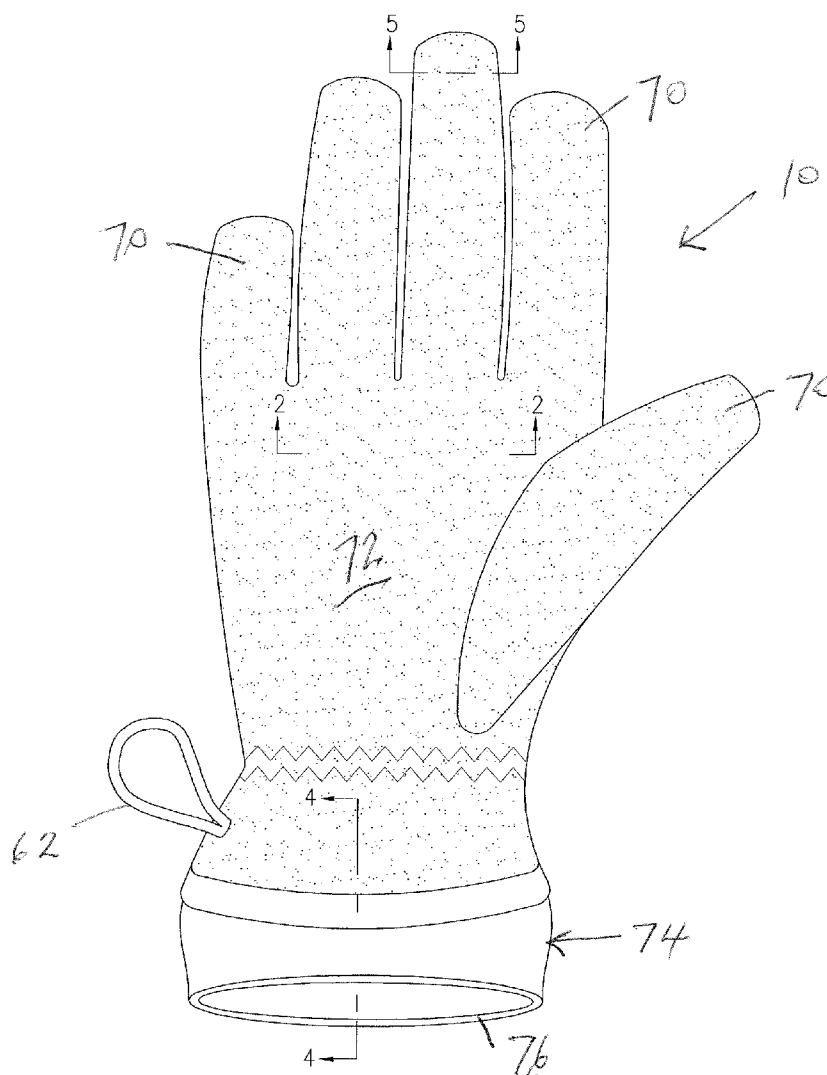


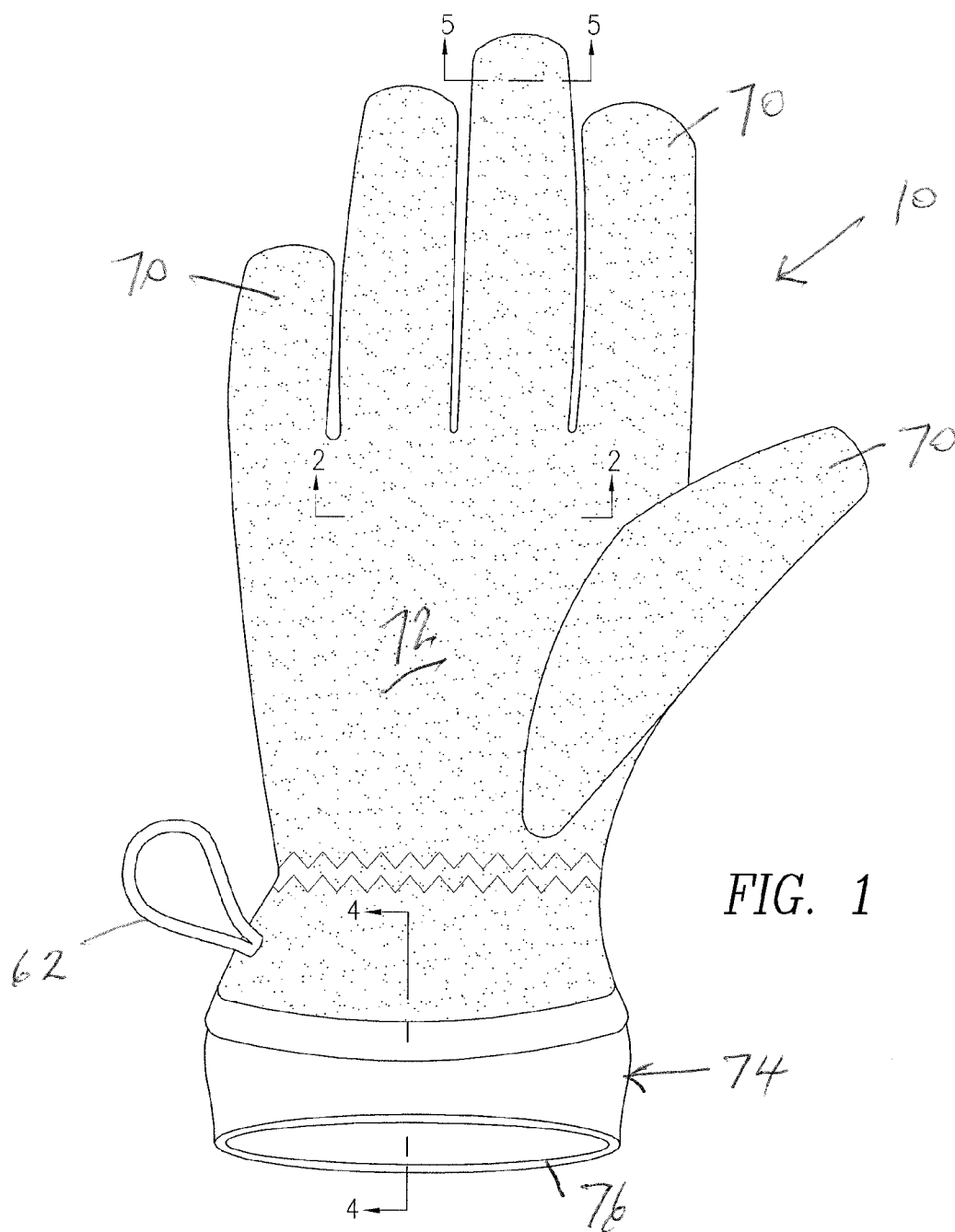


US 20110258755A1

(19) **United States**(12) **Patent Application Publication**
Arfi(10) **Pub. No.: US 2011/0258755 A1**(43) **Pub. Date: Oct. 27, 2011**(54) **CLEANING GLOVE****Publication Classification**(75) Inventor: **Mike Arfi**, Sunny Isles Beach, FL
(US)(73) Assignee: **MAGIC HANDS USA, L.L.C.**,
Miami, FL (US)(21) Appl. No.: **12/784,812**(22) Filed: **May 21, 2010**(51) **Int. Cl.****A41D 19/00** (2006.01)**A47L 17/04** (2006.01)**A41D 19/02** (2006.01)(52) **U.S. Cl. 2/161.6; 2/162; 2/167; 2/169; 15/227**(57) **ABSTRACT**

Glove 10 has multiple layers, including an innermost layer 12 of fabric for directly contacting the wearer's hand 20, a first intermediate layer 14 of waterproof material for preventing liquids from contacting the wearer's hand 20, said first intermediate layer 14 being in contact with said innermost layer 12; a second intermediate layer 16 of sponge material in contact with the outermost layer 18; and said outermost layer 18 comprising an abrasive material 22, having a hardness greater than the innermost layer 12 and said two intermediate layers 14 and 16.

Related U.S. Application Data(63) Continuation-in-part of application No. 12/682,937,
filed on Apr. 26, 2010.



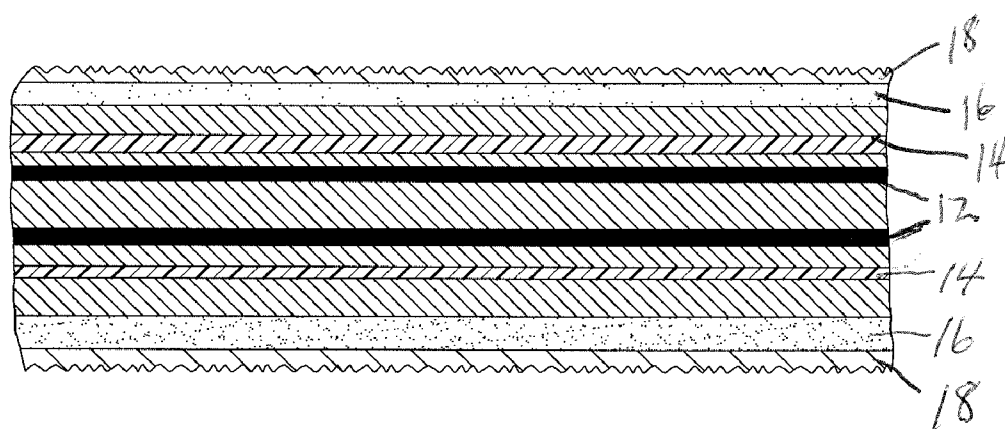


FIG. 2

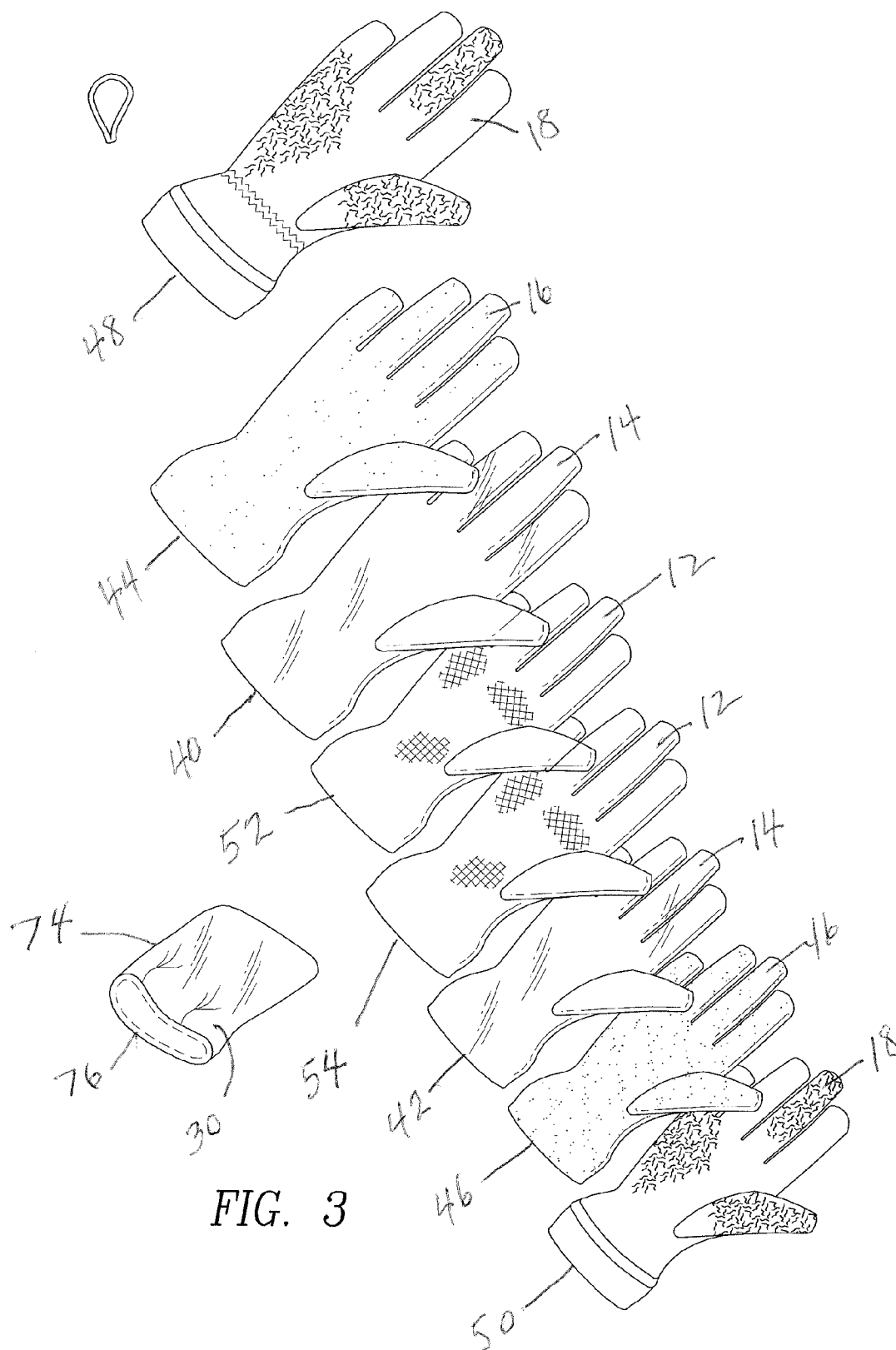


FIG. 3

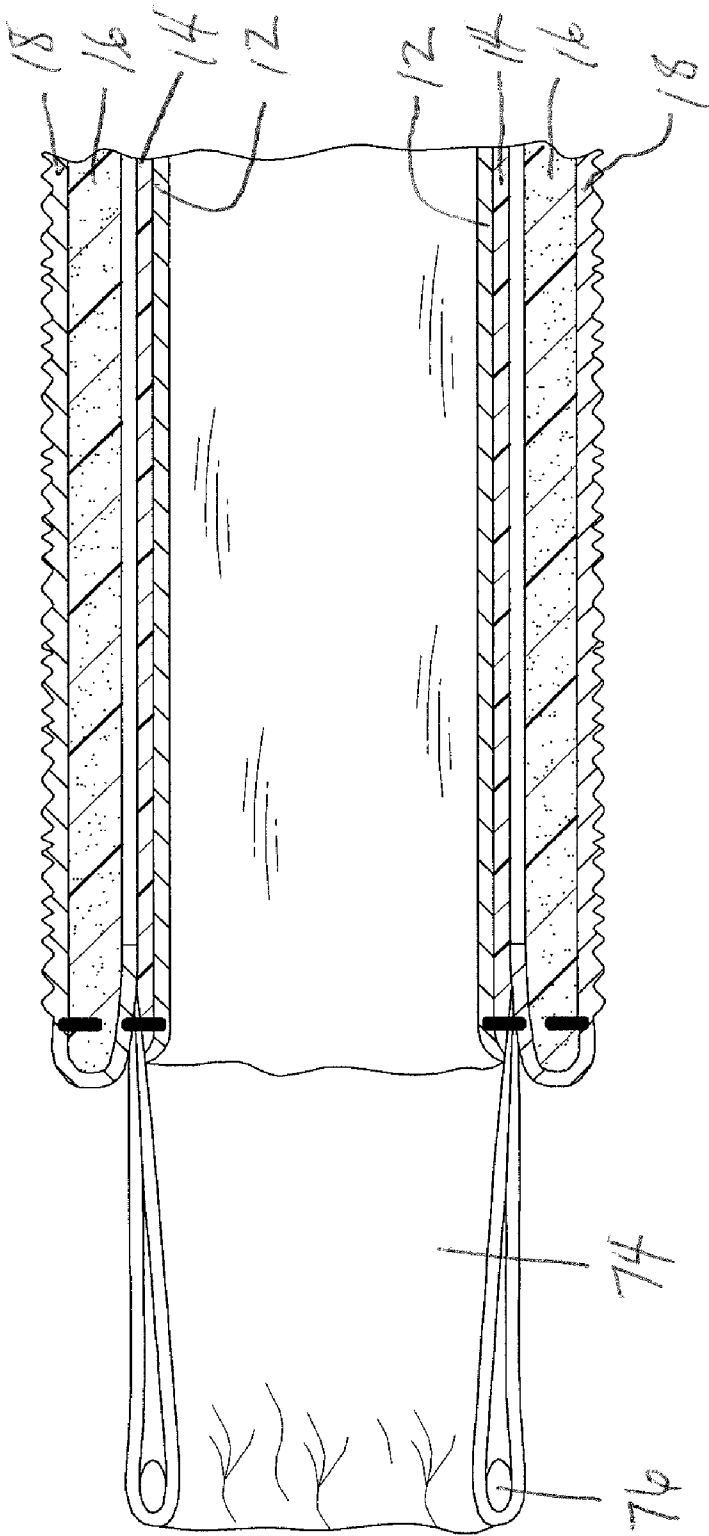


FIG. 4

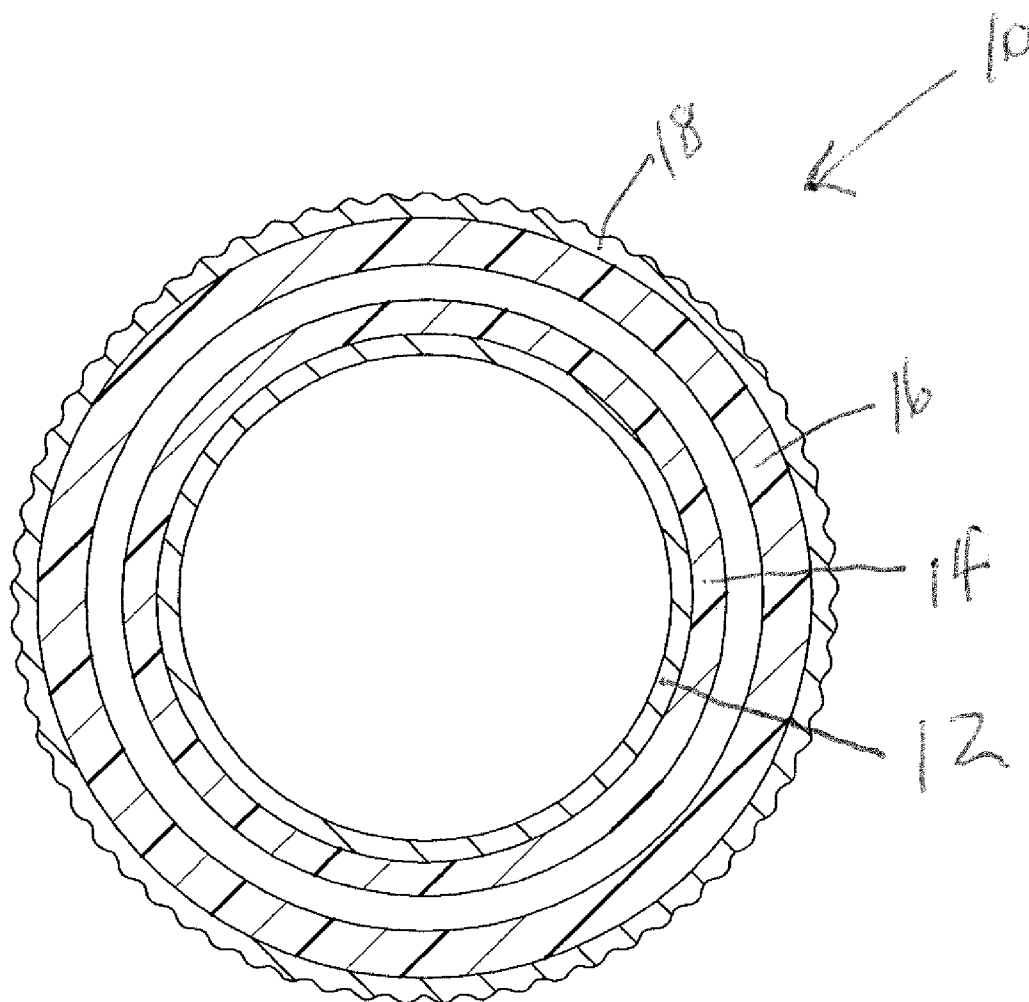


FIG. 5

CLEANING GLOVE

RELATED PATENT APPLICATION

[0001] This patent application is a continuation-in-part of application Ser. No. 12/682,937 filed on Jan. 12, 2010.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] This invention relates to cleaning gloves. Specifically, this invention relates to a cleaning glove for cleaning dishes, pots, and pans.

[0004] 2. Background and Discussion of the Prior Art

[0005] It is generally known in the art related to cleaning to use a scrubber pad such as disclosed in U.S. Pat. No. 3,005,219, granted Oct. 24, 1961 to Miller and U.S. Pat. No. 4,111,666, granted Sep. 5, 1978 to Kallow.

[0006] It is generally known to provide a glove to assist in cleaning. The art directed to cleaning gloves is directed to attaching pads, and fibrous or metal elements to a glove to facilitate the cleaning operation. U.S. Pat. No. 4,980,943, granted Jan. 1, 1991 to Barber, discloses a cleaning mitt in which a fibrous bristle strip is attached to a side of the mitt. U.S. Pat. No. 5,956,770, granted Sep. 28, 1999 to Dennis, discloses a glove with attachable pads. U.S. Pat. No. 7,210,171, granted May 1, 2007 to Jacobs et al, discloses a cleaning glove having water-proof polyester material on the palm and an artificial thumbnail.

[0007] U.S. Patent Application Publication No. 2008/0,178,366 published on Jul. 31, 2008, which discloses a cleaning glove having layers, but the layers are differently constructed from the four layers of the present invention.

[0008] The prior art constructions suffer one or more of the following impediments or disadvantages: the attachable parts or elements created crevices for food particulates to accumulate creating a source of bacterial growth; specialized attachment elements were costly to manufacture precluding practical commercialization; cleaning functionality was limited to those areas or surfaces specific to the attached elements or like attached features; and the gloves or mitts did not provide a natural feel and comfort consistent with that of cleaning with the hand itself.

[0009] The present invention provides a solution to the several aforesaid prior art impediments and disadvantages. The present invention provides a cleaning glove that is of practical design and construction for commercially viable manufacture and provides effective natural feel hand cleaning functionality.

SUMMARY OF THE INVENTION

[0010] Glove 10 has multiple layers, including an innermost layer 12 of fabric for directly contacting the wearer's hand 20, a first intermediate layer 14 of waterproof material for preventing liquids from contacting the wearer's hand 20, said first intermediate layer 14 being in contact with said innermost layer 12; a second intermediate layer 16 of sponge material in contact with the outermost layer 18; and said outermost layer 18 comprising an abrasive material 22, having a hardness greater than the innermost layer 12 and said two intermediate layers 14 and 16.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a perspective view of the glove of the present invention;

[0012] FIG. 2 is a sectional view taken along line 2-2 of FIG. 1;

[0013] FIG. 3 is an exploded view of the glove of FIG. 1;

[0014] FIG. 4 is a sectional view taken along line 4-4 of FIG. 1; and

[0015] FIG. 5 is a sectional view taken along line 5-5 of FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0016] Glove 10 has digits or fingers 70, a palm section 72, and a wrist section 74.

[0017] Glove 10 has multiple layers, including an innermost layer 12 of fabric for directly contacting the wearer's hand 20, a first intermediate layer 14 of waterproof material for preventing liquids from contacting the wearer's hand 20, said first intermediate layer 14 being in contact with said innermost layer 12; a second intermediate layer 16 of sponge material in contact with the outermost layer 18; and said outermost layer 18 comprising an abrasive material 22, having a hardness greater than the innermost layer 12 and said two intermediate layers 14 and 16.

[0018] The cleaning glove 10, further includes a wrist section 30 formed of nylon waterproof material for preventing water from entering inside the glove at the wrist of the glove 10. The wrist portion of the innermost layer 12 has an elastic wrist band 76 which grips the wrist in a manner to provide a water-tight construction.

[0019] The cleaning glove 10, wherein all of said layers 12, 14, 16, and 18 are substantially co-extensive so that the cleaning effect is undertaken by manipulation of the hand inside the glove 10 for cleaning plates, pots, or pans, or any other household products.

[0020] In addition, the glove 10, wherein the glove is machine washable, and the layers in the glove 10 have bacterial and germicidal properties.

[0021] The innermost layer 12 of fabric is formed of polyester material. Said first intermediate layer 14 of waterproof material is formed of polyvinyl chloride, and is in the shape of a hand. Said outermost layer 18 of abrasive material 22 is formed of an abrasive polyester material. All of said layers are sewn together to form a unitary construction. Said second intermediate layer 16 of sponge material and said outermost layer 18 of abrasive material are bonded together by glue, and then sewn together.

[0022] The cleaning glove 10 is made as follows:

[0023] a) Said first intermediate layer 14 of waterproof material is cut into shape and the front 40 and back 42 sections are bonded together.

[0024] b) Then said second intermediate layer 16 of sponge material, having front and back sections 44 and 46, and said outermost layer 18 of abrasive material, having front and back sections 48 and 50, wherein the front sections 44 and 48 of the sponge material and abrasive material are glued together, and wherein the back sections 46 and 50 of the sponge material and abrasive material are glued together, and said four front and back sections are then sewn together to form the shape of a hand 20.

[0025] c) Said innermost layer 12 of fabric is made from two separate front and back fabric sections 52 and 54 which are sewn together to form a shape of a hand 20.

[0026] d) All of said layers are then sewn together to form a unitary construction.

[0027] With this manner of construction, cleaning glove 10 of the present invention provides an improved operability where the user in manipulating the fingers to clean an encrusted surface more effectively scrubs and cleans the surface with a comfortable natural ergonomic movement and with the feel of the fingers. In addition, the present invention provides a unitary construction throughout the glove 10, so that the natural cleansing movement of the fingers 70 is faithfully translated to the contoured outer layer 18 and intermediate layers 14 and 16.

[0028] In addition, an elastic removable wrist band 60 with hang loop 62 of thermoplastic construction is an optional feature. Wrist band 60 is highly elastic to ensure a water tight seal. Hang loop 62 permits the wet glove to engage a hook so that the glove can air dry.

[0029] In operation, the user wears the glove 10 in a water tight fit. A cleaning solution is applied to the outer layer 18 and inner layers 12, 14, and 16, and through a sponge action, the cleaning solution is absorbed by the glove. Then, the user, by a combination of finger movements and outer layer scraping action, readily cleans any object, including dishes, pots or pan surfaces with comfort, and without fatigue. It is important to note that the contoured outer layer 18 and/or intermediate layers 14 and 16, in combination with the form fitting innermost layer 12, provide ergonomic functionality for cleaning.

[0030] Accordingly, the present invention provides the following advantages:

- [0031] a) protects hands from harsh chemicals and detergents;
- [0032] b) it makes it easier to clean small areas by manipulating the fingers of the glove;
- [0033] c) it is machine washable;
- [0034] d) it is more sanitary than a traditional sponge;
- [0035] e) the user can wash dishes and other items to be cleaned in hot water without burning one's hands;
- [0036] f) the glove uses less soap than an ordinary sponge;
- [0037] g) the glove is useful for household scrubbing;
- [0038] h) the user's fingernails are prevented from being damaged during cleaning with the glove; and
- [0039] i) the glove of the present invention can be used to clean plates, cups, pots, pans, eating utensils, counter tops, sinks, ovens, bathrooms, tiles, showers, car wheels, car engines, BBQ grills, and any other household surface, by just adding soap and water.

What is claimed is:

1. A cleaning glove, comprising:

a glove having multiple layers, including an innermost layer of fabric for directly contacting the wearer's hand; a first intermediate layer of waterproof material for preventing liquids from contacting the wearer's hand, said first intermediate layer being in contact with said inner-

most layer; a second intermediate layer of sponge material in contact with the outermost layer; and said outermost layer comprising an abrasive material, having a hardness greater than the innermost layer and said two intermediate layers.

2. The cleaning glove of claim 1, further including a wrist section formed of waterproof material for preventing water from entering inside the glove at the wrist of the glove.

3. The cleaning glove of claim 1, wherein all of said layers are substantially co-extensive so that the cleaning effect is undertaken by manipulation of the hand inside the glove for cleaning plates, pots, or pans, or any other household products.

4. The cleaning glove of claim 1, wherein the glove is machine washable.

5. The cleaning glove of claim 1, wherein the layers in the glove have bacterial and germicidal properties.

6. The cleaning glove of claim 1, wherein said innermost layer of fabric is formed of polyester material.

7. The cleaning glove of claim 1, wherein said first intermediate layer of waterproof material is formed of polyvinyl chloride, and is in the shape of a hand.

8. The cleaning glove of claim 1, wherein said outermost layer of abrasive material is formed of an abrasive polyester material.

9. The cleaning glove of claim 1, wherein all of said layers are sewn together to form a unitary construction.

10. The cleaning glove of claim 1, wherein said second intermediate layer of sponge material and said outermost layer of abrasive material are bonded together by glue, and then sewn together.

11. The method of making the cleaning glove of claim 1, wherein:

- a) said first intermediate layer of waterproof material is cut into shape and the front and back sections are bonded together;
- b) said second intermediate layer of sponge material, having front and back sections, and said outermost layer of abrasive material, having front and back sections, wherein the front sections of the sponge material and abrasive material are glued together, and wherein the back sections of the sponge material and abrasive material are glued together, and said four front and back sections are then sewn together to form the shape of a hand;
- c) said innermost layer of fabric is made from two separate front and back fabric sections which are sewn together to form a shape of a hand; and
- d) all of said layers are then sewn together to form a unitary construction.

* * * * *