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(54) CUSHION

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(57)ABSTRACT

One aspect of an embodiment includes a cushion made up of a spacer mesh fabric core, an outer cover, made from a woven fabric and containing a cushioning material, the outer cover substantially enclosing the spacer mesh fabric core.









FIGURE 3B





FIGURE 6B



FIGURE 7A



FIGURE 7B

FIGURE 7C



FIGURE 8B









FIGURE 12C











Figure 17



Figure 18

CUSHION

FIELD OF THE INVENTION

[0001] The invention relates generally to products utilizing spacer mesh fabrics.

SUMMARY

[0002] One aspect of an embodiment includes a cushion made up of a spacer mesh fabric core, an upper cover, made from a spacer mesh fabric having a finer mesh than the core and a bottom cover.

BRIEF DESCRIPTION OF DRAWINGS

[0003] FIG. **1** is a top view of different types of spacer mesh fabric that may be used in various embodiment of the invention.

[0004] FIG. 2 is a perspective view of a spacer mesh fabric.

[0005] FIG. 3A-B are perspective views of a lounge cover formed in accordance with an embodiment of the invention. [0006] FIGS. 4A-B are perspective views of a mat formed in accordance with the present invention.

[0007] FIG. **5**A-B are views of the mat of FIG. **4** in folded configurations.

[0008] FIG. **6**A-B are perspective views of a portable lounger formed in accordance with an embodiment of the invention,

[0009] FIG. 7A-C is are perspective views of the removable frame of the portable lounger of FIG. 6.

[0010] FIGS. **8**A-B are perspective views of a pillow formed in accordance with a first embodiment of the invention.

[0011] FIGS. 9A-C are perspective views of a pillow formed in accordance with a second embodiment of the invention.

[0012] FIGS. **10**A-C are perspective views of a seat cushion formed in accordance with a first embodiment of the invention.

[0013] FIGS. **11**A-C are perspective views of a seat cushion formed in accordance with a second embodiment of the invention.

[0014] FIGS. **12**A-C are perspective views of several embodiments of bags formed in accordance with embodiments of the invention.

[0015] FIG. **13** illustrates an embodiment of a lounge cover or beach mat in a rolled up configuration.

[0016] FIG. **14** illustrates an alternate rolled up configuration.

[0017] FIGS. 15 and 16 illustrate embodiments of a tote bag.

[0018] FIG. **17** illustrates an embodiment of a pillow incorporating a spacer mesh portion.

[0019] FIG. **18** illustrates an embodiment of a mattress topper incorporating a spacer mesh portion.

DETAILED DESCRIPTION

[0020] FIG. 1 shows different varieties of spacer mesh fabrics. Spacer mesh fabrics are typically composed of nylon or polyester and are available in a wide variety of thickness and size. As seen in FIG. 1,

[0021] FIG. **2** depicts how spacer mesh fabrics allow air and water to easily pass through.

Lounge Cover

[0022] FIGS. **3**A-B show a lounge cover that utilizes the spacer mesh fabrics. The core of the lounge cover may be formed of a thick layer, "coarse"-grade of spacer mesh, while the upper cover may be formed of a thin layer, fine mesh spacer mesh fabric for greater comfort. The bottom cover surface may be made of nylon fabric or other suitable material. In an embodiment, double binding may be used to secure the layers together. A storage pocket may be provided on one end of the cover.

Beach Mat

[0023] FIGS. **4**A-B show a beach mat that utilizes spacer mesh fabric. The core of the beach mat may be formed of a thick layer, "coarse"-grade of spacer mesh, while the upper cover may be formed of a thin layer, fine mesh spacer mesh fabric for greater comfort. The bottom surface of the mat may be made of nylon fabric or other suitable material. In an embodiment, double binding may be used to secure the layers together. A storage pocket may be provided on one end of the mat. As shown in FIGS. **5**A-B, the mat may be configured so that it can be folded up and secured in a folded configuration. One or more handles may be provided for easy carrying.

Portable Lounger

[0024] FIGS. **6**A-B show an embodiment of a portable lounger that utilizes spacer mesh fabric. The core of the portable lounger may be formed of a thick layer, "coarse"grade of spacer mesh, while the upper cover may be formed of a thin layer, fine mesh spacer mesh fabric for greater comfort. The bottom cover surface may be made of nylon fabric or other suitable material. In an embodiment, double binding may be used to secure the layers together. A storage pocket may be provided on one end of the cover. As shown in FIGS. **7**A-C, the lounger may further comprise a removable folding stand.

Pillow

[0025] FIGS. **8**A-B show a pillow that utilizes spacer mesh fabric. The core of the pillow may be comprised of multiple layers of spacer mesh fabric. This core may be formed by either folding one piece of spacer mesh fabric one or more times, or by binding, laminating, or otherwise connecting multiple separate layers of spacer mesh fabric together. The cover may be formed of a thin, fine-mesh layer of spacer mesh fabric. In an embodiment, double binding may be used to secure the layers together. Straps may be provided so that the pillow can be attached to a lounger or chair. FIGS. **9**A-B show a second embodiment of a pillow that further comprises a compartment for storing items such as beverages. A zipper may be used to close the compartment. In an embodiment, the compartment may be insulated.

Seat Cushion

[0026] FIGS. **10**A-C show a seat cushion utilizing spacer mesh fabrics. The core of the seat cushion may be formed of a thick layer, "coarse"-grade of spacer mesh, while the upper cover may be formed of a thin layer, fine mesh spacer mesh fabric for greater comfort. The bottom surface of the mat may be made of nylon fabric or other suitable material. In an embodiment, double binding may be used to secure the

layers together. A storage pocket may be provided on one end of the cushion. FIGS. **11**A-B show a second embodiment that also provides cushioning for the back of a seat.

Tote Bags

[0027] FIGS. **12**A-C show several embodiments of tote bags utilizing spacer mesh fabrics. The body of the bag may be formed using a thin, fine-mesh spacer mesh fabric, allowing for air and moisture to easily pass through the body of the bag. In an embodiment, double binding may be used to secure the sections of the bag together. Handles may be formed of nylon or polyester fabric or webbing or other suitable fabric.

[0028] The concepts described above may further be combined with other materials to enhance one or more desired features. For example, memory foam and/or microfiber may be used in combination with layers of spacer mesh in most if not all of the embodiments described above to take advantage of the different characteristics of the materials in combination with each other. It will be appreciated that other styles and sizes of bags may be formed from similar materials using similar principles of construction.

[0029] FIG. **13** illustrates an embodiment of a lounge cover or beach mat in a rolled up configuration. In this embodiment, snaps are provided in the handles to maintain the rolled up configuration.

[0030] FIG. **14** illustrates an alternate rolled up configuration in which a single fastener is used and handles are omitted.

[0031] FIGS. 15 and 16 illustrate embodiments of a tote bag similar to the embodiments of FIGS. 12A-C.

[0032] FIG. 17 illustrates a pillow using a spacer mesh central portion. The core of the pillow may be comprised of multiple layers of spacer mesh fabric. This core may be formed by either folding one piece of spacer mesh fabric one or more times, or by binding, laminating, or otherwise connecting multiple separate layers of spacer mesh fabric together. As with other embodiments, the core may have some portions having a coarse mesh while other portions have a fine mesh. In an embodiment, the fine mesh is in an outer portion while the coarse mesh is in an inner portion. [0033] The pillow further has an outer covering that is made from a fabric, for example, cotton fabric. The outer covering may include an opening to allow removal and/or insertion of the spacer mesh portion. In an embodiment, the outer covering includes an interior space, for example between inner and outer surfaces of the covering, that may be filled with cushioning material, for example, polyfill, down, synthetic down, or other materials such as are used in pillows.

[0034] In an embodiment, the opening of the outer covering may be closable by way of fasteners such as buttons, hook and loop fasteners, zipper(s), or the like.

[0035] FIG. **18** is a mattress topper having construction similar to that of the pillow in FIG. **17**. Specifically, the mattress topper may include an interior portion of spacer mesh construction and an outer portion of a filled fabric construction. As shown in the FIGURE, the mattress topper may include quilting to stabilize the spacer mesh with respect to the cover. The topper may be in a duvet-like configuration in which the spacer mesh portion may be removable from the fabric covering. In this approach, appropriate fasteners may be provided to allow for opening the covering for removal and/or insertion of the spacer mesh portion.

[0036] Aspects of the embodiments may include improved comfort, resilience over time, breathability and/or user cooling, machine washability, and dynamic fatigue performance that may be superior to other approaches.

[0037] As will be appreciated, other meshes and other types of fabrics may find application consistent with the principles described herein in each of the above-described embodiments.

[0038] Although the inventions have been described in detail for the purpose of illustration based on what are currently considered to be the most practical and preferred embodiments, it is to be understood that such detail is solely for that purpose and that the inventions are not limited to the disclosed embodiments, but, on the contrary, are intended to cover modifications and equivalent arrangements that are within the spirit and scope of the described embodiments. For example, it is to be understood that the present invention contemplates that, to the extent possible, one or more features of any embodiment can be combined with one or more features of any other embodiment.

What is claimed is:

1. A cushion comprising:

a spacer mesh fabric core;

an outer cover, comprising a woven fabric and configured to contain a cushioning material, the outer cover configured and arranged to substantially enclose the spacer mesh fabric core.

2. A cushion as in claim **1**, wherein the cushioning material comprises a polyfill material.

3. A cushion as in claim **1**, wherein an opening of the outer cover comprises a fastening member, selectively fastenable to alternately allow removal of the core or prevent removal of the core.

4. A cushion as in claim **1**, wherein the core comprises a mattress and the outer cover comprises a mattress topper.

5. A cushion as in claim **4**, wherein the mattress topper is fastened to the mattress.

6. A cushion as in claim **5**, wherein the mattress topper is removably fastened to the mattress.

7. A cushion as in claim 5, wherein the mattress topper is sewn to the mattress.

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