A glove sander comprising: an ambidextrous glove, an inner liner, and a sand layer, the ambidextrous glove having a thumb compartment, an index finger compartment, a middle finger compartment, a ring finger compartment, a pinky compartment and a hand region generally housing a user’s hand extending to a user’s wrist region, the inner liner comprised of a fabric which is affixed to the ambidextrous glove, the inner liner being housed within the ambidextrous glove and approximating the general inner space of the ambidextrous glove; the sand layer affixed to the outer surface of the ambidextrous glove, the sand layer extending from the wrist region to the finger and thumb compartments on both sides of the ambidextrous glove and in between the finger and thumb compartments.
DISPOSABLE AND AMBIDEXTROUS GLOVE SANDER

FIELD OF THE INVENTION

The present invention relates to hardware supplies and pertains more specifically to products used for sanding various articles.

BACKGROUND OF THE INVENTION

One of the main difficulties with sanding down wooden articles is the lack of suitable tools. Currently, the main product the marketplace offers is a sheet of sandpaper. There are many problems which inhere with the use of this product.

First, using sheets of sandpaper is cumbersome. A person using a sheet of sandpaper must grip the sheet of sandpaper by its corners and scrape away at the rough portions of wood. This proves difficult because the user is not able to find sufficient leverage or grip with which to exert consistent pressure between the sandpaper and the object it is supposed to finish.

Although the marketplace does offer devices which clamp sandpaper on opposite sides which is further affixed with a handle, this does not completely fix the problem. Oftentimes, these devices still do not enable the user to sand the wood with sufficient leverage because the handle is too small or too large for the user. In addition, the fact that the handle and the point of interface between the user’s hand is so far removed from the point at which the sandpaper is interfaced with the article, the device tends to roll over. When the device rolls over slightly, the sandpaper may begin to tear. Moreover, the slight rolling decreases the surface area between the sandpaper and the wooden article. Yet another problem with these devices is the fact that the portions which clamps the opposite sides of the sandpaper often are not able to prevent the sandpaper from releasing from the clamps. When the sandpaper is released from the device, the sandpaper must be re-inserted back into the device. Needless to say, this is very frustrating for the user.

The marketplace also does offer the possibility of affixing the sandpaper with electric drills. Likewise, there are many problems related to this option. First, the use of electric drills is cumbersome to use with sandpaper. Electric drills are heavy, big, and expensive. And some electric drills which are not battery operated require access to an electric outlet along with a cord long enough to acquire access. Another problem which naturally inheres with the use of drills is the fact that they may apply too much pressure and take off more wood than is desirable to the user. Most drills do not offer variable speed control.

There are patents which do provide sandpaper which are affixed to gloves. U.S. Pat. Nos. 5,885,148, 5,642,527, 6,557,178, 6,575,822, 256,183, 4,038,787, 3,748, 792, 3,643,868, 3,151,333, 3,729,555, and 5,297,366 (hereafter ‘148, ‘527, ‘178, ‘822, ‘183, ‘787, ‘792, ‘686, ‘333, ‘555’ and ‘366) are variations of sandpaper gloves. However, most of these patents have gloves which are designed asymmetrically. That is to say, the gloves are designed specifically to be used with a right hand and a left hand (they are monodextrous). This is problematic because one side of the glove will go unused.

Another problem with the prior art is that most of these gloves are meant to be re-usable. Re-usable sandpaper gloves are not desirable given the ephemeral nature of sandpaper. A typical project may take several sheets of sandpaper. Consequently, these gloves will require the user to re-affix the sandpaper to the gloves which is cumbersome and a waste of time. Disposable sandpaper gloves are more desirable because once the sandpaper on the gloves has been used up, a user can simply throw them in the trash and put on a new pair of gloves.

Another problem with the prior art is the fact that many of them do not possess a comfortable and expedient lining inside of the glove which directly interfaces with a user’s hand. For some of these gloves the lining which interfaces with the hand is made of rubber or similar material. As a user’s hand produces sweat, the gloves become quite uncomfortable to use due to the sweat and heat. Add to this the fact that most of these gloves are re-usable and you see that these gloves will begin to collect a significant stench.

Therefore, what is clearly needed in the art is an ambidextrous and disposable glove adapted for use with sandpaper.

SUMMARY OF THE INVENTION

The present invention in some preferred embodiments consists of a glove sanding device comprising: an ambidextrous glove, an inner liner, and a sand layer, the ambidextrous glove having a thumb compartment, an index finger compartment, a middle finger compartment, a ring finger compartment, a pinky compartment and a hand region generally housing a user’s hand extending to a user’s wrist region, the inner liner comprised of a fabric which is affixed to the ambidextrous glove, the inner liner being housed within the ambidextrous glove and approximating the general inner space of the ambidextrous glove; the sand layer affixed to the outer surface of the ambidextrous glove, the sand layer extending from the wrist region to the finger and thumb compartments on both sides of the ambidextrous glove and in between the finger and thumb compartments.

Preferred embodiments may vary with the present invention. Although the aforementioned preferred embodiment was described with many components, the summary of the invention should not be construed to be limiting the scope of the present invention. Several of these components may be optional depending upon the circumstances.

BRIEF DESCRIPTION OF THE DRAWING FIGURES

Fig. 1a is a perspective view of a preferred embodiment of the present invention.

Fig. 1b is a cross-sectional view of a preferred embodiment of the present invention.

Fig. 2 is a perspective view of a preferred embodiment of the present invention.

Fig. 3 is a top view of a preferred embodiment of the present invention.

Fig. 4 is a top view of a preferred embodiment of the present invention.
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FIG. 5 is a perspective view of a preferred embodiment of the present invention.

FIG. 6 is a perspective view of a preferred embodiment of the present invention.

DESCRIPTION OF PREFERRED EMBODIMENTS

According to a preferred embodiment of the present invention, a unique article of manufacture or device is used to finish wooden articles or other products to make them smoother and remove rough edges. The present invention is also adaptable to finish other surfaces other than wood. The article of manufacture or device is described in enabling detail below.

FIG. 1a illustrates a preferred embodiment of the present invention. The disposable and ambidextrous glove sander 100 (hereafter Glove Sander) will be described herein by specific enumerated regions or parts. Although the present invention will be described by different regions or parts it should be understood that these individual components regions are not necessarily separately manufactured pieces or components. The nomenclature and enumeration of the regions, parts, or components thereof are only for illustrative purposes and are not meant to be construed as separate and individual pieces. Generally, most of the present invention should be viewed from a unified perspective.

For the purposes of clarity it will be pointed out here that FIG. 4 illustrates one side of the Glove Sander 100 whereas FIG. 5 illustrates the opposite side of the Glove Sander 100. The purpose of showing both sides is to illustrate the symmetrical and ambidextrous nature of the Glove Sander 100. Most of the other products which combine gloves and sandpaper are asymmetrical. Due to their asymmetrical nature, the thumb compartment is positioned off-center closer to the palm side of the glove. In addition, most of the prior art only incorporates a sanding surface on the palm side of the glove. The present invention is enabled for sanding on both sides. For this reason, there is no “palm side” or “back side” of the gloves. Moreover, there will be no mention of a “left glove” or a “right glove” due to the ambidextrous nature of the present invention.

Glove Sander 100 is comprised of a thumb compartment 101, an index finger compartment 102, a middle finger compartment 103, a ring finger compartment 104, a pinky finger compartment 105, a sand layer 110 (as seen in FIG. 1b), a glove layer 111 (as seen in FIG. 1b), and a liner layer 112 (as seen in FIG. 1b). FIG. 1a illustrates that the sand layer 110 extends from the wrist line 120 to the fingers. Moreover, FIG. 2 illustrates that there is a sand layer between the finger compartments as well.

The portion of the glove sander 100 which comprises the outer glove layer is the glove layer 111 as illustrated in FIG. 1b. Glove layer 111 in a preferred embodiment is made of rubber. As pointed out above, glove layer 111 is ambidextrous in the sense that the thumb compartment 101 is positioned on the same plane as the other finger compartments. This is illustrated in FIG. 2. For this reason, the glove layer is symmetrical relative to the top-side and bottom side as is illustrated in FIG. 2. Although rubber is used in a preferred embodiment other expedient materials to comprise the glove layer 111 abound. Materials such as leather, fabric, cotton, etc. may also be used in other embodiments. For this reason, the use of rubber to comprise the glove layer 111 should not be construed to be limiting the scope of the present invention.

The sand layer 110 is comprised of a coarse material used for the purpose of finishing wood articles and other materials in need of polishing and smoothing out. The sand layer 110 is affixed to the glove layer 111 through use of an adhesive. After the adhesive is applied to the top of the glove layer 111 the sand layer 110 is applied thereto. Sand layer 110 is affixed to almost all of the surface area of the glove layer. The wrist line 120 demarcates the point where the sand layer 110 begins as illustrated in FIG. 1a. Sand layer 110 extends from the wrist line 120 to the tips of the finger compartments as well as between the finger compartments. Sand layer 110 is placed on both sides of glove layer 111 due to its ambidextrous nature. The type of adhesive used to affix the sand layer 110 to the glove layer is well known in the art. Exemplary adhesives include glue and resin. The particular type of adhesive is no consequence to the present invention. There abound a panoply of various adhesives which are equally expedient for this purpose. Moreover, the types of adhesives are well known to one skilled in the art. For this reason, the method of affixing the sand layer 110 to the glove layer 111 will not be detailed herein.

The sand layer 110 used in any embodiment of the present invention may come in a variegated array of different grades of sand grit. There is no preferred level of sand grit which is desirable because the specific article which needs to be finished or polished will dictate a specific grade of grit. For this reason, it is foreseeable that the present invention may be sold or produced in a multitude of different grades of sand grit. More granularity may also be incorporated through use of different types of material to comprise the sand layer 110 such as steelwool, sponge, or scotchbrite. Moreover, other exemplary types of abrasives which may be used include silicon carbide, garnet, or aluminum oxide.

In some preferred embodiments the sand layer 110 may be dispersed on the glove layer 111 in different grades. For instance, the sand layer on the front side of the glove layer 111 may be affixed with a sand grit grade of “1” (this is not the technical grade used for sand grit, but for the purposes of simplicity “1” shall mean a fine grade whereas a “5” shall mean a coarse grade), whereas the opposite side may be affixed with a sand grit grade of “5”. The reason for this is that it is desirable to initially use a coarse grade to remove large amounts of material. And after the large portions of material are removed it is often desirable to use a finer grade of sand grit for the purposes of precision and fine tuning. Therefore, a user may use one side of the glove sander 100 with the sand grit grade of “5” initially to remove the larger portions. And after most of the sanding has been done, user can simply take off the glove sander 100 and reverse the side to the grit grade of “1” in order to fine tune, or precision sand the article in a detailed and meticulous manner.

In addition, the sand layer 110 in between the finger compartments may also come in different grades as well. In some embodiments, the sand grit in between thumb compartment 101 and index finger compartment 102 may come
in a sand grit grade of "1". The sand grit between index finger compartment 102 and middle finger compartment 103 may come with a sand grit grade of "2" and so on.

[0028] The inner portion of the glove sander 100 is the interface between a user’s hand and the glove sander 100. FIG. 3 and FIG. 1b illustrate that the inner portion of glove sander 100 in a preferred embodiment is lined with a liner layer 112. Liner layer 112 in a preferred embodiment is comprised of cotton. The reason cotton is used is it is more comfortable to the hand of a user. Oftentimes, a user’s hand will begin to sweat and produce a significant amount of heat. The advantage of using a cotton liner is that the cotton layer will absorb any excess sweat from the hand. Another reason for adding a cotton liner is that the interface between a user’s hand and rubber engenders a significant amount of friction. This friction between a user’s hand and the glove makes it difficult to remove the glove from the user’s hand. Oftentimes, this friction will force the glove to turn inside-out as a user removes the hand from the glove. By using a cotton liner, a user will be able to take the gloves off a lot easier and will not have to worry about turning the gloves inside-out.

[0029] FIG. 6 illustrates how a user sands down an article using the glove sander 100. The glove sander 100 is used intuitively in the same or similar manner as if the user was using plain sandpaper.

[0030] It will be apparent to the skilled artisan that there are numerous changes that may be made in embodiments described herein without departing from the spirit and scope of the invention. For instance, in some preferred embodiments, the glove sander 100 may be made to be re-useable. In other embodiments, the glove sander 100 may be made of leather, cotton, or other expedient materials. The possibilities are endless. As such, the invention taught herein by specific examples is limited only by the scope of the claims that follow.

1. A glove sander comprising: an ambidextrous glove, an inner liner, and a sand layer; the ambidextrous glove having a thumb compartment, an index finger compartment, a middle finger compartment, a ring finger compartment, a pinky finger compartment and a hand region generally housing a user’s hand extending to a user’s wrist region, the inner liner comprised of cotton which is affixed to the ambidextrous glove, the inner layer being housed within the ambidextrous glove and approximating the general inner space of the ambidextrous glove; the sand layer affixed to the outer surface of the ambidextrous glove, the sand layer extending from the wrist region to the finger and thumb compartments on both sides of the ambidextrous glove and in between the finger and thumb compartments, the sand layer is comprised of steelwool, sponge or scotchbrite.

2. The glove sander of claim 1 wherein the sand layer has more than one sand grade on different regions of the glove sander.

3. The glove sander of claim 1 wherein the inner liner is comprised of cotton.

4. The glove sander of claim 1 wherein the sand layer is comprised of steelwool.

5. The glove sander of claim 1 wherein the sand layer is comprised of sponge.

6. The glove sander of claim 1 wherein the sand layer is comprised of scotchbrite.

7. The glove sander of claim 1 wherein the ambidextrous glove is comprised of rubber.

8. The glove sander of claim 1 wherein the ambidextrous glove is comprised of latex.

9. The glove sander of claim 1 wherein the sand layer is comprised of abrasive material selected from the group consisting of steelwool, sponge, scotchbrite, silicon carbide, gamet, or aluminum oxide.

10. The glove sander of claim 1 wherein the glove sander is disposable.

11. A glove sander device comprising: an ambidextrous glove, an inner liner, and a sand layer, the ambidextrous glove having a thumb compartment, an index finger compartment, a middle finger compartment, a ring finger compartment, a pinky compartment and a hand region generally housing a user’s hand extending to a user’s wrist region, the ambidextrous glove being comprised of rubber, the inner liner comprised of cotton which is affixed to the ambidextrous glove, the inner layer being housed within the ambidextrous glove and approximating the general inner space of the ambidextrous glove; the sand layer affixed to the outer surface of the ambidextrous glove, the sand layer extending from the wrist region to the finger and thumb compartments on both sides of the ambidextrous glove and in between the finger and thumb compartments, the sand layer is comprised of steelwool, sponge or scotchbrite.

12. The glove sander of claim 11 wherein the sand layer has more than one sand grade on different regions of the glove sander.

13. The glove sander of claim 11 wherein the sand layer is comprised of steelwool.

14. The glove sander of claim 11 wherein the sand layer is comprised of sponge.

15. The glove sander of claim 11 wherein the sand layer is comprised of scotchbrite.

16. The glove sander of claim 11 wherein the ambidextrous glove is comprised of rubber.

17. The glove sander of claim 11 wherein the ambidextrous glove is comprised of latex.

18. The glove sander of claim 11 wherein the sand layer is comprised of abrasive material selected from the group consisting of steelwool, sponge, scotchbrite, silicon carbide, gamet, or aluminum oxide.

19. The glove sander of claim 11 wherein the glove sander is disposable.

20. A disposable glove sander comprising: an ambidextrous glove, an inner liner, and a sand layer, the ambidextrous glove having a thumb compartment, an index finger compartment, a middle finger compartment, a ring finger compartment, a pinky compartment, and a hand region generally housing a user’s hand extending to a user’s wrist region, the ambidextrous glove being comprised of rubber, the inner liner comprised of cotton which is affixed to the ambidextrous glove, the inner layer being housed within the ambidextrous glove and approximating the general inner space of the ambidextrous glove; the sand layer affixed to the outer surface of the ambidextrous glove, the sand layer extending from the wrist region to the finger and thumb compartments on both sides of the ambidextrous glove and in between the finger and thumb compartments.