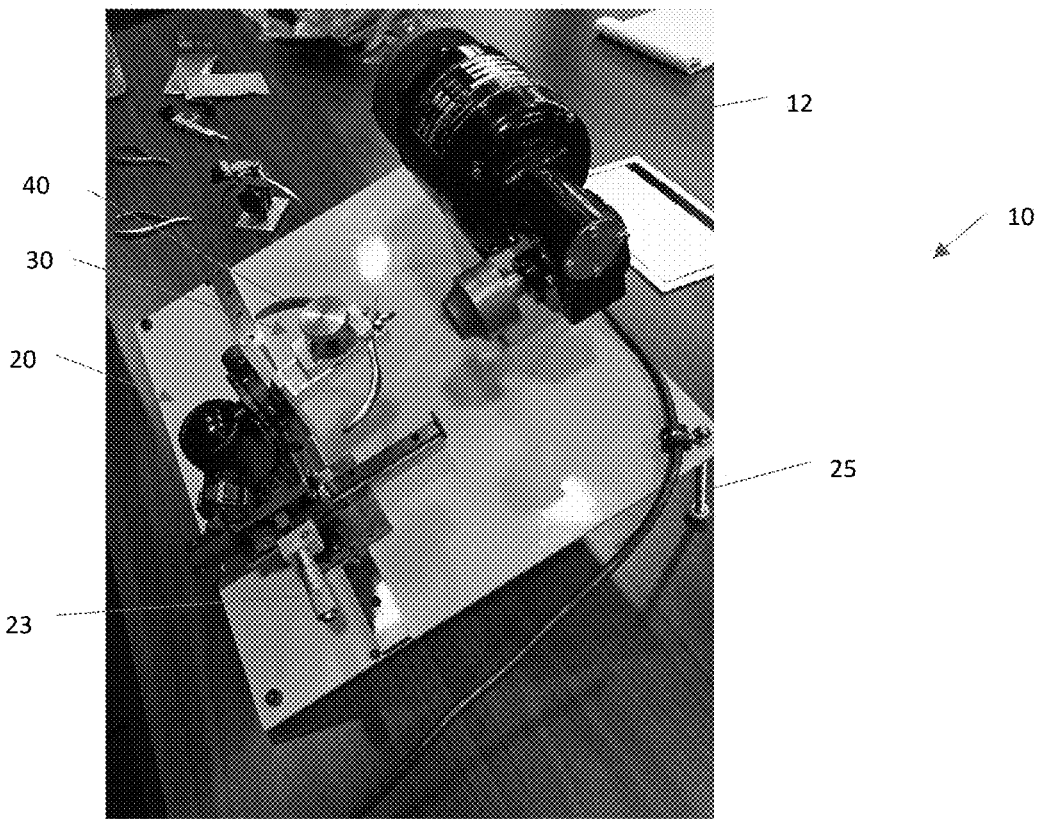


Figure 4

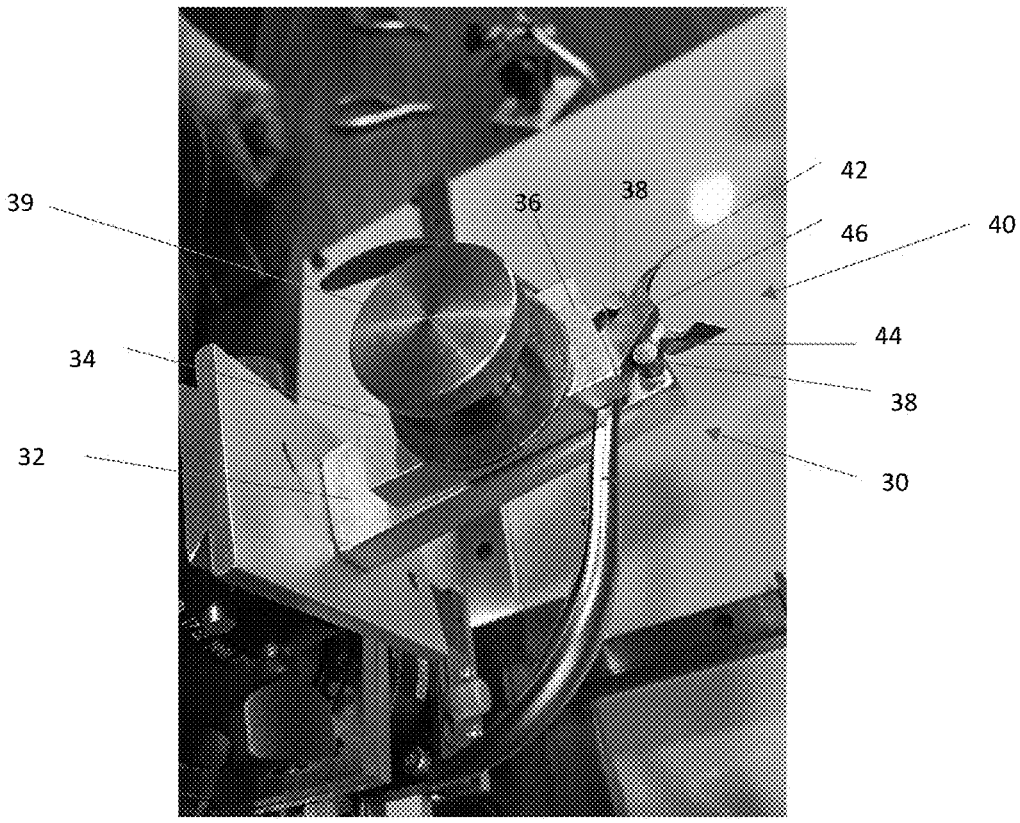


Figure 5

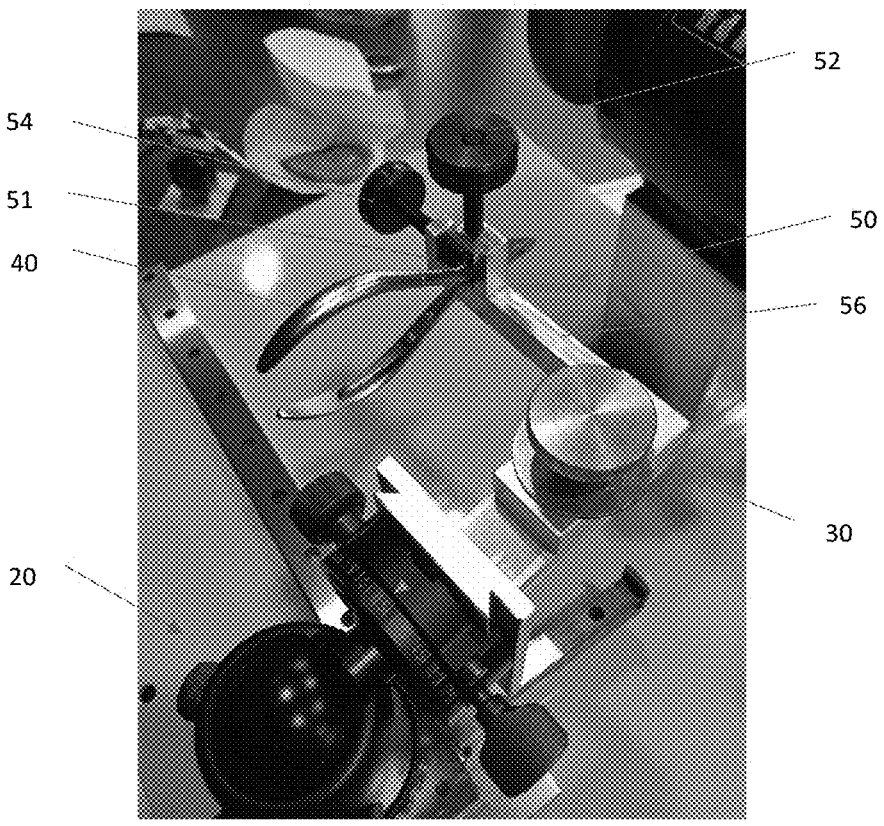


Figure 6

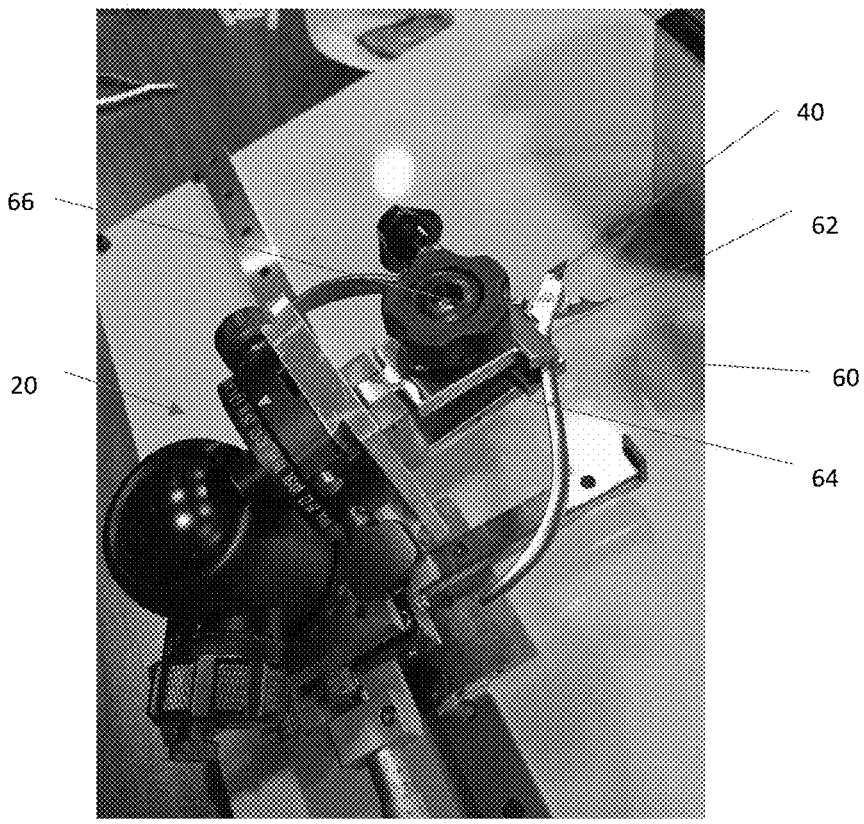


Figure 7

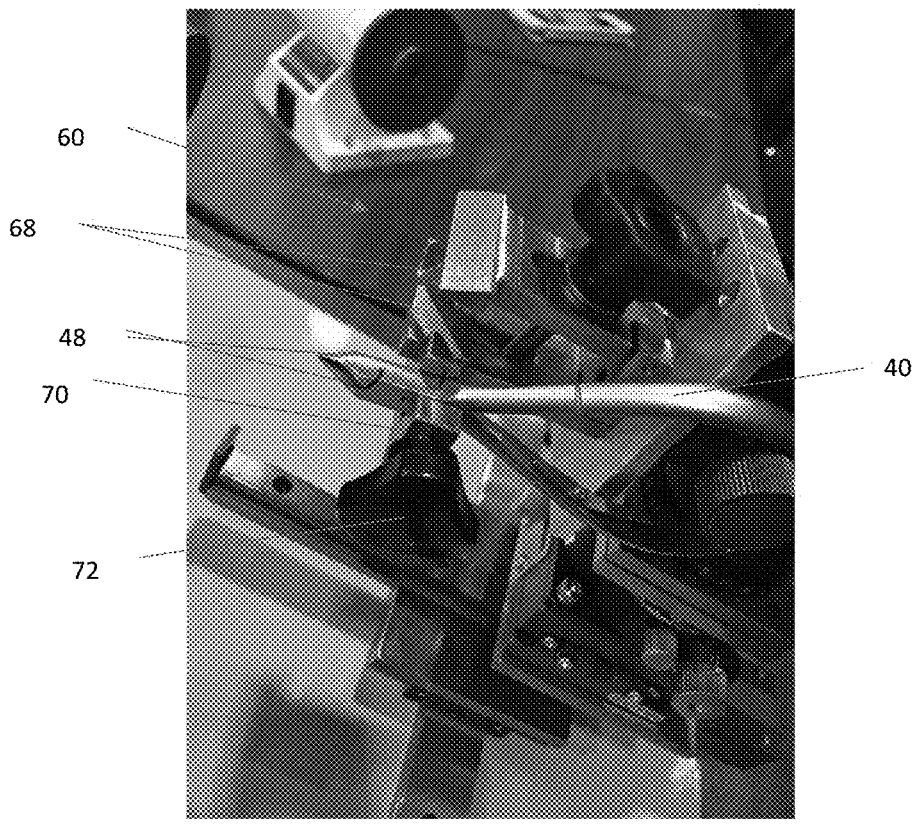


Figure 8

Figure 9

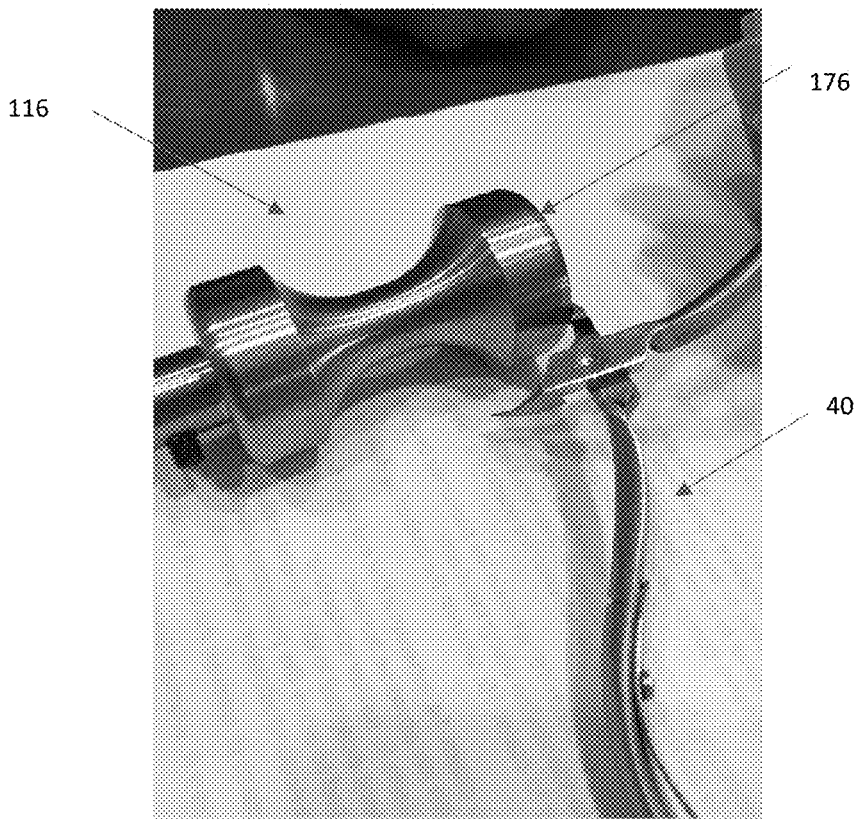


Figure 10

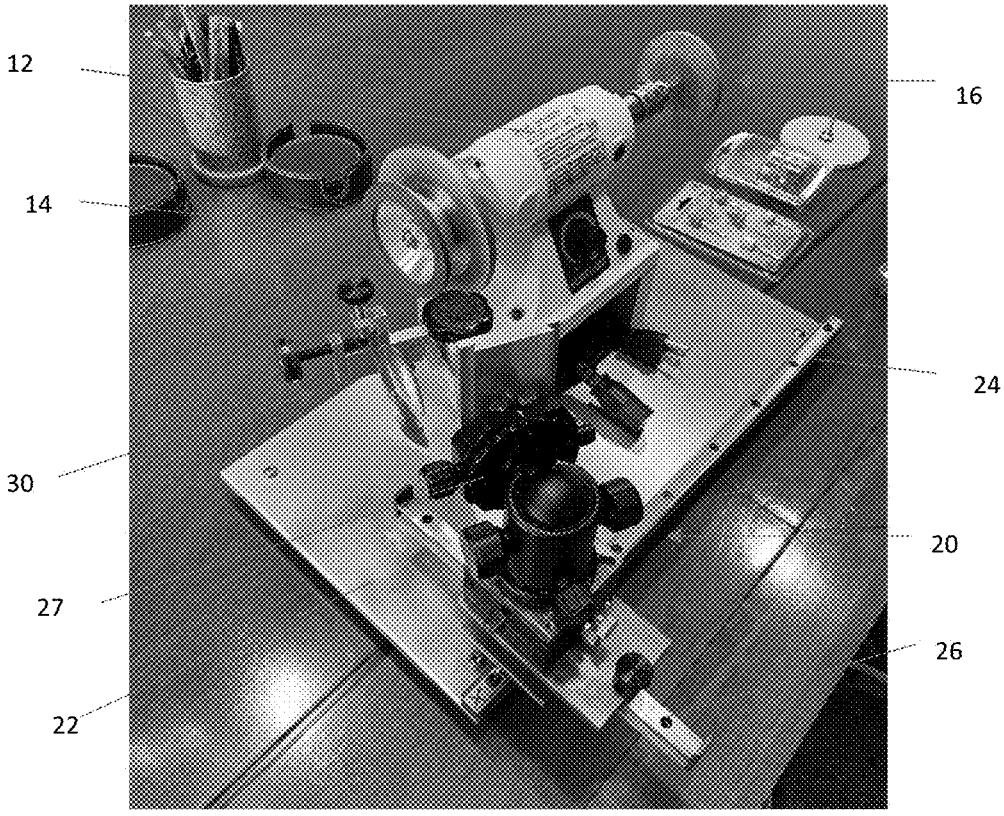


Figure 11

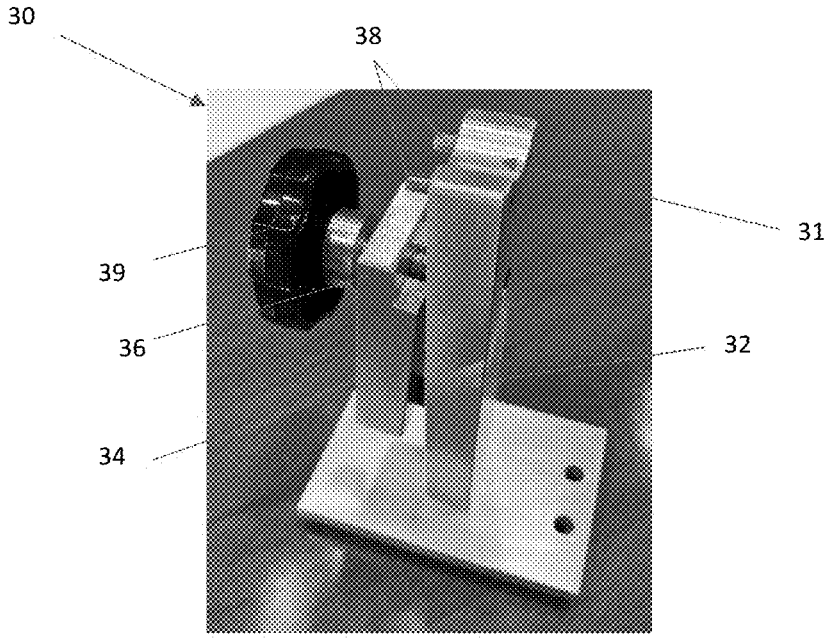


Figure 12

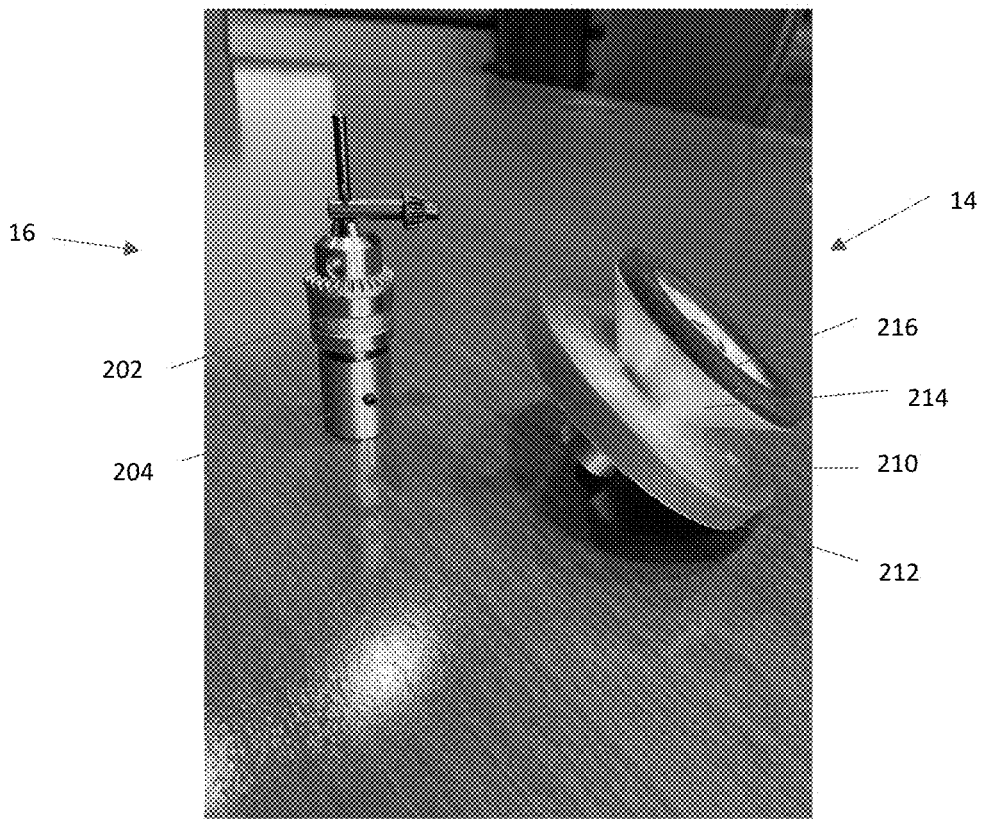


Figure 13

Figure 14

CUTICLE TOOL SHARPENING SYSTEM AND METHOD

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Application Ser. No. 62/695,239 filed Jul. 9, 2018, the disclosures of which are hereby incorporated by reference as if fully restated.

TECHNICAL FIELD

[0002] Exemplary embodiments of the present invention relate generally to a system and method for sharpening a cuticle tool.

BACKGROUND AND SUMMARY OF THE INVENTION

[0003] Various tools are used in nail maintenance. Many of these tools are used to cut or trim various parts of the nail. Several other of these tools are used to remove parts of the nail itself and/or material on or around the nail such as, but not limited to, nail polish or gel. Some examples of these tools include, without limitation, nippers, clippers, cuticle nippers, acrylic nippers, cuticle pushers, gel polish tools, gel pushers, toe nail clippers, and the like. Many of these tools have one or more sharpened edges used to cut or trim of the nail and/or remove material deposited on or around the nail. These sharpened edges may become dulled or misshapen over many uses. Further, these sharpened edges may become dulled or misshapen if the tool is dropped or otherwise mishandled.

[0004] Such tools are relatively expensive. Sharpening or reshaping of such tools is often less expensive than purchasing a new tool. Manual sharpening or reshaping of such tools is known. However, such manual sharpening or reshaping requires an experienced, skilled operator. Furthermore, such manual sharpening or reshaping is often performed using tools adapted for general sharpening (e.g., files, grinders, sanders, etc.), but such generalist tools are not often conducive to the unique and specific needs of sharpening or reshaping nail related tools. Use of such tools, particularly by an unskilled operator, can lead to poor sharpening or reshaping. Furthermore, such manual sharpening or reshaping often requires a significant amount of time and effort. Therefore, what is needed is a cuticle tool sharpening system and apparatus.

[0005] The present invention is a cuticle tool sharpening system and apparatus. In an exemplary embodiment, the system comprises a motor connected one or more abrasive devices. A first abrasive device may be shaped as a disk having a first and second thickness. An outer circumferential portion of the first abrasive device may have a first thickness, while an inner circumferential portion may have a second thickness that is less than the first thickness. The outer and front surfaces of the first abrasive device may be coated with an abrasive material. A second abrasive device may be shaped as a cylinder having a concave chamfered edge extending from a first point along the height of the cylinder to the distal end of the cylinder. In this way, the distal end of the second abrasive device may be shaped as a circle having a smaller diameter than the proximal end of the second abrasive device, which may also be shaped as a circle. The outer surface of the cylinder, the chamfered edge, and the distal end may be coated with an abrasive material. In another exemplary embodiment, the second abrasive device may be shaped as an hourglass. The outer surface of the hourglass shape may be coated with an abrasive material.

[0006] A positioning device may also be provided for positioning the tool for sharpening or reshaping relative to the one or more abrasive devices. The motor and the positioning device may be mounted to a common surface, though such is not required. The positioning device may be mounted to one or more tracks or slides on the common surface which permit vertical and horizontal movement of the positioning device. The positioning device may be configured to accept one or more securing devices and permit multi-axis movement and orientation of the attached securing device(s).

[0007] A first securing device may be configured to accommodate one or more nail tools. The first securing device may comprise a first block positioned above a second block. The first block may comprise a protruding lip that creates a gap between the bottom edge of the lip and the top surface of the second block when the first block is placed into contact with the second block. A first and second post may be located on the top surface of the second block. The tool may be secured in an opened position against a front surface of the first block, below the lip, and between the first and second posts, thereby securing the tool into the opened position. A fastener may extend through the first and second blocks to secure the first and second blocks to one another.

[0008] A second securing device may comprise a vertical fastener and a horizontal fastener. The second securing device may comprise a securing portion configured to receive the head of the tool in a closed position. The vertical and horizontal fasteners may be positioned such that the head of a tool may be secure therebetween in the closed position such that the head faces the motor. In exemplary embodiments, the second securing device may be mounted to the first securing device, however, such is not required. In such embodiments, the second securing device may be located on an elongated member. The elongated member may comprise a first and second aperture configured to be secured to the first and second posts of the first securing device.

[0009] A third securing device may comprise a clamp configured to secure the tool in an opened position. The clamp may comprise a first portion located above a second portion. The clamp may comprise one or more grooves located in the first and/or second portions, wherein said grooves are configured to accommodate the handle portion of the tool in a splayed open arrangement. A vertical fastener may extend through the clamp to secure the relative position of the first and second portions. The third securing device may further comprise a substantially C- or U-shaped securing portion configured to accommodate the head of a tool in a closed position. A horizontal fastener may extend through the securing portion to secure the tool therein.

[0010] The first, second, or third securing device may be selectively attached to the positioning device and the tool may be secured therein. The motor may be activated such that the first and/or second abrasive devices begin to rotate. The positioning device may be manipulated to place the appropriate surface of the tool in contact with the first or second abrasive device. Once the appropriate sharpening or reshaping is performed, the positioning device may be manipulated to remove the tool from contact with the first or

second abrasive device. The process may be repeated as necessary with various surfaces of the tool to sharpen or reshape the tool. In other exemplary embodiments, the positioning and securing devices are not required and the tool may be sharpened or reshaped freehand.

[0011] Further features and advantages of the devices and systems disclosed herein, as well as the structure and operation of various aspects of the present disclosure, are described in detail below with reference to the accompanying figures.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] In addition to the features mentioned above, other aspects of the present invention will be readily apparent from the following descriptions of the drawings and exemplary embodiments, wherein like reference numerals across the several views refer to identical or equivalent features, and wherein:

[0013] FIG. **1** is a top perspective view of an exemplary system;

[0014] FIG. **2**A is a detailed side perspective view of an exemplary first abrasive device for use with the system of FIG. **1**;

[0015] FIG. **2**B is a top view of other exemplary embodiments of the first abrasive device;

[0016] FIG. **3**A is a detailed front perspective view of an exemplary second abrasive device for use with the system of FIGS. **1**;

[0017] FIG. **3**B is a detailed front perspective view of another exemplary embodiment of the second abrasive device.

[0018] FIG. **4** is side perspective view of the system of FIG. **1**;

[0019] FIG. **5** is a detailed top perspective view of a first securing device for use with the system of FIG. **1**;

[0020] FIG. **6** is a detailed top perspective view of a second securing device for use with the system of FIG. **1**;

[0021] FIG. **7** is a detailed top perspective view of a third securing device for use with the system of FIG. **1**;

[0022] FIG. **8** is a detailed side perspective view of the third securing device of FIG. **7**;

[0023] FIG. **9** is a top perspective view of another exemplary motor and abrasive devices;

[0024] FIG. **10** is a side perspective view of another exemplary embodiment of the second abrasive device;

[0025] FIG. **11** is a rear perspective view of another exemplary embodiment of the system of FIG. **1**;

[0026] FIG. **12** is a side perspective view of another exemplary securing device;

[0027] FIG. **13** is a side perspective view of other exemplary embodiments of the abrasive devices; and

[0028] FIG. **14** is a top perspective view of exemplary attachments.

DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENT(S)

[0029] Various embodiments of the present invention will now be described in detail with reference to the accompanying drawings. In the following description, specific details such as detailed configuration and components are merely provided to assist the overall understanding of these embodiments of the present invention. Therefore, it should be apparent to those skilled in the art that various changes and modifications of the embodiments described herein can be made without departing from the scope and spirit of the present invention. In addition, descriptions of well-known functions and constructions are omitted for clarity and conciseness.

[0030] Embodiments of the invention are described herein with reference to illustrations of idealized embodiments (and intermediate structures) of the invention. As such, variations from the shapes of the illustrations as a result, for example, of manufacturing techniques and/or tolerances, are to be expected. Thus, embodiments of the invention should not be construed as limited to the particular shapes of regions illustrated herein but are to include deviations in shapes that result, for example, from manufacturing.

[0031] FIG. **1** is a top perspective view of an exemplary system **10**. The system **10** may comprise a motor **12**. One or more abrasive devices **14**, **16** may be connected to the motor **12**. In exemplary embodiments, a first abrasive device **14** and a second abrasive device **16** are mechanically connected to the motor **12** such that the first and second abrasive devices **16** are configured to rotate or otherwise move when the motor **12** is activated. The motor **12** may be in electrical connection with a controller **11** for controlling the power supplied to the motor **12**. The controller **11** may be electrically connected to a power sources such as, without limitation, an electrical outlet or a battery. In exemplary embodiments, the motor **12** is a two-way motor such that the attached abrasive devices **14** and **16** may be rotated in either direction. The controller **11** may be configured to control the speed and direction of rotation of the abrasive devices **14** and **16**. In other exemplary embodiments, the controller **11** may be integrated with the motor **12**.

[0032] A positioning device **20** may be provided for positioning a tool **40** for sharpening or reshaping. The tool **40** may be nippers, clippers, cuticle nippers, acrylic nippers, cuticle pushers, gel polish tools, gel pushers, toe nail clippers, or any other tool used for nail maintenance. The motor **12** and the positioning device **20** may be mounted to a common surface **22**, though such is not required. The positioning device **20** may be mounted to one or more tracks **24** or **26** located on the common surface **20**, though such is not required. The tracks **24** and **26** may be configured to permit vertical and horizontal movement of the positioning device **20** along the track **24** and **26**, though just vertical or just horizontal movement is also contemplated. The illustrated number and orientation of the tracks **24** and **26** is merely exemplary and is not intended to be limiting. Any number of tracks **24** and **26** in any orientation is contemplated. The positioning device **20** may comprise a receiver **27** configured to receive one or more securing devices **30**, **50**, or **60**. Each of the securing devices **30**, **50**, or **60** may be configured to receive one or more tools **40**.

[0033] The positioning device **20** may be configured to permit multi-axis movement and orientation of the securing devices **30**, **50**, and **60**. Such movement may include, but is not limited to, movement in the x-, y-, and z-directions. In exemplary embodiments, the positioning device **20** may be configured for vertical and/or horizontal movement along the tracks **24** and **26**. The positioning device **20** may be configured to tilt up and down along a y-axis (i.e., pitch), rotate clock-wise and counter-clockwise along an x-axis (i.e., roll), and/or rotate left or right along a z-axis (i.e., yaw), though such is not required. Various knobs and other fasteners may be used to temporality secure the positioning

device **20** at various positions and orientations. Various movement control devices, such as but not limited to, one or more micrometers **23**, or other measuring devices, may be used to track and control the position and movement of the positioning device **20**. In exemplary embodiments, at least one micrometer **23** is used to control the movement of the positioning device **20** towards or away from the motor **12** such that the amount of abrasion performed on the tool **40** may be measured and controlled. This may permit detailed instructions to be provided to an unskilled operator. Additionally, this may permit an operator to track and thereby receive feedback regarding the appropriate amount of abrasion performed.

[0034] FIG. **2**A is a detailed side perspective view of the first abrasive device **14**. The first abrasive device **14** may be configured to provide a grinding surface for the tool **40** upon rotational movement of the first abrasive device **14**. In exemplary embodiments, the first abrasive device **14** may be shaped as a disk and/or cylinder having a first and second circumferential portion **13** and **15**. The first circumferential portion **13** may have a first thickness and the second circumferential portion **15** may have a second thickness, wherein the second thickness may be greater than the first thickness. In exemplary embodiments, the first circumferential portion **13** is shaped as a disk placed within the second circumferential portion **15** which is shaped as a hollow disk which circumscribes the first circumferential portion **13**. The outer and front surfaces of the second circumferential portion **15** may be comprise an abrasive material. The inner portion of the second circumferential portion **15** extending to the front surface of the first circumferential portion **13** may likewise comprise an abrasive material, though such is not required. In exemplary embodiments, the abrasive material is provided as a coating to one or more surfaces of the second circumferential portion **15**. The abrasive material may comprise metal, ceramics, diamonds, diamond dust, or the like. The grit of the abrasive material used may vary. In exemplary embodiments, the first abrasive device **14** may be configured to sharpen the blades **42** of the tool **40** when they are placed at an angle against the first abrasive device **14** and the first abrasive device **14** is rotated or otherwise moved relative to the tool **40**.

[0035] FIG. **2**B is a top view of other exemplary embodiments of the first abrasive device **14**. In these exemplary embodiments, a series of holes **74** may be located on the first abrasive device **14**. In exemplary embodiments, seven equal size holes **74** of the same or different sizes and shapes may be equally spaced apart in a circular pattern about the center of the first abrasive device. However, any number of holes **74** in any pattern is contemplated. The holes **74** may be of any size or shape. The holes **74** may reduce the weight of the first abrasive device **14**. Additionally, the holes **74** may improve the aesthetics of the first abrasive device **14**.

[0036] FIG. **3**A is a detailed front perspective view of the second abrasive device **16**. The second abrasive device **16** may be configured to provide a grinding surface for the tool **40** upon rotational movement of the second abrasive device **16**. In exemplary embodiments, the second abrasive device **16** may be shaped as a cylinder **17** having a concave chamfered edge **19** extending from a first point along the height of the cylinder **17** to a distal end **21**. In this way, the distal end **21** may be shaped as a circle having a smaller diameter as compared to a proximal end of the second abrasive device **16**, which may also be shaped as a circle and which may be located proximate to the motor **12**. The distal end **21** of the second abrasive device **16** is preferably flat and comprises an abrasive surface. The outer surface of the cylinder **17**, the chamfered edge **19**, and the distal end **21** may also comprise an abrasive material. The abrasive material may comprise metal, ceramics, diamonds, diamond dust, or the like. The grit of the abrasive material used may vary. In exemplary embodiments, the abrasive material is provided as a coating to one or more surfaces of the second abrasive device **16**.

[0037] In exemplary embodiments, the second abrasive device **16** may be configured to thin the walls **44** of the tool **40** upon substantially flush application of the walls **44** to the cylinder **17** and/or the chamfered edge **19** the second abrasive device **16** and rotation or other movement of the second abrasive device **16** relative to the tool **40**. The second abrasive device **16** may be further configured to level the outer edges **48** of the tool **40** upon substantially flush application of the outer edges **48** to the cylinder **17** and/or the chamfered edge **19** the second abrasive device **16**. The second abrasive device **16** may be further configured to trim the inner block **46** of the tool **40** upon placement of the tool **40** in the opened position and substantially flush application of the inner block **46** to the distal end **21** of the second abrasive device **16**.

[0038] FIG. **3**B is a detailed front perspective view of another exemplary embodiment of the second abrasive device **16**. The second abrasive device **16** may further comprise a rounded edge **76** located between the chamfered edge **19** and the distal end **19**. In exemplary embodiments, the rounded edge **76** may form a convex shape. The rounded edge **76** may comprise an abrasive material, which may be applied as a coating. The abrasive material may comprise metal, ceramics, diamonds, diamond dust, or the like. The grit of the abrasive material used may vary. The rounded edge **76** may permit the inside edge of the tool **40** to be sharpened on the rounded edge **76**.

[0039] FIG. **4** is side perspective view of the system **10**. The common surface **22** may comprise one or more adjustable legs **25** to control the tilt of the common surface **22**. FIG. **4** illustrates the first securing device **30** mounted to the positioning device **20** with the tool **40** secured within the first securing device **30**.

[0040] FIG. **5** is a detailed top perspective view of the first securing device **30**. The first securing device **30** may be configured to accommodate one or more tools **40**. In exemplary embodiments, the securing device **30** may comprise a first block **34** positioned above a second block **32**. The first block **34** may comprise a protruding lip **36**, which may create a gap between the bottom edge of the lip **36** and the top surface of the second block **32** when the first block **34** is secured to the second block **32**. The lip **36**, and thus the resulting gap, may be sized to accommodate some or all of the tool **40**. A first and second post **38** may be located on the top surface of the second block **32**. The first and second post **38** may be spaced apart on the second block **32** to accommodate some or all of the tool **40**. In exemplary embodiments, the tool **40** may be secured in an opened position against the front surface of the first block **34**, below the lip **36**, and between the posts **38**, thereby securing the tool **40** into the opened position. A fastener **39** may extend vertically through the first and second blocks **32** and **34** to secure the first and second blocks **32** and **34** to one another.

[0041] Once secured within the first securing device **30**, the positioning device **20** may be manipulated to place the tool **40** in contact with the first or second abrasive device **14** or **16**. In exemplary embodiments, the first securing device **30** may be rotated to a 5, 10, 15, or 45 degree position and the blades **42** of the tool **40** may be held against the first abrasive device **14** to sharpen the blades **42**. However, this is merely exemplary and not intended to be limiting. Any rotation angle or positioning of the tool **40** is contemplated. Similarly, any surface of the tool **40** may be sharpened or reshaped using any of the abrasive devices **14** or **16**.

[0042] FIG. **6** is a detailed top perspective view of the second securing device **50**. The second securing device **50** may comprise a vertical fastener **52** and a horizontal fastener **54**, one or more of which may extend into a securing section **51**. The securing section **51** may be configured to receive the head of the tool **40** in a closed position. In exemplary embodiments, the second securing device **50** may form a substantially C-, U-, or G-shaped, though any shape is contemplated.

[0043] The vertical and horizontal fasteners **52** and **54** may extend into the securing section **51** to secure the tool **40** within the securing section **51**. In exemplary embodiments, the vertical and horizontal fasteners may be positioned to secure the head of the tool **40** in the closed position such that the blades **42** face the one or more abrasive surfaces **14**, **16**. In exemplary embodiments, the second securing device **50** may be mounted to the first securing device **30**, however, such is not required. In such embodiments, the second securing device **50** may be secured to an elongated member **56**. The elongated member **56** may comprise a first and second aperture configured to be secured to the first and second posts **38** of the first securing device **30**.

[0044] Once secured within the second securing device **50**, the positioning device **20** may be manipulated to place the tool **40** in contact with the first or second abrasive device **14** or **16**. In exemplary embodiments, the second securing device **50** may be rotated to a 0 degree position, but may be rotated to the left or right along a z-axis (i.e., yaw) to place the outer edges **48** of the tool **40** substantially flush with the first or second abrasive device **14** or **16** to sharpen the blades **42**, though such is not required. However, this is merely exemplary and not intended to be limiting. Any angle or positioning of the tool **40** is contemplated. Similarly, any surface of the tool **40** may be sharpened or reshaped using any of the abrasive devices **14** or **16**.

[0045] FIG. **7** is a detailed top perspective view of the third securing device **60**, and FIG. **8** is a detailed side perspective view of the third securing device **60**. The third securing device **60** may comprise a clamp configured to secure the tool **40** in an opened position. The third securing device **60** may comprise a first portion **62** located above a second portion **64**. The third securing device **60** may comprise one or more grooves **68** located in the first and/or second portion(s) **62** and **64**, wherein said grooves **68** are configured to accommodate some of all of the tool **40**, preferably in a splayed open arrangement though such is not required. A vertical fastener **66** may extend through the first and second portions **62** and **64** to secure the relative position of the first and second portions **62** and **64**. The third securing device **60** may further comprise a securing portion **70**, preferably configured to accommodate the head of the tool **40** in a closed position though such is not required. The securing portion **70** may be substantially C- or U-shaped, though any shape is contemplated. A horizontal fastener **72** may extend through the securing portion **70** to secure the tool **40** therein.

[0046] Once secured within the third securing device **60**, the positioning device **20** may be manipulated to place the tool **40** in contact with the first or second abrasive device **14** or **16**. In exemplary embodiments, the third securing device **60** may be rotated to a 5, 10, 15, or 45 degree position and the blades **42** of the tool **40** may be held against the first abrasive device **14** to sharpen the blades **42** and/or thin the walls **44**. However, this is merely exemplary and not intended to be limiting. Any rotation angle or positioning of the tool **40** is contemplated. Similarly, any surface of the tool **40** may be sharpened or reshaped using any of the abrasive devices **14** or **16**.

[0047] In other exemplary embodiments, the third securing device **60** may be rotated to a 0 degree position and may be rotated to the left or right along a z-axis (i.e., yaw) to place the outer edges **48** of the tool **40** substantially flush with the first or second abrasive device **14** or **16** to sharpen the level the edges **48**. However, this is merely exemplary and not intended to be limiting. Any angle or positioning of the tool **40** is contemplated. Similarly, any surface of the tool **40** may be sharpened or reshaped using any of the abrasive devices **14** or **16**.

[0048] The first, second, or third securing device **30**, **50**, or **60** may be attached to the positioning device **20** and the tool **40** may be secured in the mounted securing device **30**, **50**, or **60**. The motor **12** may be activated such that the first and second abrasive devices **14** and **16** begin to rotate. The positioning device **20** may be manipulated to place the tool **40** in contact with the first or second abrasive surface **14** or **16**. Once the appropriate sharpening or reshaping of the tool **40** is performed, the positioning device **20** may be manipulated to remove the tool **40** from contact with the first or second abrasive device **14** or **16**. The process may be repeated as necessary to sharpen or reshape the tool **40**. For example, without limitation, this process may be used to sharpen the blades **42**, thin the walls **44**, level the edges **48**, and/or trim the inner block **46**. However, it is contemplated that any surface of the tool **40** may be sharpened or reshaped. In other exemplary embodiments, the positioning device **20** and securing devices **30**, **50**, or **60** are not required and any surface of the tool **40**, including but not limited to the blades **42**, the walls **44**, the edges **48**, and/or the inner block **46**, may be sharpened or reshaped freehand.

[0049] FIG. **9** is a top perspective view of another exemplary system **100**. Like items are numbered similarly but increased by **100** (i.e., **112** is similar to **12**). A first and second abrasive device **114** and **116**, respectively, may extend from either end of a motor **112**. The second abrasive device **116** may be shaped as an hourglass to accommodate the sharpening or reshaping of various features of the tool **40**. The outer surface and first and second abrasive devices **114** and **116** may be coated with an abrasive material. The abrasive material may comprise metal, ceramics, diamonds, diamond dust, or the like. The grit of the abrasive material used may vary. The system **100** may be used with a positioning device **20** and securing device **30**, **50**, and **60**. However, in other exemplary embodiments, the system **100** may be used freehand.

[0050] FIG. **10** is a side perspective view of another exemplary embodiment of the second abrasive device **116**. The second abrasive device **116** may further comprise a

rounded edge **176** located on a distal end thereof. The rounded edge **176** may form a convex shape. The rounded edge **176** may also be coated with an abrasive material. The abrasive material may comprise metal, ceramics, diamonds, diamond dust, or the like. The grit of the abrasive material used may vary. The rounded edge **176** may permit the inside edge of the tool **40** to be sharpened on the rounded edge **176**.

[0051] FIG. **11** is a rear perspective view of another exemplary embodiment of the system of FIG. **1**. The first and second abrasive devices **14** and **16** may extend from either side of the motor **12**. The motor **12** may be mounted to the surface **22**. The positioning device **27** may be mounted to horizontal **24** and/or vertical track **26**. The securing device **30** may be mounted to the positioning device **27**. The positioning device **27** may comprise one or more knobs configured to adjust the position of the positioning device **27** and/or secure the positioning device **27** in a particular position. The horizontal **24** and/or vertical track **26** may comprise one or more knobs configured to adjust the position of the positioning device **27** along the horizontal **24** and/or vertical track **26** and/or secure the positioning device **27** in a particular position along the horizontal **24** and/or vertical track **26**.

[0052] FIG. **12** is a side perspective view of another exemplary securing device **30**. The securing device **30** may comprise the first block **34**, the protruding lip **36**, and the second block **32**. The securing device **30** may further comprise the posts **38** and the fastener **39**. The securing device **30** may further comprise a recess **31** located on a distal edge of the second block **32**. The recess **31** may be configured to permit any tool **40** located within the securing device **30** to be positioned closer to the first and/or second abrasive devices **14** and **16** without contacting the first and/or second abrasive devices **14** and **16**. In exemplary embodiments, the recess **31** may be shaped as a half circle. The recess **31**, for example without limitation, may permit the inner edge of the blade **42**, **44** to be positioned closer to the first and/or second abrasive devices **14** and **16** when the tool **40** is secured within the first block **34** in an opened position.

[0053] FIG. **13** is a side perspective view of another exemplary embodiment of the second abrasive device **16** and another exemplary embodiment of the first abrasive device **14**. The second abrasive device **16** may comprise an adapter **204** and a chuck **202**. The adapter **204** may be configured to connect the chuck **202** to the motor **12**. The chuck **202** may be configured to receive one or more attachments **200**.

[0054] The first abrasive device **14** may comprise an inner circumferential member **210**. An outer edge **212** of the inner circumferential member **210** may comprise abrasive material. The inner circumferential member **210** may be shaped as a disk and/or cylinder, though such is not required. The inner circumferential member **210** may be configured to sharpen, shape, or otherwise abrade inner surfaces of the tool **40**, for example without limitation. A funnel shaped section **214** may extend from an outer surface of the inner circumferential member **210**. An outer edge of the funnel shaped section **214** may comprise an outer circumferential member **216**, which may comprise an abrasive material. In exemplary embodiments, the outer circumferential member **216** may be annular in shape, though such is not required. In other exemplary embodiments, the outer circumferential member **216** may be a coating applied to the outer edge of the funnel shaped section **214**. The funnel shaped section **214**, for example without limitation, may facilitate placement of various surfaces of the tool **40** in contact with the outer edge **212** and/or the outer circumferential member **216**. The outer circumferential member **216** may, for example without limitation, be configured to sharpen, shape, or otherwise abrade outer surfaces of the tool. The funnel shaped section **214** may further provided better balance when rapidly spinning the first abrasive device **14** as may be required to sharpen, shape, or otherwise abrade the tool **40**. The outer circumferential member **216** may comprise a finer grit abrasive as compared to the inner circumferential member **210**, though such is not required.

[0055] FIG. **14** is a top perspective view of exemplary attachments **200**. Any number or kind of attachments **200** are contemplated such as, but not limited to, abrasive surfaces, polishing surfaces, cutting surfaces, disks, cones, knobs, some combination thereof or the like. The attachments **200** may be configured to be interchangeably attached to the chuck **202**. In other exemplary embodiments, the attachments **200** may be configured to be interchangeably attached to the motor **12**, directly and/or through the use of one or more adapters. The adapter portion **204** of the second abrasive device **16** may be configured to receive the hourglass shaped abrasive device **116**, such as but not limited to, as shown and described with respect to FIG. **10**.

[0056] Any embodiment of the present invention may include any of the optional or preferred features of the other embodiments of the present invention. The exemplary embodiments herein disclosed are not intended to be exhaustive or to unnecessarily limit the scope of the invention. The exemplary embodiments were chosen and described in order to explain the principles of the present invention so that others skilled in the art may practice the invention. Having shown and described exemplary embodiments of the present invention, those skilled in the art will realize that many variations and modifications may be made to the described invention. Many of those variations and modifications will provide the same result and fall within the spirit of the claimed invention. It is the intention, therefore, to limit the invention only as indicated by the scope of the claims.

What is claimed is:

1. An apparatus for sharpening a tool, the tool having blade and wall portions, the apparatus comprising:
- a first abrasive component comprising a first abrasive surface;
- a second abrasive component comprising a second abrasive surface;
- a motor for driving the first and second abrasive components;
- a securing device adapted to secure the tool; and
- a positioning device adapted to receive the securing device and permit movement of the securing device relative to the first and second abrasive devices.

2. The apparatus according to claim **1**, wherein:
- the first abrasive component is adapted to sharpen the blade portion of the tool; and
- the second abrasive component is adapted to thin the wall portion of the tool.

3. The apparatus according to claim **1**, further comprising:
- a surface; and
- a track located on the surface and comprising vertically extending portions and horizontally extending portions, wherein the track is adapted to permit movement of the

positioning device between the first abrasive component and the second abrasive component.

4. The apparatus according to claim **2**, wherein:

the first abrasive component comprises a first portion shaped as a disk and comprising an abrasive material located along an outer edge thereof, a funnel shaped portion extending from an outer surface of the first portion, and a third portion which is annular in shape and located on an outer surface of the funnel shaped portion, wherein said third portion comprises an abrasive material.

5. The apparatus according to claim **4**, wherein:

the abrasive material located on the third portion has a finer grit as compared to the abrasive material located on the first portion.

6. The apparatus according to claim **1**, wherein:

the first and second abrasive components are coated with a diamond coating.

7. The apparatus according to claim **1**, wherein:

the positioning device is adapted to rotate clockwise and counterclockwise in the roll axis; and

the positioning device is adapted to rotate left and right in the yaw axis.

8. The apparatus according to claim **1**, wherein:

the tool is a cuticle nipper.

9. The apparatus according to claim **1**, wherein:

the securing device comprises:

a first block;

a second block located below the first block;

a first and second post spaced apart from one another and extending from an upper surface of the second block; and

a protruding lip located at the first block, wherein the protruding lip defines a gap between a lower surface of the protruding lip and the upper surface of the second block when the first bock is secured to the second block;

wherein the gap, the first post, and the second post are configured to receive the tool in an opened position.

10. The apparatus according to claim **9**, further comprising:

an elongated member comprising a first and second aperture located at a proximal end, wherein said first and second aperture are configured to receive said first and second posts so as to secure the elongated member to the second block; and

a securing section located at a distal end of the elongated member, wherein said securing section is configured to receive said tool in a closed position.

11. The apparatus according to claim **9**, further comprising:

a recess located on a distal end of the second block.

12. The apparatus according to claim **9**, further comprising:

a vertical fastener comprising a knob and a threaded shaft;

an aperture located in the first block configured to receive the threaded shaft; and

a threaded aperture located in the second block and configured to receive the threaded shaft and permit the first block to be vertically positioned relative to the second block upon rotation of the knob.

13. The apparatus according to claim **1**, wherein:

the securing device comprises:

a first portion;

a second portion spaced apart from the first portion to define a gap configured to receive the tool;

a vertical fastener comprising a knob and a threaded shaft;

an aperture located in the first portion configured to receive the threaded shaft; and

a threaded aperture located in the second portion and configured to receive the threaded shaft and permit the first portion to be vertically positioned relative to the second block upon rotation of the knob.

14. The apparatus according to claim **13**, wherein:

the securing device comprise a grove located in the first or second portion configured to receive a portion of the tool in an open position.

15. The apparatus according to claim **1**, further comprising:

a chuck configured to interchangeably receive a number of abrasive devices including the second abrasive component; and

an adapter configured to attach the chuck to the motor.

16. An apparatus for sharpening a tool, the tool having blade and wall portions, the apparatus comprising:

a surface;

a motor mounted to the surface;

a first abrasive component coupled to a first end of the motor and comprising a first portion shaped as a disk and comprising an abrasive material located along an outer edge thereof, a funnel shaped portion extending from an outer surface of the first portion, and a third portion which is annual in shape and located on an outer surface of the funnel shaped portion, wherein said third portion is comprised of an abrasive material;

an adapter configured to be coupled to a second end of said motor;

a chuck configured to be received within said adapter and configured to receive one of a number of attachments;

a controller configured to control the speed and direction of rotation of the motor;

a securing device configured to secure the tool;

a positioning device adapted to receive the securing device and move the securing device in at least two dimensions; and

a track located on the surface and adapted to receive the positioning device and permit movement of the positioning device between the first abrasive component and the chuck, wherein said track is further configured to permit movement of the positioning device in the third dimension.

17. The apparatus according to claim **16**, further comprising:

a second abrasive component shaped as an hourglass and comprising a rounded edge located on a distal end thereof, wherein said adapter is configured to receive said second abrasive device.

18. The apparatus according to claim **16**, wherein:

the securing device comprises:

a first block;

a second block comprising a half-circle shaped recess located at a distal end thereof;

a first and second post spaced apart from one another and extending from an upper surface of the second block; and

a protruding lip located at the first block and defining a gap between a lower surface of the protruding lip

and the upper surface of the second block when the first bock is secured to the second block;

wherein the gap, the first post, and the second post are configured to receive the tool in an opened position.

19. An apparatus for sharpening a tool, the tool having blade and wall portions, the apparatus comprising:

a surface;

a motor mounted to the surface;

a first abrasive component coupled to the motor and adapted to sharpen the blade portion of the tool, the first abrasive component having a disk shape and comprising an outer circumferential portion having a first thickness and an inner circumferential portion having a second thickness, wherein the first thickness is greater than the second thickness, and wherein the outer circumferential portion comprises a first abrasive surface;

a second abrasive component coupled to the motor and adapted to thin the wall portion of the tool, the second abrasive component having a cylindrical shape and comprising a concave chamfered edge on a distal portion thereof, wherein an outer surface and a distal surface of second abrasive component comprise a second abrasive surface;

a controller configured to control the speed and direction of rotation of the first and second abrasive devices;

a securing device configured to secure the tool;

a positioning device adapted to receive the securing device and move the securing device in three dimensions; and

a track located on the surface and adapted to receive the positioning device and permit movement of the positioning device between the first abrasive component and the second abrasive component.

20. The apparatus according to claim **19**, wherein:

The tool is a cuticle nipper.

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