A cleaning device is provided including a front layer including a capture material, an active material adjacent the capture material, a juncture line where the capture material joins the active material, and a front layer perimetric edge; and a backing layer having a backing layer perimetric edge, wherein at least a portion of the backing layer perimetric edge is coupled to the front layer perimetric edge such that the front and backing layers define an interior space that is at least partially enclosed. Also provided is a method for cleaning a surface, the method including situating a cleaning device having a front layer including a capture material and an active material, and moving the cleaning device along the surface such that the capture and active materials both contact the surface.
DISPOSABLE CLEANING SYSTEM

BACKGROUND
[0001] This invention pertains to a device for controlling dirt, lint, and animal detritus on surfaces such as clothing, upholstery, drapery, and carpeting.

[0002] Dirt and lint on fabric-like surfaces are common problems. Also, owners of pets and other animals usually face the prospect of repeatedly and often cleaning fur, hair, and dander from various surfaces including carpets and furniture. Devices exist for collecting dirt, lint, and fur, and dander shed by animals, including devices that employ adhesive rolls to which the dirt, lint, fur, hair, and dander may stick, and durable devices such as brushes.

SUMMARY OF THE INVENTION
[0003] There are disadvantages to using such devices. Adhesive-based devices tend to quickly become matted with fur and hair, greatly decreasing their effectiveness. Comb-and brush-like devices can miss much of the deposited detritus. Durable devices need to be cleaned frequently. Infrequent use of such devices due to their ineffectiveness results in a build-up of lint, and in hair and fur becoming deposited throughout the range of an animal.

[0004] To solve these problems, a new disposable lint and hair removal system is required.

[0005] The elements of the lint and hair removal system are generally a front layer that includes capture material and an active material, and a shape that allows for ease of use. Such a device allows a consumer to collect lint, pet hair, and the like from surfaces.

[0006] More specifically, the present invention provides a disposable lint and hair removal cleaning device including a front layer including a capture material, an active material adjacent the capture material, a juncture line where the capture material joins the active material, and a front layer perimeter edge; and a backing layer having a backing layer perimeter edge, wherein at least a portion of the backing layer perimeter edge is coupled to the front layer perimeter edge such that the front and backing layers define an interior space that is at least partially enclosed.

[0007] The capture material may be a hook, brush, or comb-like material. The active material may be absorbent, a high-friction material, a silicone material, or a laminate with elastomeric properties, and the active material may include a cleaning solution, a stain guard, or a deodorant. The backing layer may be a nonwoven, elastomeric, or a hook material. The device may be a mitt, a wipe, or a cleaning tool cover.

[0008] The present invention also provides a method for cleaning a surface, the method including situating a cleaning device having a front layer including a capture material, an active material adjacent the capture material, a juncture line where the capture material joins the active material, and a front layer perimeter edge, and a backing layer having a backing layer perimeter edge, wherein at least a portion of the backing layer perimeter edge is coupled to the front layer perimeter edge such that the front and backing layers define an interior space that is at least partially enclosed. The method also includes moving the cleaning device along the surface such that the capture and active materials both contact the surface.

[0009] The present invention also provides a cleaning device including a front layer including a capture material, an active material adjacent the capture material, a leading edge, and a trailing edge, wherein the active material is positioned adjacent the leading edge, and wherein the capture material is positioned adjacent the trailing edge. The device also includes a backing layer having a backing layer perimeter edge, wherein at least a portion of the backing layer perimeter edge is coupled to the leading and trailing edges such that the front and backing layers define an interior space that is at least partially enclosed.

[0010] The present invention also provides a method for cleaning a surface, the method including situating a cleaning device having a front layer including a capture material, an active material adjacent the capture material, a leading edge, and a trailing edge, wherein the active material is positioned adjacent the leading edge, and wherein the capture material is positioned adjacent the trailing edge; and a backing layer having a backing layer perimeter edge, wherein at least a portion of the backing layer perimeter edge is coupled to the leading and trailing edges such that the front and backing layers define an interior space that is at least partially enclosed. The method also includes agglomerating detritus by moving the cleaning device along the surface such that the active material contacts the surface; and collecting the agglomerated detritus by moving the cleaning device along the surface such that the capture material contacts the surface.

[0011] The present invention also provides a cleaning device including a front layer including a capture material and an active material adjacent the capture material, wherein the front layer has a juncture line where the capture material adjoins the active material and a front layer perimeter edge, wherein the front layer is a laminate including a liquid impermeable material, wherein the capture material is hook material positioned substantially on one side of the juncture line, and wherein the active material is positioned substantially on another side of the juncture line. The device also includes a backing layer having a backing layer perimeter edge, and wherein at least a portion of the backing layer perimeter edge is coupled to the front layer perimeter edge such that the front and backing layers define an interior space that is at least partially enclosed, the interior space having an open end; and a sealing mechanism positioned adjacent the open end.

[0012] Other objects and advantages of the present invention will become more apparent to those skilled in the art in view of the following description and the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS
[0013] FIG. 1 is a schematic view of a cleaning device of the present invention.

[0014] FIG. 2 is a schematic view of another aspect of the cleaning device of FIG. 1.

[0015] FIG. 3 is a schematic view of the device of FIG. 1, including a thumb space.

[0016] FIG. 4 is a schematic view of the device of FIG. 1, including a finger loop.

[0017] FIG. 5 is a schematic view of the device of FIG. 1, including a finger slit.
FIG. 6 is a schematic view of the device of FIG. 1, including a finger space.

FIG. 7 is a schematic view of the device of FIG. 1, including strap-like backing layer.

FIG. 8 is a schematic view of the device of FIG. 1, in use in conjunction with a cleaning tool.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The invention described herein is a disposable cleaning device 10 for the removal of lint, dirt, hair, fur, etc. from a surface. Such a cleaning device 10 allows a user to clean a surface, particularly a fabric or fabric-like surface. For cleaning purposes, the user needs to capture primarily lint, dirt, hair, fur, dander, debris, and loose material, collectively referred to herein as detritus.

FIG. 1 illustrates an example of a cleaning device 10 of the present invention. The device 10 includes a front layer 15 and a backing layer 20. FIG. 1 shows the cleaning device 10 from side of the front layer 15. The device 10 may have a closed end 22 and an open end 23. The device 10 has a leading edge 31 and a trailing edge 32. For purposes of illustration, and not for purposes of limitation, the cleaning device 10 is described as a mitt. The same device 10, however, may be described as any other suitable form of a cleaning device 10, including an enclosure or attachment for a cleaning tool.

The device 10 includes a front layer 15. The front layer 15 may be of any suitable shape, but is preferably generally planar and is further preferably generally rectangular or oblong. The front layer 15 has a perimeter edge 25 extending around the front layer 15. The front layer 15 has a longitudinal axis 24 extending longitudinally along the front layer. In one aspect of the present invention, the front layer 15 is generally the size of a human hand held flat on a surface. In another aspect of the present invention, the front layer 15 is generally the size of the four fingers of a human hand. In still another aspect of the present invention, the front layer 15 is generally the size of a human finger. In an alternative aspect of the present invention, the front layer 15 is generally the size of a cleaning tool. In general, the front layer 15 may be of any suitable size, with the size preferably selected to be suitable for the intended use of the cleaning device 10.

The front layer 15 performs the cleaning function. The front layer 15 includes a capture material 26 and an active material 28.

The capture material 26 may be generally oblong in shape, and in one aspect of the present invention is oriented to extend longitudinally along the front layer 15, positioned on one side of the longitudinal axis 24. In other aspects of the present invention, the capture material 26 may cover from 2 percent to 100 percent of the front layer 15. The capture material 26 has a longitudinal axis 29 that is generally parallel to the longitudinal axis 24. The capture material 26 is positioned adjacent the trailing edge 32.

In another aspect of the present invention, as shown in FIG. 2, the capture material 26 extends across the front layer 15 and intersects the longitudinal axis 24 in a generally perpendicular orientation. In one aspect of the present invention shown in FIG. 2, the capture material 26 is positioned adjacent the closed end 22 of the cleaning device 10. In another aspect of the present invention (not shown), the capture material 26 is positioned adjacent the open end 23 of the cleaning device 10.

In one aspect of the present invention, the capture material 26 is a hook material. Hook material and hooks are used generically herein to describe material or the protrusions thereon including hooks, stems, mushrooms, or any other suitable shape. The hook material may include relatively small and flexible hooks. Hook material is commonly available in hook and loop material such as that manufactured as VELCRO-brand hook and loop fasteners by VELCRO U.S.A., Inc. The hook material is typically formed in a continuous sheet using continuous injection molding, and the hook material typically includes hooks, knobs, stems, protrusions, or some combination of these. Micro-hook material may be used and is considered surface-friendly because the hooks are designed to be relatively small and feel soft to the touch for the average user. In one aspect of the present invention, the ends of the hooks are not exposed at the surface, so the hook material does not feel abrasive or sharp. As is known in the art, the manufacturer may tailor the modulus of the hooks by the polymer that is chosen to manufacture them. One example of a polymer used in micro-hook material is linear low-density polyethylene (LLPE). One example of a hook or stem size in a micro-hook material is a stem height of 0.013 inches.

Conventional hook and loop fastening systems are, for example, available as VELCRO hook and loop fastening systems. In a particular aspect of the present invention, the capture material may be a micro-hook material such as that distributed under the designation CS200 by 3M Corporation a business having offices in St. Paul, Minn. Another suitable micro-hook material is distributed under the designation VELCRO CFM-61, and is available from VELCRO U.S.A., Inc., a business having offices in Manchester, N.H.

Referring to FIG. 1, the front layer 15 also includes an active material 28. The active material 28 is positioned on the front layer 15 to generally cover the area not covered by the capture material 26. The capture material 26 may abut the active material 28 to form the front layer 15, or the capture material 26 may overlap the active material 28 in the front layer 15. The intersection of the capture material 26 and the active material 28 is a juncture line 33. In another aspect of the present invention, the active material 28 may extend across the entire front layer 15, with the capture material 26 covering a portion of the active material 28. The active material 28 is positioned adjacent the leading edge 31.

In one aspect of the present invention, the active material 28 acts to cause hair and related substances to ball or agglomerate. The active layer 28 acts to reduce the affinity the detritus has for the surface on which it resides and to increase the affinity the detritus has for itself, resulting in the detritus agglomerating. Various materials can increase this effect of the active layer 28, and wetting or dampening the active layer 28 can also increase this effect. Once the detritus has been agglomerated, the detritus is much easier to collect using the capture material 28, thus removing the detritus from the surface.

To this effect, the active material 28 may be a static-providing material such as 100% polyethylene (PET)
spunlace and Electrec nonwovens available from Kimberly-Clark Corporation. In another aspect of the present invention, the active material 28 may be a high-friction material such as loop material available in various blends from Velcro USA or a hydroknit spunbond such as PRT3405 Premiere Hydroknit available from Kimberly-Clark Corporation.

[0032] In another aspect of the present invention, the active material 28 may include a silicone in addition to or instead of hook material, such as one hundred percent silicone gel sheeting. The silicone in the active material 26 acts to agglomerate hair and related material.

[0033] In another aspect of the present invention, the active material 28 may be a hook material of any suitable kind, including those described above with respect to the capture material 26.

[0034] In another aspect of the present invention, the active material 28 may be a laminate with elastomeric properties such as a stretch-bonded laminate (SBL) available from Kimberly-Clark Corporation with pre-stretched elastic filament and meltblown material with one ply of spunbond material on each outer surface and a basis weight of approximately 70 grams per square meter, but any suitable may be used.

[0035] In another aspect of the present invention, the active material 28 may be an absorbent material. Suitable absorbent materials include spunlace PET and polypropylene (PP) blends (e.g., 50% rayon, 50% PET), hydroknit spunbond such as PRT3405 Premiere Hydroknit, and double re-creped (DRC) material, all available from Kimberly-Clark Corporation. An absorbent active material 28 may used in an initially dry condition to absorb liquids from a surface. In another aspect of the present invention, the absorbent active material 28 may be dampened by a user with water or another substance to aid cleaning with the cleaning device 10. The active material 28 may act, particularly when it is moistened, to cause hair and related material to ball or agglomerate, which facilitates collection of the hair and related material by the capture material 26.

[0036] In yet another aspect of the present invention, the active material 28 may be pre-moistened by the manufacturer with water or another substance. For example, the active material 28 may include a cleaning solution to aid the effectiveness of the cleaning device 10. The cleaning solution may be a cleaner such as FOUR PAWS Super Strength Stain and Odor Remover, which includes water, natural enzymes, and mild detergent (from Four Paws Products, Ltd., Hauppauge, N.Y.), or NATURE’S MIRACLE Stain & Odor Remover, which includes water, natural enzymes, isopropyl alcohol, and natural citrus scent (from Pets ‘N People, Inc., Rolling Hills Estates, Calif.), or RESOLVE Carpet Spot & Stain Carpet Cleaner (from Reckitt Benckiser, Wayne, N.J.). The cleaning solution may be a pet shampoo. The cleaning solution may be a stain cleaner and stain guard such as SCOTCHGARD Oxy Carpet Cleaner with Stain Protector that includes water, 2-butoxyethanol, hydrogen peroxide, and surfactants (from 3M Corporation, St. Paul, Minn.). In the case of using the cleaning device 10 to clean a fabric surface, the cleaning solution may include a pet repellent such as SIMPLE SOLUTION Indoor/Outdoor Repellent for Dogs and Cats, which has as its active ingredient methyl nonyl ketone (from The Bramton Company, Dallas, Tex.).

[0037] The cleaning solution may be an antimicrobial, which may be deposited on the active material 28 by a spray or dip application or by inclusion into the melt from which the active material 28 is manufactured. Examples of suitable antimicrobials include quaternary ammonium compounds such as 3-trimethoxysilylpropylimidethiocuretyl ammonium chloride (AEKIS); poly cationic chemicals such as biguanides (poly (hexamethylene) biguanide hydrochloride (PHMB) Arch Chemical), 2, 4, 4-trichloro-2-hydroxy-diphenylether (Tinosan, Ciba); diphenyl ether (bis-phenyl) derivatives known as either 2, 4, 4-trichloro-2' hydroxy diphenyl ether or 5-chloro-2-(2, 4-dichlorophenyl) phenol; triclosan; silver; and copper. The cleaning solution may be an allergen sequestrant that may be a charged or mixed charged particle or nanoparticle. Most allergy proteins are glycoproteins (proteins that contain covalently-bound oligosaccharides), so a negative charge may be better than predominance of positive charges on the particles, although mixed charges may be preferred. Clays or modified clays work in this respect. Examples of suitable allergen sequestants include plant lectins with an affinity for N-acetylgalactosamine such as jacinin, peanut, and soybean, where the lectins both bind allergens and are bound to the web, thus removing allergens from a surface. The cleaning solution may also include a fragrance. The cleaning solution may also include a pheromone to either attract or repel an animal.

[0038] In still another aspect of the present invention, the active material 28 may be both absorbent and act to agglomerate hair and other substances.

[0039] The front layer 15 may be a laminate structure including a liquid impermeable or shape conforming backing material. The backing material may coincide with the capture material 26, the active material 28, or both. The backing material may be SBL, as described above, or may be any other suitable material.

[0040] The cleaning device 10 also includes a backing layer 20. The backing layer 20 is preferably of the same general size and shape of the front layer 15, although the size and/or shape of the backing layer 20 may be selected to be different from the size and/or shape of the front layer 15 based on the intended use of the cleaning device 10. The backing layer 20 has a perimetric edge 30 extending around the perimeter of the backing layer 20.

[0041] The backing layer 20 may be manufactured from any suitable nonwoven or woven material, including, for example, paper tissue. The backing layer 20 may also be manufactured from an elastomeric material to allow for a more snug fit on the user’s hand.

[0042] In an alternative aspect of the present invention, the backing layer 20 is also a working layer and manufactured under any of the aspects of the present invention described above for the front layer 15. In the case of the backing layer 20 as a working layer, the backing layer 20 may be manufactured from a different capture material than is used for the front layer 15. For example, the capture material of the backing layer 20 may include hooks that are larger than the hooks of the capture material of the front layer 15 to accommodate different cleaning needs.

[0043] In an alternative aspect of the present invention, one or both of the front and backing layers 15, 20 may be breathable to allow air to circulate through the device 10.
The front layer 15 is coupled to the backing layer 20. One of the front and backing layers 15, 20 is positioned to overlie the other of the front and backing layers 15, 20, such that the perimetric edges 25, 30 of the front and backing layers 15, 20 generally align. A portion of the perimetric edge 25 of the front layer 15 is attached to the perimetric edge 30 of the backing layer 20 to form a seam 35. The seam 35 may be formed at one of the perimetric edges 25, 30, or the seam 35 may be adjacent or inward from the perimetric edges 25, 30. The perimetric edges 25, 30 may be attached by adhesive, ultrasonic bonding, heating, sewing, or by any other suitable method.

As shown in FIGS. 1 and 7, the active and capture materials 28, 26 define a use direction 60 indicating the direction in which the device 10 should be used. The use direction 60 extends from the capture material 26 to the active material 28, indicating that, in use, the device 10 should be moved in the use direction 60 such that the active material 28 contacts the surface prior to the capture material 26 contacting the surface. In other words, the use direction 60 can be envisioned as extending from the trailing edge 32 to the leading edge 31. The use direction 60 may be indicated by indicia 62 on the device 10. The indicia 62 may be words, symbols, or other suitable visual indication of the use direction 60. The indicia 62 may be printed, embossed, or otherwise established on the device 10, and the indicia 62 may be established on the front layer 15, the backing layer 20, on any other structure or edge, or on a tag or label (not shown) attached to the device 10.

Coupling the front layer 15 to the backing layer 20 forms the device 10 with a bag-like structure having an outer surface 40 and an interior space 45 with an opening 50. The device 10 may be formed such that the interior space 45 is sized to accommodate a human hand, finger, or fingers, a cleaning tool, or any other suitable item. Because of this bag-like design, the device 10 may be turned inside-out by a user such that the previous interior space 45 becomes the new outer surface, and the previous outer surface 40 becomes and defines the new interior space. In turning the device 10 inside-out, any detritus captured in the hooks or adhesive on the previous outer surface 40 of the device 10 becomes captured within the new interior space of the device 10.

In an alternative aspect of the present invention, the interior space 45 may also include capture material and/or adhesive to allow the device 10 to be used for cleaning after being turned inside-out.

The device 10 may be manufactured in any dimensions. For example, the device 10 as a mitt may be sized to fit best on a child’s hand, an adult hand, or may be of a length to cover much of a child’s hand and arm.

The device 10 may be manufactured without a thumb or other directional or control means. In this aspect of the present invention, pressure from a user’s fingers on the seam 35 helps to stabilize the device 10 by helping to prevent rotation of the device 10 around the user’s hand.

In an alternative aspect of the present invention, as illustrated in FIG. 3, the device 10 may include a thumb space 55 sized to accommodate a human thumb. A thumb space 55 helps to stabilize the device 10 in use by helping to prevent rotation of the device 10 around a user’s hand. In another alternative aspect of the present invention, particularly one on which the backing layer 20 is an active layer, the device 10 may also be manufactured with a second thumb space (not shown) on the opposing perimetric edge 25 of the device 10, such that one thumb space 55 may be used when the front layer 15 is used to collect detritus, and the other thumb space (not shown) may be used when the backing layer 20 is used to collect detritus.

In another alternative aspect of the present invention, as illustrated in FIG. 4, the device 10 may include a finger loop 65 within the space. With a finger inserted in the finger loop 65 during use, the finger loop 65 helps to stabilize the device 10 by helping to prevent rotation of the device 10 around a user’s hand. The finger loop 65 may be formed from any suitable material including the nonwoven material described above, and may be formed with either the front or backing layers 15, 20, or formed independently of the front and backing layers 15, 20. The finger loop 65 may be attached to either or both of the front or backing layers 15, 20, or the finger loop 65 may be attached to the device 10 in conjunction with coupling the front layer 15 to the backing layer 20. The finger loop 65 may assist a user in turning the device 10 inside-out by grasping the finger loop 65 and pulling.

In yet another alternative aspect of the present invention, as illustrated in FIG. 5, the device 10 may include a finger slit 70 appropriately positioned in the front layer 15, backing layer 20, between the front and backing layers 15, 20, or in both the front and backing layers 15, 20. With a finger or thumb inserted through the finger slit 70 during use, the finger slit 70 helps to stabilize the device 10 by helping to prevent rotation of the device 10 around a user’s hand. In another aspect of the present invention, the finger slit 70 may be positioned parallel to and adjacent to the perimetric edge 25 of the front layer 15, or the perimetric edge 30 of the backing layer 20.

In yet another alternative aspect of the present invention, as illustrated in FIG. 6, the device 10 may include a line 75 of stitching, glue, or other suitable means to define a finger space 80 within the interior space 45 to help prevent rotation of the device 10 around a user’s hand.

The opening 50 of the device 10 may include a sealing mechanism 85 (see FIG. 4) to allow the opening 50 to be closed. The sealing mechanism 85 may be hook material, adhesive, a zipper-like mechanism, or any other suitable sealing mechanism. In turning the device 10 inside-out and capturing any detritus within the interior space 45 of the device 10, the sealing mechanism 85 can then be used to ensure that the detritus remains within the interior space 45 for disposal without mess.

By virtues of the design and materials chosen for the device 10, the device 10 is preferably designed to be disposable. In this case, disposable means that the device 10 is disposed of, rather than cleaned, after use.

In an alternative aspect of the present invention, the active material 28 and the backing layer 20 are two portions of the same piece of material. One of the active material 28 and the backing layer 20 is folded over the other of the active material 28 and the backing layer 20, and a portion of the perimetric edges 25, 30 are coupled by any means described herein to form the device 10.

In another aspect of the present invention shown in FIG. 7, the backing layer 20 may be a strap 90 attached to
the front layer 15 at opposite perimetric edges 25 of the front layer 15. The strap 90 may be formed from SBL or any other suitable nonwoven or woven material.

[0058] The cleaning devices 10 may be packaged individual for portability or may be packaged with more than one in a package. Each cleaning device 10 within a package may be separated from the other cleaning devices 10 in a package by any suitable material.

[0059] In use of the device 10 as a mitt, as illustrated in FIGS. 1-6, when a user recognizes a need for collecting detritus from and cleaning a surface, the user selects and situates the device 10 on the user’s hand. The user then rubs the surface with the user’s hand in the device 10, allowing the hooks and absorbent of the front layer 15 to capture dirt and detritus. The user may contact the surface first with the active material 28 to either absorb liquids, to wash dirt, and/or to ball up any hair or related materials, and then contact the same surface with the capture material 26 to collect the hair and related materials. The user then removes the device 10, turns the device 10 inside-out, thereby capturing the dirt and detritus within the inside-out device 10. The user may then seal the device 10 if the device 10 is equipped with a sealing mechanism 85. With or without sealing the device 10, the user then disposes of the device 10 and along with it the dirt and detritus.

[0060] In other words, a user may clean a surface by situating the cleaning device 10 on the user’s hand and then moving the cleaning device 10 along the surface, wherein the user positions the cleaning device 10 at a first angle such that only the active material 28 contacts the surface. The user then rotates the cleaning device 10 to reposition the cleaning device 10 to a second angle, and moves the cleaning device 10 along the surface such that only the capture material 26 contacts the surface.

[0061] In use of the device 10 as a cover for a cleaning tool 95, as illustrated in FIG. 8, 10 when a user recognizes a need for collecting detritus and cleaning, the user selects an appropriate device 10 and situates the device 10 over the cleaning tool 95. The user then rubs a surface with the cleaning tool 95 in the device 10, allowing the hooks and/or absorbent of the front layer 15 to clean and/or capture detritus. The user may contact the surface first with the active material 28 to either absorb liquids, to wash dirt, and/or to ball up any hair or related materials, and then contact the same surface with the capture material 26 to collect the hair and related materials. The user then removes the device 10, turning the device 10 inside-out, and capturing the dirt and detritus within the inside-out device 10. The user may then seal the device 10 if the device 10 is equipped with a sealing mechanism. In this case, the device 10 may also be equipped with a second sealing mechanism (not shown) to allow the device 10 to be sealed during use to enclose the cleaning tool 95. With or without sealing the device 10, the user then disposes of the device 10 and along with it the dirt and detritus.

[0062] Other objects and advantages of the present invention will become more apparent to those skilled in the art in view of the following description and the accompanying drawings.

[0063] The invention has been described with reference to various specific and illustrative aspects and techniques. However, it should be understood that many variations and modifications may be made while remaining within the spirit and scope of the invention. Many alternatives, modifications, and variations will be apparent to those skilled in the art in light of the foregoing description. Accordingly, this invention is intended to embrace all such alternatives, modifications, and variations that fall within the spirit and scope of the appended claims. We claim:

1. A cleaning device comprising:
   a front layer including
   a capture material,
   an active material adjacent the capture material,
   a juncture line where the capture material joins the active material, and
   a front layer perimetric edge; and
   a backing layer having a backing layer perimetric edge, wherein at least a portion of the backing layer perimetric edge is coupled to the front layer perimetric edge such that the front and backing layers define an interior space that is at least partially enclosed.

2. The device of claim 1, wherein the capture material is hook material.

3. The device of claim 1, wherein the capture material is a micro-hook material.

4. The device of claim 1, wherein the capture material is positioned substantially on one side of the juncture line, and the active material is positioned substantially on another side of the juncture line.

5. The device of claim 1, wherein the capture material is positioned entirely on one side of the juncture line, and the active material is positioned entirely on another side of the juncture line.

6. The device of claim 1, wherein the front layer further comprises a longitudinal axis, and wherein the capture material is positioned on one side of the longitudinal axis.

7. The device of claim 1, wherein the juncture line is parallel to the longitudinal axis.

8. The device of claim 1, further comprising a closed end, wherein the capture material intersects the longitudinal axis adjacent the closed end.

9. The device of claim 1, wherein the active material is absorbent.

10. The device of claim 1, wherein the active material is a high-friction material.

11. The device of claim 1, wherein the active material is a laminate with elastomeric properties.

12. The device of claim 1, wherein the active material includes a cleaning solution.

13. The device of claim 1, wherein the active material includes a stain guard.

14. The device of claim 1, wherein the active material includes a deodorant.

15. The device of claim 1, wherein the active material includes an antimicrobial.

16. The device of claim 1, wherein the active material includes an allergen sequestant.

17. The device of claim 1, wherein the active material includes a silicone material.

18. The device of claim 1, wherein the front layer is a laminate including a liquid impermeable material.
19. The device of claim 1, wherein the device is sized to encompass four fingers of a human hand.
20. The device of claim 1, wherein the device is sized to encompass a human hand.
21. The device of claim 1, wherein the device is sized to encompass a human finger.
22. The device of claim 1, further comprising a thumb space extending from the front layer perimetric edge.
23. The device of claim 1, further including a finger loop attached to one of the front and backing layers.
24. The device of claim 23, wherein the finger loop is attached within the space.
25. The device of claim 1, further comprising a thumb opening.
26. The device of claim 1, the backing layer including a nonwoven material.
27. The device of claim 1, the backing layer including an elastomeric material.
28. The device of claim 1, the backing layer including a micro-hook material.
29. The device of claim 1, wherein the front layer is coupled to the backing layer using adhesive.
30. The device of claim 1, wherein the front layer is coupled to the backing layer using ultrasonic bonding.
31. The device of claim 1, wherein the front layer is coupled to the backing layer by sewing.
32. The device of claim 1, further comprising a sealing mechanism.
33. The device of claim 32, wherein the sealing mechanism uses hook material.
34. The device of claim 32, wherein the sealing mechanism is a zipper-like device.
35. The device of claim 32, wherein the sealing mechanism is an adhesive.
36. The device of claim 1, wherein the device is disposable.
37. The device of claim 1, wherein the active material and the backing layer are one piece of the same material, and wherein one of the active material and the backing layer is folded over the other of the active material and the backing layer.
38. A method for cleaning a surface, the method comprising:

- situating a cleaning device having
  - a front layer including
    - a capture material,
    - an active material adjacent the capture material,
    - a juncture line where the capture material joins the active material, and
    - a front layer perimetric edge, and
  
  - a backing layer having a backing layer perimetric edge, wherein at least a portion of the backing layer perimetric edge is coupled to the front layer perimetric edge such that the front and backing layers define an interior space that is at least partially enclosed; and

- moving the cleaning device along the surface such that the capture and active materials both contact the surface.

39. The method of claim 38, wherein the moving act further includes moving the cleaning device along the surface such that the active material contacts the surface first, and the capture material contacts the surface second.
40. The method of claim 38, further comprising turning the cleaning device inside-out.
41. The method of claim 38, further comprising sealing the cleaning device and disposing of the cleaning device.
42. The method of claim 38, wherein the situating act includes situating the cleaning device such that the front layer is adjacent a user's palm.
43. A cleaning device comprising:

- a front layer including
  - a capture material,
  - an active material adjacent the capture material,
  - a leading edge, and
  - a trailing edge, wherein the active material is positioned adjacent the leading edge, and wherein the capture material is positioned adjacent the trailing edge; and

- a backing layer having a backing layer perimetric edge, wherein at least a portion of the backing layer perimetric edge is coupled to the leading and trailing edges such that the front and backing layers define an interior space that is at least partially enclosed.
44. The device of claim 43, further comprising a use direction defined by the active and capture materials as extending from the capture material to the active material.
45. The device of claim 44, further comprising indicia indicating the use direction.
46. A method for cleaning a surface, the method comprising:

- situating a cleaning device having
  - a front layer including
    - a capture material,
    - an active material adjacent the capture material,
    - a leading edge, and

    - a trailing edge, wherein the active material is positioned adjacent the leading edge, and wherein the capture material is positioned adjacent the trailing edge; and

    - a backing layer having a backing layer perimetric edge, wherein at least a portion of the backing layer perimetric edge is coupled to the leading and trailing edges such that the front and backing layers define an interior space that is at least partially enclosed;

    - agglomerating detritus by moving the cleaning device along the surface such that the active material contacts the surface; and

    - collecting the agglomerated detritus by moving the cleaning device along the surface such that the capture material contacts the surface.
47. The method of claim 45, further comprising disposing of the cleaning device.

48. The method of claim 45, further comprising coupling the cleaning device to a handle.

49. A cleaning device comprising:

A front layer including a capture material and an active material adjacent the capture material, wherein the front layer has a juncture line where the capture material adjoins the active material and a front layer perimeter edge, wherein the front layer is a laminate including a liquid impermeable material, wherein the capture material is hook material positioned substantially on one side of the juncture line, and wherein the active material is positioned substantially on another side of the juncture line;

a backing layer having a backing layer perimeter edge, and wherein at least a portion of the backing layer perimeter edge is coupled to the front layer perimeter edge such that the front and backing layers define an interior space that is at least partially enclosed, the interior space having an open end; and

a sealing mechanism positioned adjacent the open end.

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