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Nguyen

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(54) **MATTRESS ASSEMBLY, SUBASSEMBLY, OR COMPONENTS THEREOF, AND METHOD OF MAKING SAME**

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A47C 27/00 (2006.01)
A47C 27/15 (2006.01)

(52) **U.S. Cl.**
CPC ***A47C 27/002*** (2013.01); ***A47C 27/15*** (2013.01)

(58) **Field of Classification Search**
CPC A47C 27/002; A47C 27/15; A47C 31/105; A47C 27/056; A47C 27/003; A47G 9/0246; A47G 9/04; A47G 9/0238; A47G 9/02
See application file for complete search history.

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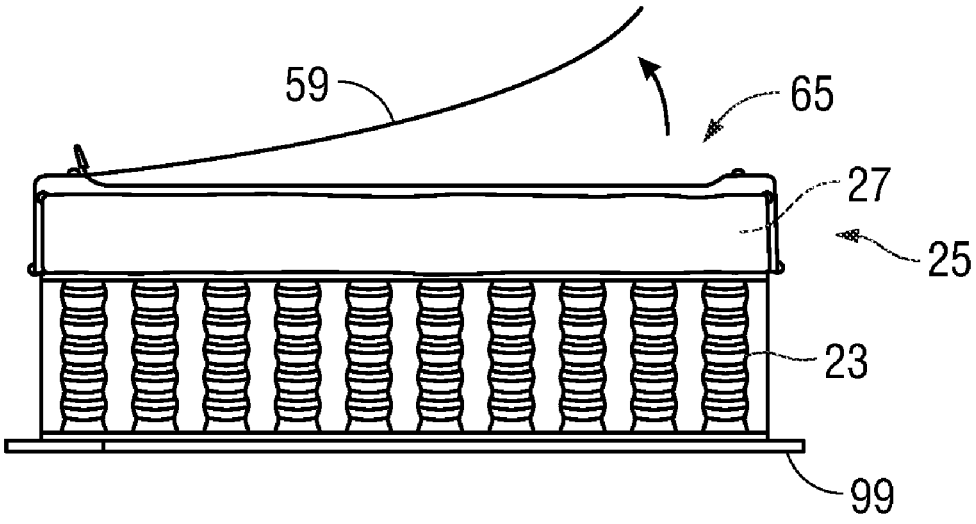
(57) **ABSTRACT**

Described herein is a method of forming a mattress (and product thereof) including providing a cover-top panel compact that includes a top panel having one or more filler layers and a drape that is affixed to the top panel at a first margin. The method entails detaching the drape at a second margin and inverting the drape to engage a supporting core, thereby completing the mattress assembly.

30 Claims, 10 Drawing Sheets



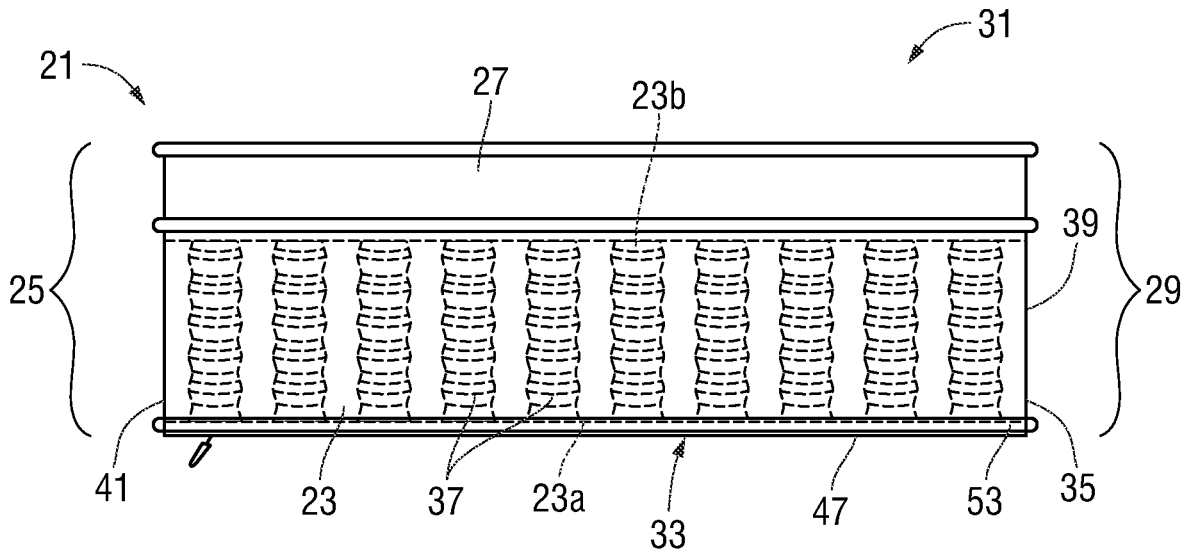


FIG. 1

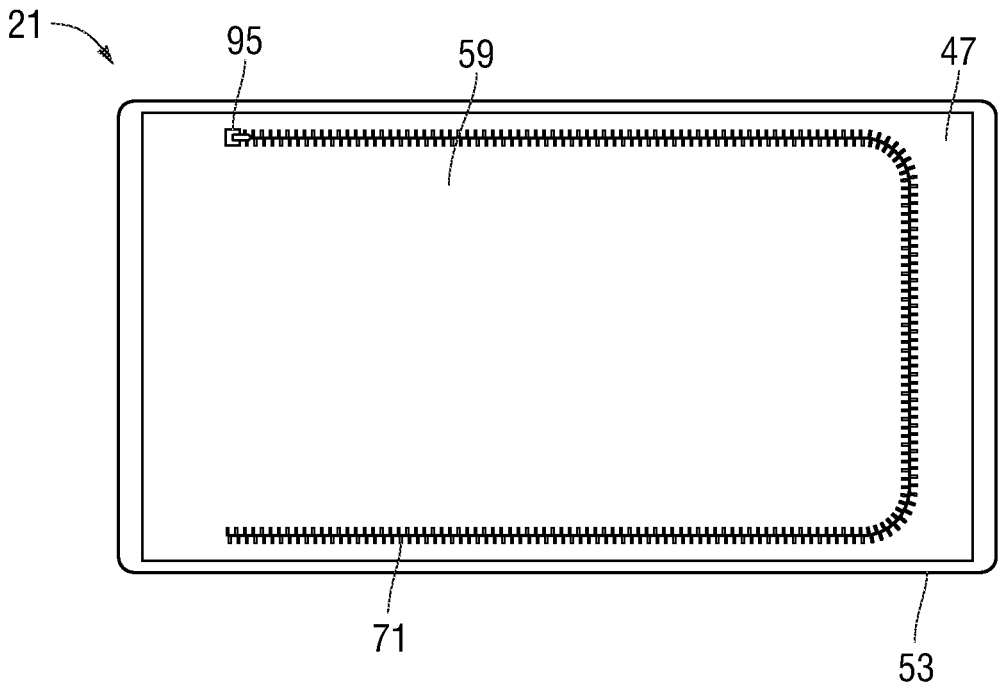


FIG. 2

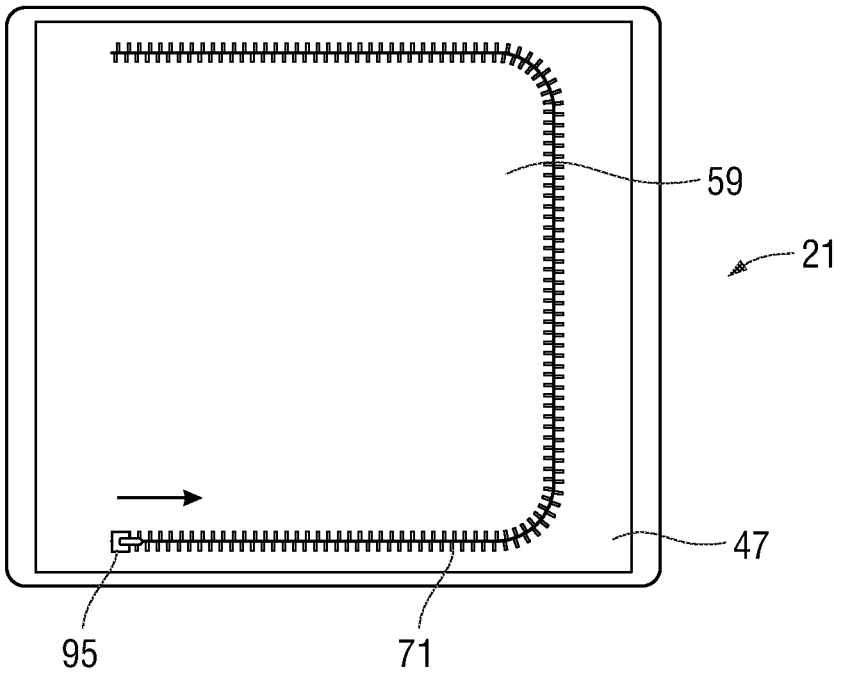


FIG. 2A

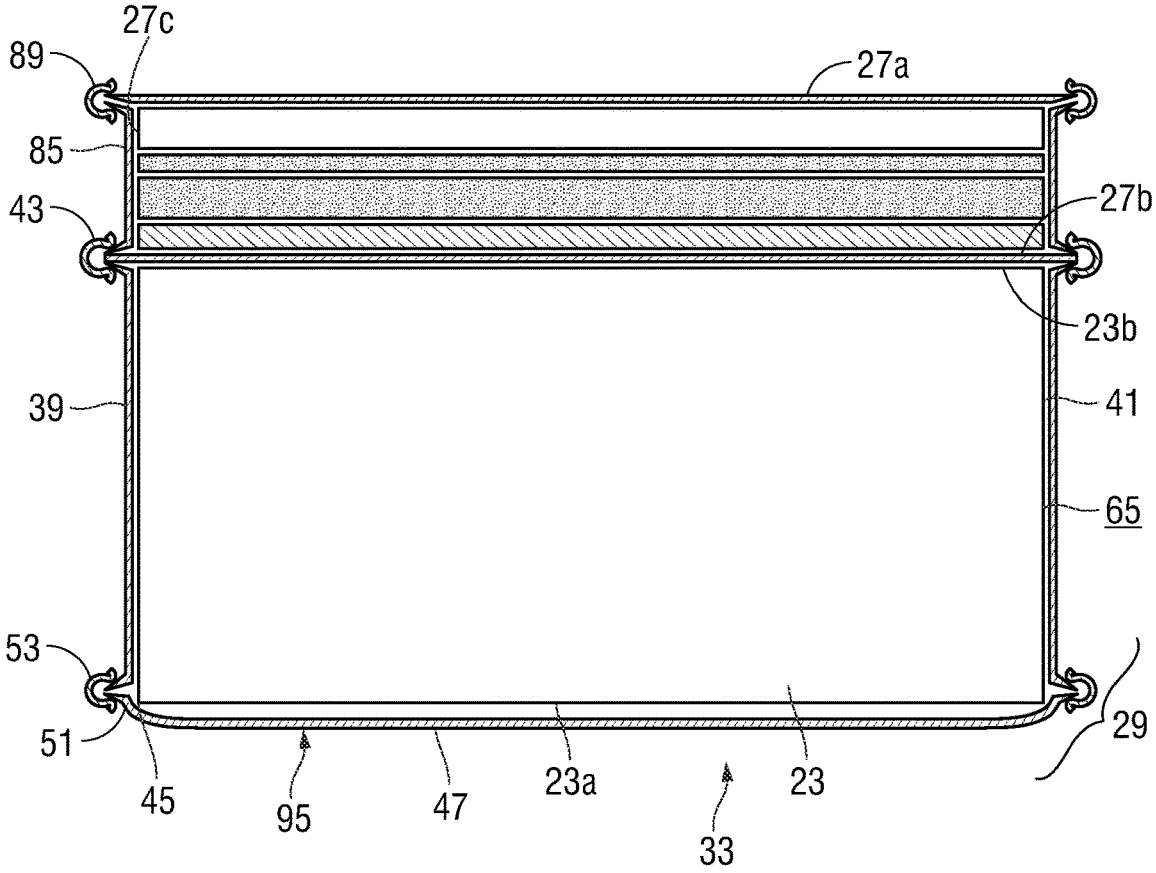

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FIG. 3

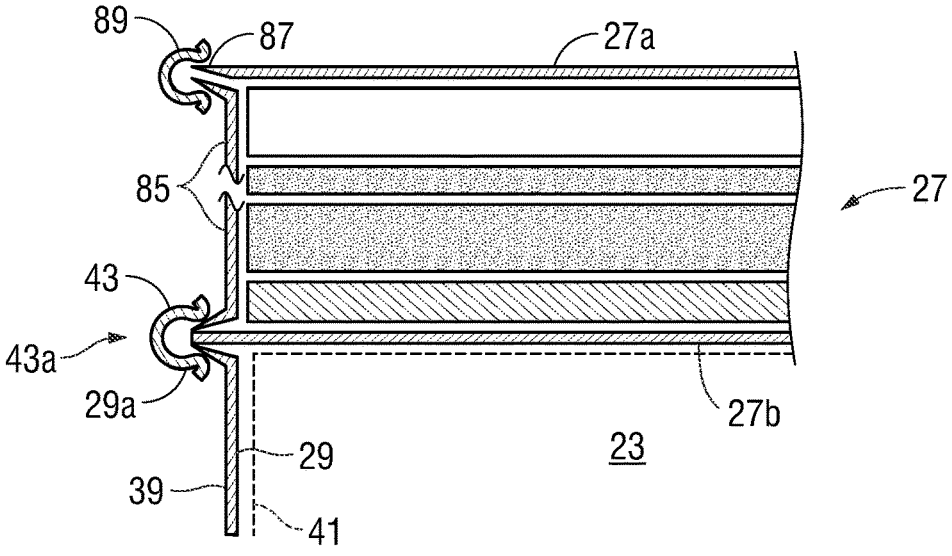
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FIG. 3A

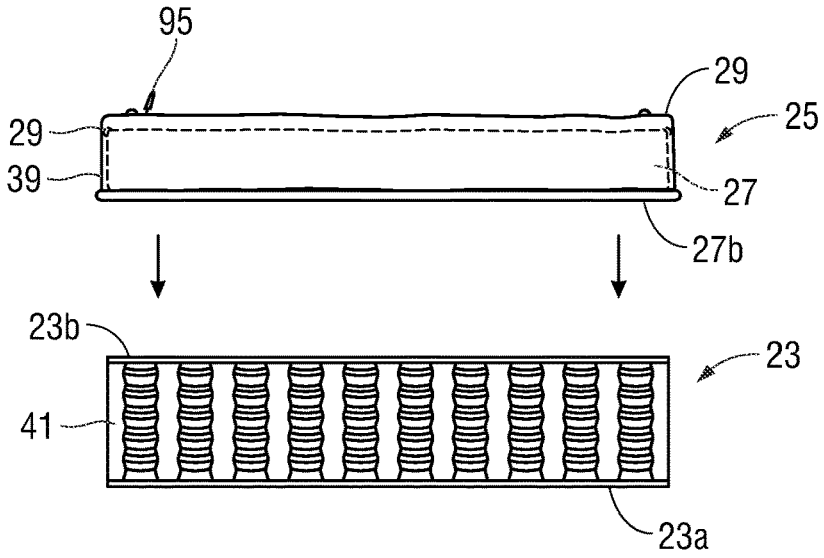

FIG. 4A

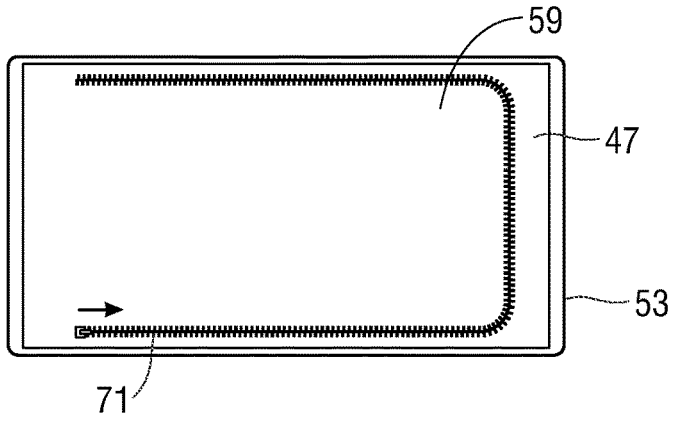

FIG. 4B

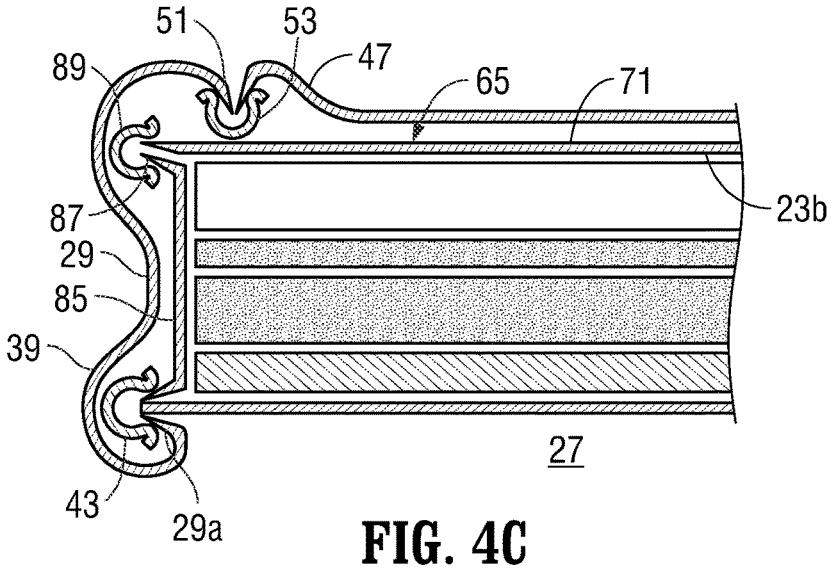

FIG. 4C

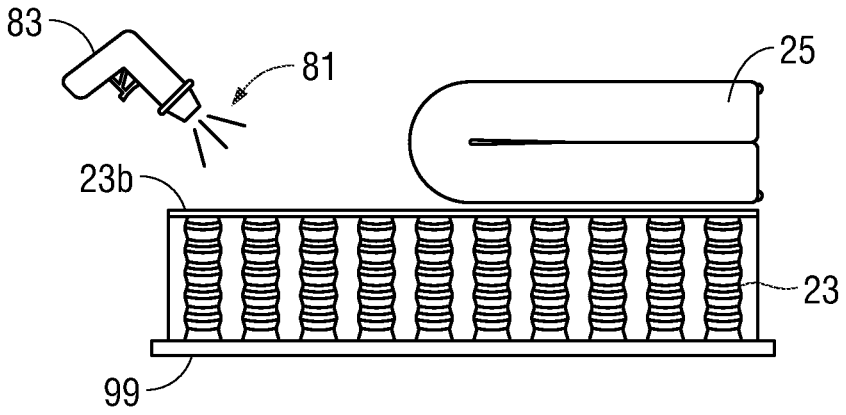

FIG. 5

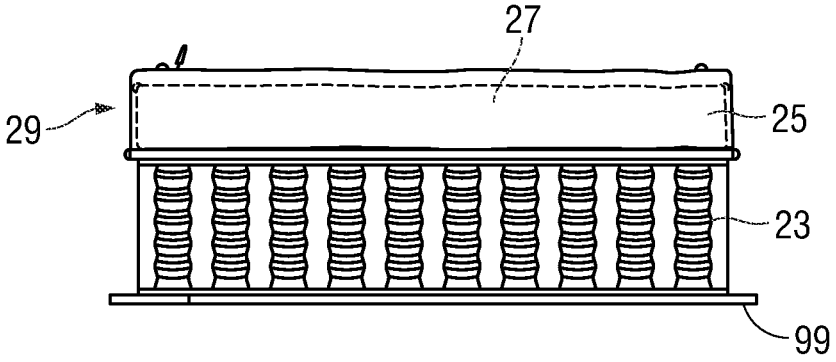

FIG. 6

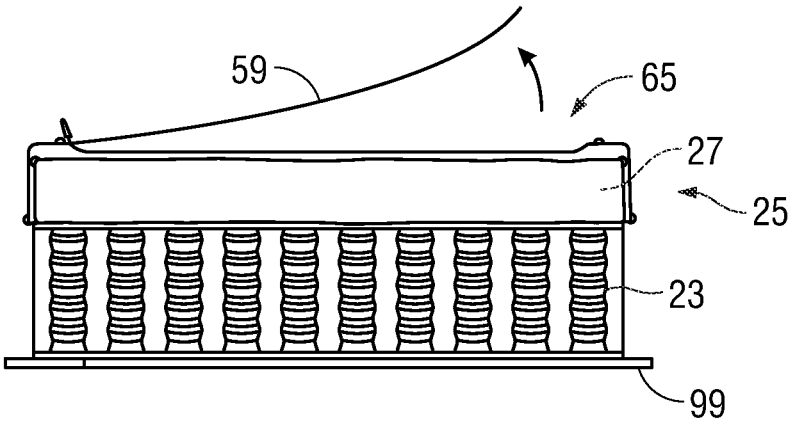

FIG. 7A

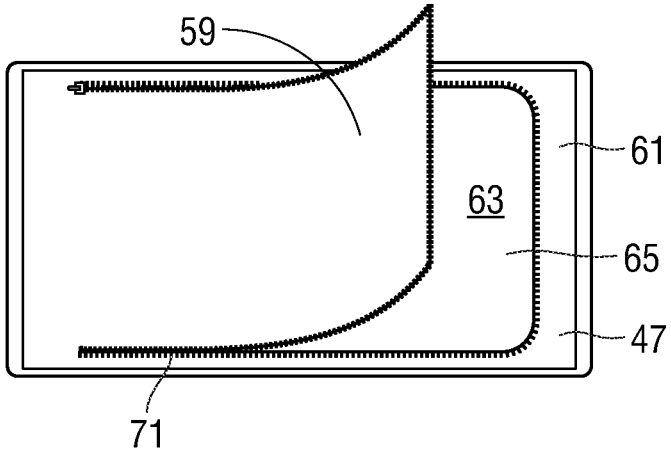

FIG. 7B

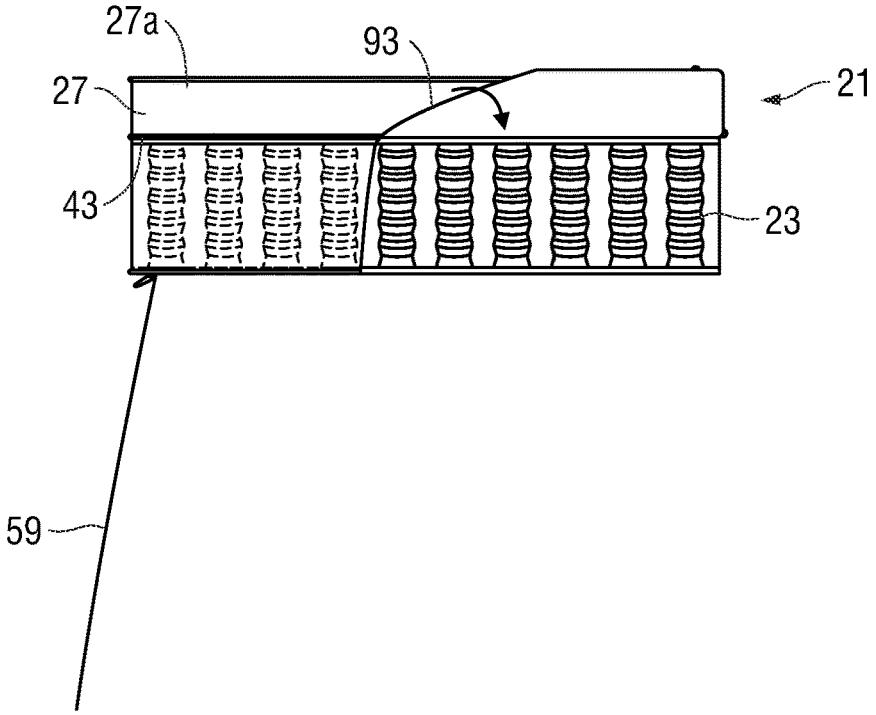

FIG. 8

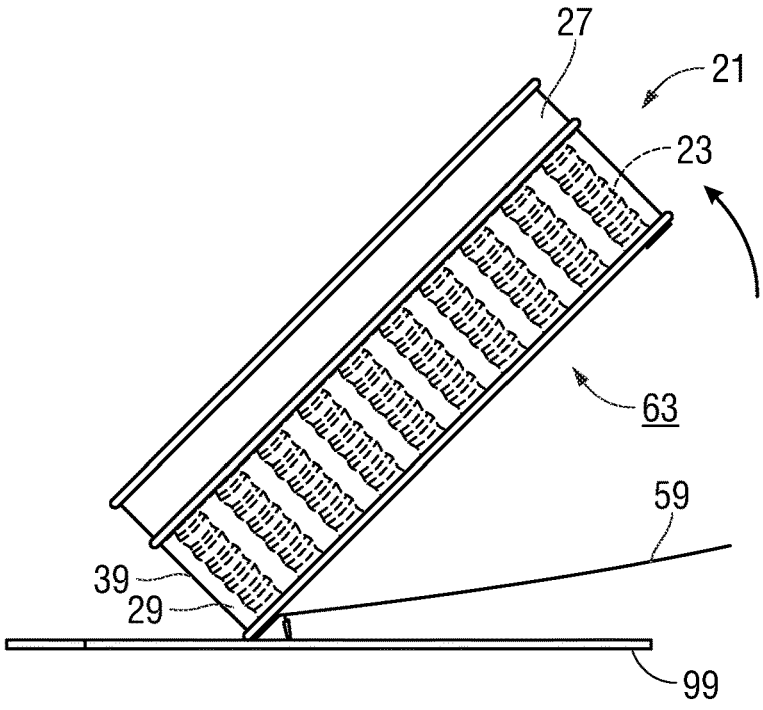

FIG. 9

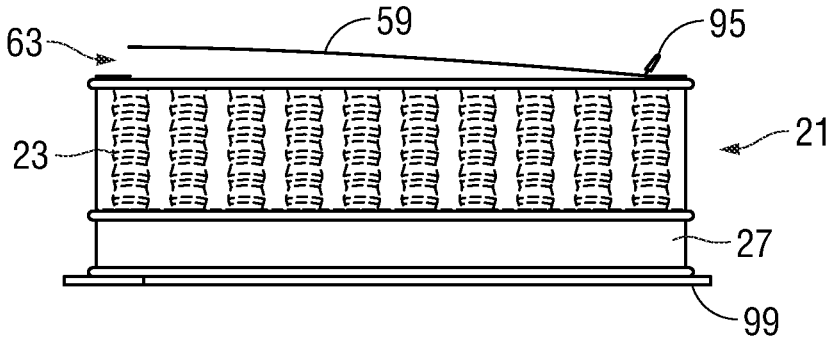

FIG. 10

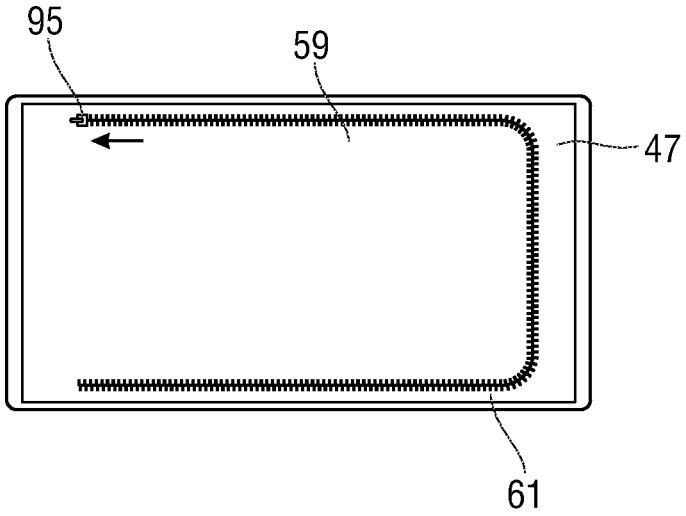

FIG. 11

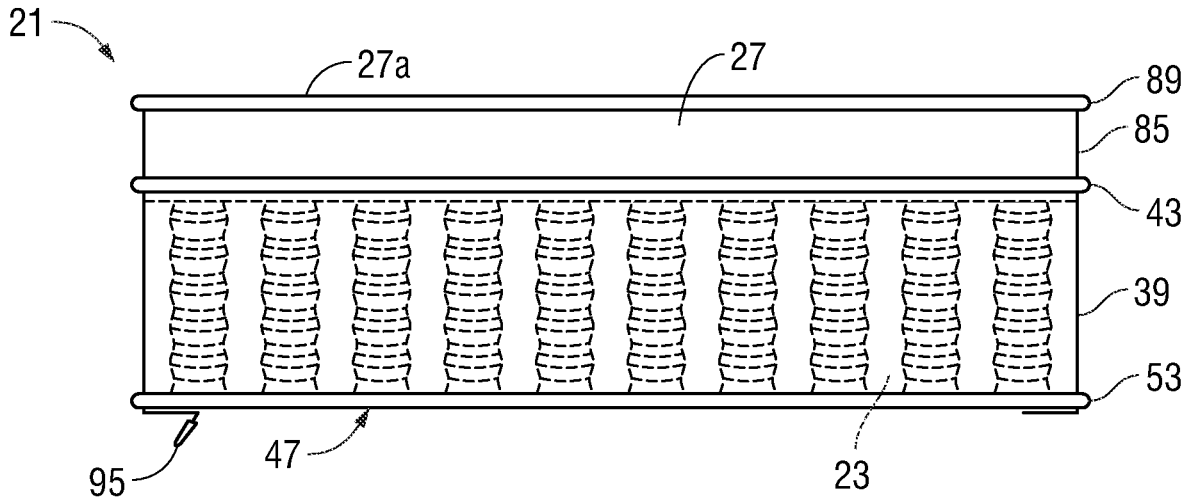
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FIG. 12

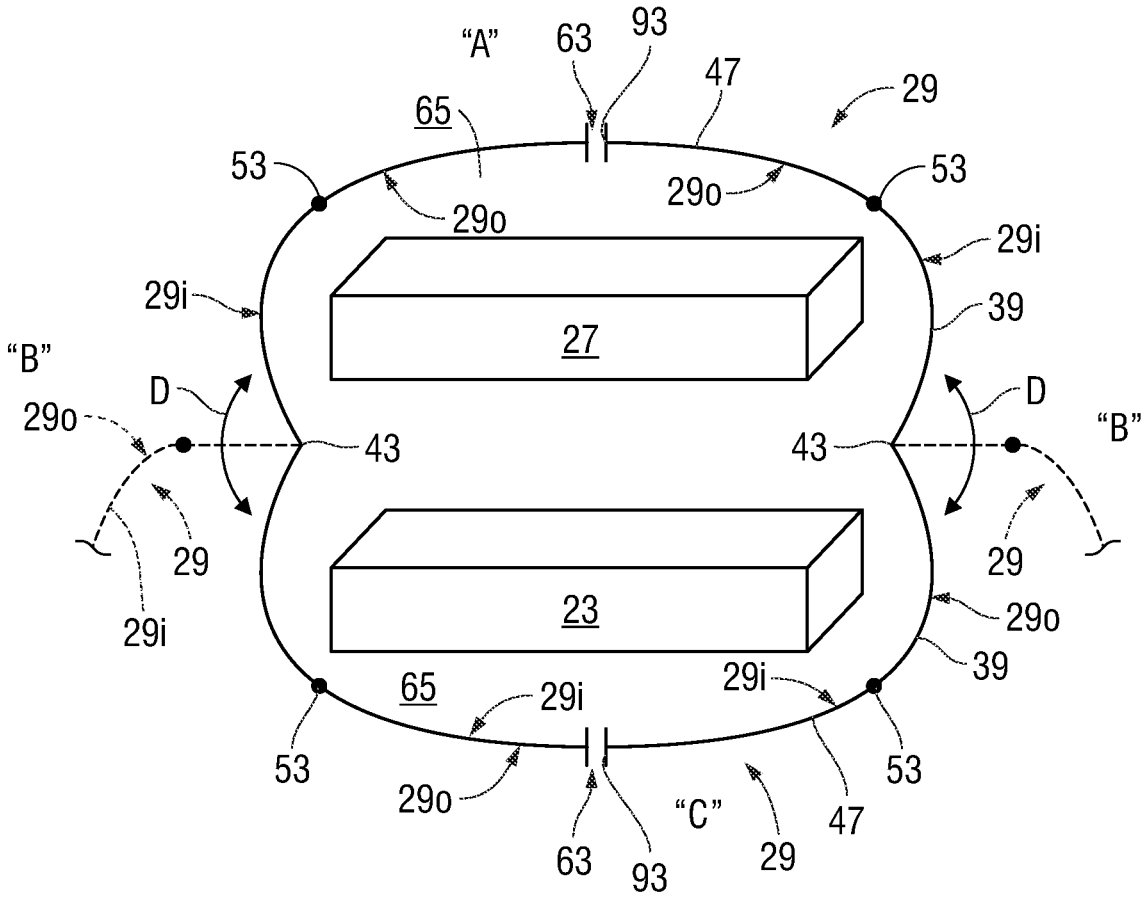
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FIG. 13

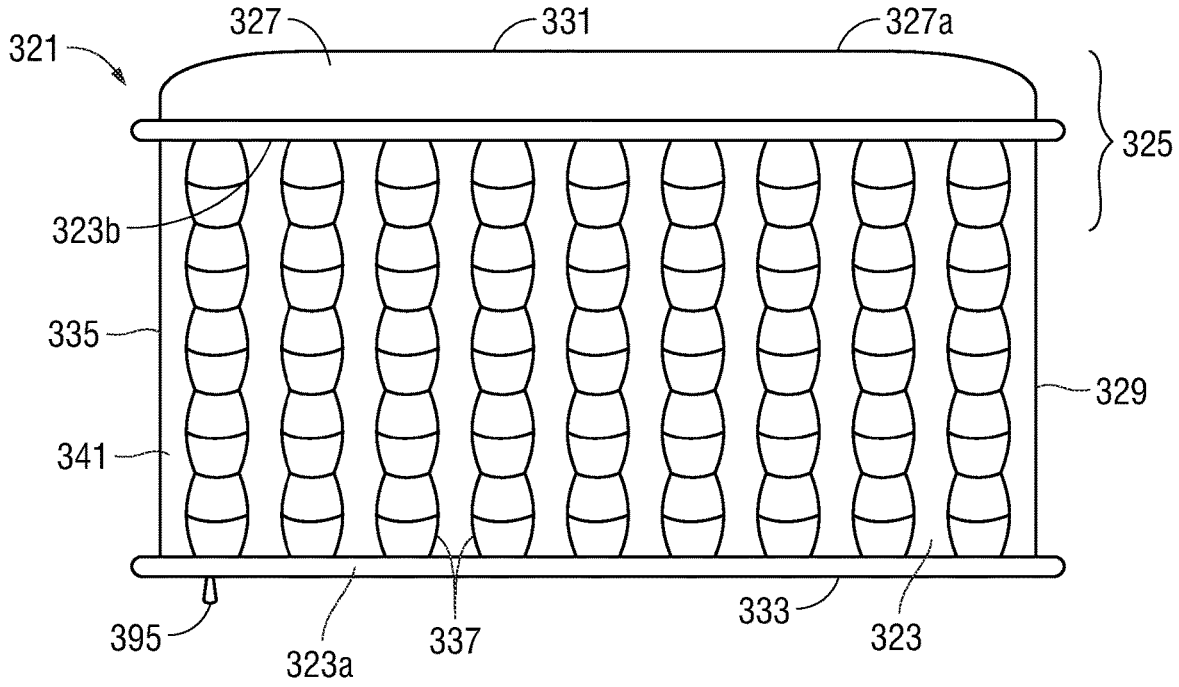

FIG. 14A

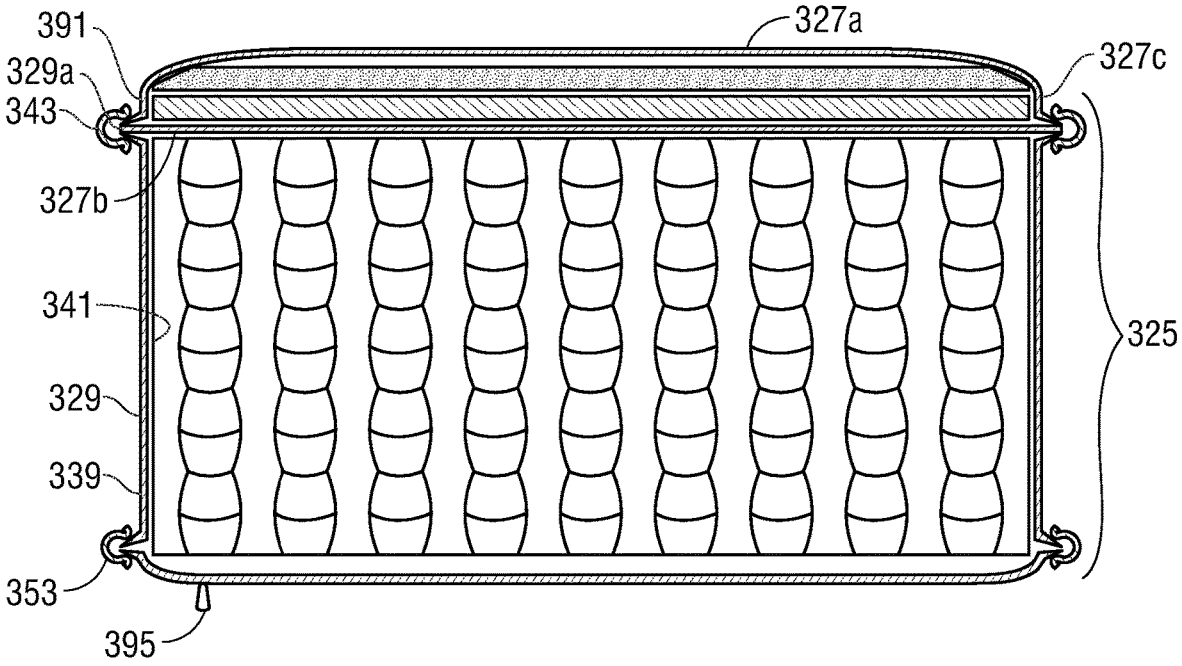

FIG. 14B

MATTRESS ASSEMBLY, SUBASSEMBLY, OR COMPONENTS THEREOF, AND METHOD OF MAKING SAME

CROSS-REFERENCE TO RELATED APPLICATION

The present application claims the benefit of U.S. Provisional Patent Application No. 63/047,105, filed on Jul. 1, 2020, entitled "MATTRESS ASSEMBLY AND METHOD OF MAKING SAME", the entirety of which is incorporated herein by reference.

FIELD

The present disclosure relates generally to a method of assembling a multi-component textile-supplemented furnishing construct, as well as to the finished product and structural components thereof. The present disclosure is particularly applicable to the assembly of a furniture construct that incorporates a textile component, such as a mattress or mattress assembly.

BACKGROUND

In the field of manufacturing furnishing constructs such as furniture and more particularly, mattresses and cushioned and/or material-layered assemblies, certain operations and techniques are labor-extensive and/or require skilled workers. Other operations and techniques which have traditionally been performed manually, may now be performed, in the alternative, with the aid of specialized machines. These machines can be complex, however, and usually require operation by a skilled operator. Examples include prior art techniques of closing layered edges by applying a tape edge. See e.g., the techniques discussed in U.S. Pat. Nos. 7,647,876, 6,994,043, and 5,432,964.

There is a need for improvements in the design (and assembly) of such furnishing constructs, including furniture and mattresses, which directly or indirectly, increases the efficiency, productivity, cost, ease of manufacture, assembly, shipping, storage, and maintenance, as well as product quality and appeal.

BRIEF SUMMARY

The present disclosure describes methods, techniques, products, systems/apparatus, and assemblies that present improvements and enhancement to the field of furnishings, furniture, textile, and their manufacture, and the like. These improvements are particularly applicable to textile-supplemented or supported furniture and furnishings and, more particularly, to bedding products including mattresses, pillowtop assemblies, and the like.

The present disclosure describes, among other concepts, a method of forming a mattress including providing a cover-top panel compact that includes a top panel having one or more filler layers and a drape that is affixed to the top panel at a first margin. The method entails inverting the drape to engage a supporting core, thereby completing the mattress assembly. In one variation, the method includes first securing the drape about the top panel and/or detaching the drape at a second margin. In another variation, the detaching step includes opening the drape to detach the second margin and/or fastening the second margin to enclose the core. In yet another variation, the detaching step is preceded by detachably fastening the drape at the second margin to enclose or cover the top panel.

The present disclosure describes a mattress assembly including a supporting core and a subassembly including a plurality of filler layers secured within a layered cushion panel and a drape extending from the panel. The subassembly may be called a cover assembly, a core cover-top panel compact, a top panel assembly, a fitted cushion assembly, and the like. The subassembly further includes a drape with a skirt secured about sidewalls of the core. Removed from the subassembly, the drape preferably has a continuous first margin and a continuous second margin, and all-around (continuous) sidewalls extending therebetween. The continuous margins are, of course, preferably rectangular so as to accommodate a rectangular core and top panels. The first margin is preferably enclosed by affixing at an interface with the cushioned panel. The second margin is sometimes referred to as a free or detachable margin, and is closeable above the cushion panel (e.g., by using a zipper to unite the margin).

The present disclosure also describes a method of forming a mattress including providing a top panel or cover assembly including a top panel having one or more filler layers and a drape fixed to the top panel, and juxtaposing the cover assembly with a supporting core having a topside, an underside, and sidewalls therebetween. The method further includes extending the drape to integrate the core with the cover assembly to form a mattress. Alternatively, the method may include inverting the drape to integrate the core with the top panel to form a mattress. In one variation, the method specifically entails opening the drape and then inverting the drape, while fixed to the top panel, such that the drape receives the core. In further variations, the method also includes closing the drape to encase the core. In still further variations, a cover assembly is provided having a core and a drape fixed thereto, and the drape is extended or inverted to integrate a top panel, to form a mattress assembly. Preferably, the drape is situated, initially, so as to enwrap sidewalls of the top panel (e.g., by way of a fitted border skirt), but is removable therefrom, and then, situated about sidewalls of the core to enwrap the sidewalls of the core.

The present disclosure also pertains to a mattress assembly having a support core mattress component including a core having a topside, underside, and all-around side construction therebetween and a top panel or pillowtop assembly including a plurality of filler layers secured within a layered cushion panel. The first mattress components further include a drape having a fixed margin secured to that first component, and a free margin secured to the second of the mattress components. In further variations, the drape is invertible and/or closeable to receive the second mattress component.

The present disclosure also pertains to a mattress assembly including a top panel subassembly or cover assembly for engagement with a support core to complete a mattress assembly. The top panel subassembly includes a top panel containing a plurality of filler layers, and has a topside, an underside, and an all-around cover facing extending between a perimeter of the topside and a perimeter of the underside. The subassembly also includes a drape extending from the panel proximate the perimeter of the underside toward the topside and detachably fastened thereabout.

The present disclosure also pertains to a method of forming a mattress including providing a cover-cushion compact. The compact includes a top panel having one or more filler layers and a detachably fastened drape affixed to the top panel. The method entails detachably fastening free

sections of the drape to enclose the drape about the top panel, and detaching the free sections to open the drape. The method then includes inverting the drape such that the free sections engage a supporting core, thereby completing the mattress assembly. Further, the step of providing may include providing a drape having a first end defined by a first margin and a second end defined by a second margin, the drape having continuous sidewalls extending between the margins. Thus, the drape is situated such that the first margin enwraps the top panel and is second margin is closed such that the drape encloses at least a topside and sidewalls of the top panel.

In another aspect, a method is described for forming a mattress including providing a cover-cushion compact. The compact includes a top panel having one or more filler layers and a drape affixed to the top panel about a first margin and secured outboard of the first margin about the top panel. The method further includes disengaging the drape from about the panel, and while remaining affixed to the top panel about a first margin, extending the drape to engage a supporting core, thereby completing the mattress assembly. Engaging a core may include securing the drape about the core or further, encasing the core with the compact. The method may also entail detachably fastening sections of the drape, outboard of said first margin, to enclose the drape about the top panel and/or detaching the fastening sections to open the drape. Extending the drape may include inverting the drape to engage the core and, further, securing the drape about the core. Notably, the first margin may be affixed to the top panel at a fixed edge and, thus, inverting may include pivoting the drape about the fixed edge. Inverting may further include encasing the core and/or receiving the core in a compartment defined by the compact.

In another aspect, an unassembled mattress system is described including a support core having a topside, underside, and all-around side construction therebetween and a cover assembly including a plurality of filler layers and drape. The cover assembly is secured within a layered cushion panel and the drape has a fixed margin secured to the panel and a second margin secured about the panel. The cover assembly is alignable with the core such that the drape is detachable at the second margin and movable about the first margin to secure the core.

In another aspect, a method of assembling a mattress is described having a cover assembly including a plurality of filler layers secured within a layered cushion panel and a drape having a fixed margin secured to the panel and a second margin secured about the panel. The method further includes aligning the cover assembly with a supporting core and deploying the drape to integrate the core with the cover assembly. Deploying includes disengaging a margin of the drape from about the panel and moving the drape to engage the core, thereby completing the mattress assembly. Deploying may further include inverting the drape so as to engage the core and/or engaging the core with the drape to receive the core in a compartment defined, at least partially, by the cover assembly. Furthermore, the drape may be closed about the panel and deploying the drape is preceded by opening the drape. As well, deploying the drape may be followed by closing the drape about the core.

In certain preferred applications, the drape includes a border skirt, and providing the compact includes supporting the border skirt about the top panel and inverting includes pivoting the border skirt toward the core. said inverting includes pivoting said border skirt to said core and supporting said border skirt about the core. Furthermore, the top panel may include a topside and sidewalls, and providing the compact may include situating the drape about the panel such that the compact covers the sidewalls and topside of the top panel. The compact may be affixed to the top panel about a first tape edge and the top panel further includes a second tape edge and the drape includes a third tape edge, and, then, engaging the core is preceded by pivoting the compact about the first tape edge toward the core so as to reveal the second tape edge, and dispose the third tape edge about a perimeter of the core. The method may further provide a drape having a first end defined by the first margin and a second end defined by a second margin, and the drape has continuous sidewalls extending between the margins. In this case, the drape is situated such that the first margin enwraps the top panel and the second margin is closed such that the drape encloses at least a topside and sidewalls of the top panel. Next, engaging the core may include pivoting the drape away from the top panel and toward and about the core to substantially encase the core. Further, the drape and the panel together may include at least two tape edges, such that the method includes covering (during detachably fastening) the at least two tape edges, and uncovering the tape edges during engaging the core. Alternatively, the drape and the panel together may include at least three tape edges, and the detachably fastening step includes pivoting the drape toward the panel such that at least two of the tape edges are covered. Further, each of the drape and the top panel may include at least one tape edge, such that the detachably fastening step includes covering the at least one tape edges, and engaging the core is preceded by uncovering the at least one tape edges by moving the drape about the fixed margin and away from the top panel. Further yet, the drape and the top panel share at least a first tape edge and each of the drape and top panel further includes another tape edge, such the detachably fastening step includes covering these tape edges and engaging the core is preceded by uncovering these tape edges by moving the drape about the fixed margin and away from the top panel.

BRIEF DESCRIPTION OF THE DRAWINGS

So that the manner in which the features and advantages of the system, apparatus, products, and/or methods so of the present disclosure may be understood in more detail, a more particular description briefly summarized above may be had by reference to specific implementation of the method and mattress product that are illustrated in the appended drawings. It is to be noted, however, that the drawings illustrate specific implementations for illustration and are therefore not to be considered limiting of the disclosed concepts as it may include other, effective application as well. It is noted, in particular, that the exemplary applications described herein describe certain top panel or pillowtop assemblies of filler layers and quilted panels, and a supporting core of a general construction and employing generic support element described as spring, foam, or combinations thereof. These specific constructions and more detailed variations thereof are not limiting of the concepts. The concepts described herein contemplate the use of most known mattress constructions and components, noting as well that certain applications may employ less than all of the different aspects described below.

FIG. **1** is a simplified illustration in elevation view of a complete, finished mattress according to the present description;

FIG. **2** is a bottom view of the mattress in FIG. **1**;

FIG. **2**A is a bottom view of an alternate mattress according to the present description;

FIG. **3** is a cross-sectional view of the mattress in FIG. **1**;

FIG. **3**A is a simplified and exaggerated detail cross-sectional view of a multi-component interface(s) in the mattress of FIG. **3**;

FIG. **4**A is a simplified illustration in elevation view of a cover assembly and a supporting core which form the starting components of a method of forming or assembling a mattress assembly or mattress, according to the present description;

FIG. **4**B is a simplified and exaggerated detail cross-sectional view of the cover assembly in FIG. **4**A;

FIG. **4**C is a simplified and exaggerated detail, sectional cut-away view of the top panel section in FIG. **3**;

FIGS. **5** and **6** are elevation views illustrating steps during an alignment stage of the method of assembling the mattress;

FIGS. **7**A and **7**B are elevation and top views, respectively, illustrating initial steps in disengaging or deploying a drape of the cover assembly, in the method of assembling the mattress;

FIG. **8** is an elevation view illustrating continuing steps in deploying the drape and receiving the core, in the method of assembling the mattress;

FIG. **9** and are elevation views illustrating continuing steps in securing the cover assembly and core, in the method of assembling the mattress;

FIG. **10** is an elevation view of the mattress assembly in an upside-down position, in the method of assembling the mattress;

FIG. **11** is a top view of the mattress assembly after securing the drape, in the method of assembling the mattress;

FIG. **12** is an elevation view of the mattress assembly in a final disposition, in the method of assembling the mattress;

FIG. **13** is a simplified diagram illustrating techniques in deploying or disengaging a drape of a cover assembly on or from a core, in a mattress assembly according to the present description;

FIG. **14**A is a simplified illustration in elevation view of an alternate complete, finished mattress according to the present description, with a bottom portion shown in partial cross-sectional cut-out view to reveal an interior; and

FIG. **14**B is a further cross-sectional view of the mattress in FIG. **14**A with remaining portions shown in cross-sectional view.

A conventional mattress, to which the present description of enhancements and improvements are applicable, generally includes a support core, padding or pillowtop section (referred to herein as "top panel" or "top panel assembly"), and a cover assembly. The padding may be provided atop and beneath the core, but for present purposes and so as to facilitate description, only a top padding may be specified. The top panel may comprise a plurality of layers or components, including a number of cushion layers, quilted panels, fabrics, and insulators, as generally known in the art (sometimes referred to herein, collectively as "fillers" or "layers"). Preferred or common filler materials include foam, latex, micro-pocket, or some combination of these materials. The enhancements or improvements described herein are, of course, well suited to accommodate common fillers and filler accommodations generally known in the art.

The cover assembly is typically equipped with an annular border skirt (usually fabric, but sometimes foam or foam and fabric) attached to, and extendible downward (when fitted) from, the perimeter (or thereabout) of the panel. For present purposes, the term annular is used to refer to a body defined by opposite ends or margins and walls or sidewalls extending therebetween having a continuous transverse dimension transverse. Thus, the annular object is not limited by a circular or circumferential, or diametric dimension or property. The border skirt is fitted over all-around sidewalls of the core and assists, in some applications, to hold the top panel in place relative to the core. The border skirt may be described, in this respect, as being enwrapped about the sidewall of the top panel. As used herein, the term "sidewall" refers to the all-around vertical, construction provided between a topside and underside of the core and presented and visible outward of the core. The "sidewall" (or "side" or "side construction") may or may not present an actual planar surface but in the finished mattress, the sidewall supports a facing, fabric, border, skirt, or other solid surface. In some instances, the core will, initially, have less than a full or substantial covering the support elements (e.g., spring or foam) about the side construction, but will have sufficient structure to later support a border skirt or some other covering. Similarly, the core may be describe as having a "topside" and "underside", which are outward facing constructions that may or may not include facing, fabric, border, skirt, or a solid, continuous or uniform surface. Preferably, the underside and topside are provided with a fabric that cover a significant portion of an arrangement of support elements such as spring, foam, some combination of spring and foam, and the like.

The border skirt also presents an aesthetically appropriate outer covering for the core (when fitted) and, thereby, the mattress. The border skirt preferably matches the width of the core's sidewall. Various fasteners may be employed for securing the free edges of the border skirt to secure the skirt about the sidewalls and preferably seal the core and mattress.

Typically, commercially-preferred support cores employ spring elements, foam element(s), or a combination of both to impart the structural integrity, softness, and comfort properties desired. Core constructions suited for incorporation with the mattress of the present description may be of any such construction, as generally known and commonly used in the art. To facilitate the present description, a core employing primarily spring elements is referred to and depicted.

Referring now to FIGS. **1**-**3**, a mattress **21** in accordance with the present description is an integrated structure that may include or consist of a core **23** constructed of an array of supporting elements **37** (e.g., springs, foam structures, and the like, and combinations thereof) and a cover or cushion assembly **25** integrated (e.g. attached, adjoined, encompassing, encasing, or enclosing) with the core **23**. The core **23** is further described herein as having a bottom surface **23***a*, an opposite-facing top side or top surface **23***b*, and all-around sidewalls or side construction **41** extending vertically therebetween. In some designs or configurations, the core bottom face **23***a* also forms at least a part, if not much of the finished mattress assembly's underside **33**.

The cover assembly **25** is described as having two components or sections: a pillowtop or top panel **27** and a drape **29** preferably affixed to the top panel **27** about a perimeter (or thereabout) of the panel **27**. As the mattress **21** is preferably configured in fitted and finished fashion, the top panel **27** is supported atop the core **23** and aligned therewith, such that the cover assembly **25** and core **23** form a rectangular prism body (or cuboid) with a top face **31**, a bottom face **33** (or underside **33**), and four sidewalls **35**. To facilitate description, the top panel **27** is referred to as having a panel top **27***a*, an opposite-facing panel bottom **27***b*, and all-around sidewalls **27***c* extending therebetween.

In a preferred, finished configuration, the cover assembly **25** generally covers and obscure, from view, all or much of the core **23**, although optional appurtenances and decorative pieces or sections may also be used to effect design and structural considerations. Appurtenances and the like notwithstanding, the mattress **21** or mattress assembly **21** is referred to, in the present description, as a two-piece mattress **21** with a top panel **27** that includes a subassembly of filler materials and a border skirt **39** extendable therefrom. The cover assembly **25** and core **23** are deemed integrated when the cover assembly **25** is secured to or about the core **23** to provide an outer structural cover to the mattress **23**. In further variations, as described below and illustrated in FIG. **1**, the cover assembly **25** (or a section or part thereof) encompasses, subsumes, or encases the core **23**, preferably within a defined compartment.

Referring specifically to the cross-sectional view and illustration of the cover assembly **25** in FIGS. **3** and **3**A, the drape **29** has a fixed end or margin **29***a* affixed near or about the (bottom) perimeter of the top panel **27**. In this design, the fixed margin **29***a* is closed and extends about and tracks (horizontal edge) the perimeter of the generally rectangular bottom **27***b* of the top panel **27**. The top panel **27** is actually situated within the opening otherwise defined by the fixed margin **29***a* of the drape, thereby closing the drape **29**. See also FIG. **1**. The fitted drape **29** extends downward from the top panel **27** and along vertically-extending sidewall construction **41** (sidewalls **41**) of the core **23**. The fixed margin **29***a* may be attached or affixed to a flange or tape edge construction **43***a* (or, simply tape edge **43**), or attached inboard of the perimeter and attached by sewing, staple, and other conventional means. The drape **29** extends past a bottom perimeter edge **45** of the core **23**, and preferably tucks inwardly from there to fit the underside **33** of the core **23**.

The tape edge **43***a* also closes the bottom edge of a vertical facing or gusset **85**. As shown in FIG. **3**A, the gusset **85** covers the edges of multiple filler layers and panels that are contained within the top panel **27**. At an interface **87** of a top margin of the gusset **85** and the perimeter of panel top **27***a*, another tape edge **89** is employed to close the perimeter edges. While the gusset **85**, panel top **27***a*, and tape edge **89** together impart structural integrity on the multi-component construction, these components also present a decorative or finished facing for the finished mattress assembly **21**. (In other designs, the interface is replaced by cover material extending (with or without a seam or reinforcement) from above the panel and downward the tape edge construction **43***a*, thereby eliminating the taper edge **87**).

The drape **29** has two principal sections: the border skirt **39** and an underside cover **47**. As shown, the border skirt **39** (or simply, border **39**) is preferably an all-around (closed) band that extends vertically along and beyond, the core sidewalls **41** and thereby, presents the side faces of the finished mattress **21**. Accordingly, the border skirt **39** is preferably made of a decorative fabric, or foam, or a foam-fabric hybrid. The border skirt **39** is also dimensioned to match those of the mattress core **23** and, as necessary, imparted with sufficient slack and elasticity (e.g., at the bottom margin or interface with the underside cover **47**) to ease assembly and ensure fit.

Preferably, the drape **29** includes the underside cover **47**—a section of fabric extendable inwardly of the border skirt **39** and sidewalls **41**. Obscured from view in the finished mattress assembly, the underside cover **47** may be of a lighter fabric or netting with sufficient length or extension from the border skirt **39** for placement beyond the bottom perimeter edge **45** of the core **23**. In preferred designs, the interface **51** between the border skirt **39** and the cover **47** is provided by a tape edge **53**, as shown in FIG. **3** (and also FIG. **4**C). The tape edge **53** provides a fixed edge about which the underside cover **47** may be biased and pivotable inwardly. In some applications, free edges or outer margins of the cover **47** may be elasticized and further flanged or structurally reinforced to ensure fit and assist in maintaining the border skirt **39** and top panel **27** in place.

In a preferred variation, the underside cover **47** is provided extended length to totally encompass the underside **33** of the core **23**. The margins (which are free margins of the drape, initially, during assembly) of the cover **47** are brought together and mutually secured to fix the border **39** about the core sidewalls **41** and help ensure fit and stability of both the border skirt **39** and the top panel **27** about the core **23**. Securement may be implemented with conventional manually detachable fasteners including clasps, buttons, Velcro (or hook and loop system) and zipper assembly.

As shown in the exemplary design in FIGS. **1-3**, the underside cover **47** is preferably provided as rectangular fabric having dimensions generally matching from those of the underside **33** of the core **23**. When secured, the cover **47** is positioned, in the bottom view of the finished mattress assembly (see FIG. **2**), inwardly of the perimeter edge **45** of the core **23** and preferably tightly fitted adjacent the underside **33**. The cover **47** preferably includes a flap section or flap **59** detachably fastened via detachable fasteners such as hook and loop systems, VELCRO systems, buttons, hook and eye systems, zipper assembly, clasps, and the like. In the preferred design, a zipper assembly or zipper **71** is provided on the cover **47**, which is operable to free the flap **59**. Referring also to FIG. **7**B, flap **59** may be zipped to complete and close the underside cover **47**. Conversely, the detachable flap **59** may be disengaged from the cover **47** and peeled away to reveal a substantial opening **63**. Beneath the opening **63**, the cover assembly **25** defines an internal compartment **65**. With the cover assembly **29** in FIGS. **1-3**, the unzipped flap **59** may be peeled back to reveal core **23** received, in storage per se, in compartment **65**. In other applications, the flap and zipper are located such that the drape opening is parallel with a wider side of the cover, and the dimensions of the flap and zipper runs are the same (e.g., defining a generally square shape or area). See e.g., alternate mattress design in FIG. **2**A. Also, by providing a wider flap **59**, less of the remaining sections of the cover need to be folded or "peeled" from or onto the top panel and core. Such a wider flap or flap located parallel to the wider side of the core and top panel facilitates initial assembly the cover assembly, assembly of the mattress assembly, and removal of the drape from the top panel or the core (e.g., inversion).

The detachable flap **59** is preferably elongated and extends inwardly from proximate the tape edge **53**. The section **61** of the cover **47** outward of the zipper **71** and the flap **49** is a narrow width of fabric that extends sufficiently inboard of the core perimeter to facilitate assembly and fit, and to allow fastening with the extended flap **59**. The zipper **71** is of conventional construction and typically includes a tape band and teeth (chain) on the flap **59** and on the fixed section **61**. A manual tab **95** is provided for manually zipping (or unzipping) the underside cover **47** and enclosing and encasing the core **23** within the cover assembly **29**, as shown in FIGS. **1-3**.

In one aspect, the mattress assembly **21** provides for a readily removable (detachable) cover **47** or cover assembly **25** that also allow ready access to components of the

mattress **21**. The cover assembly **25** itself may be readily removed for cleaning or repair. The same applies for the core **23**.

It should be noted that, as described above and independent of other components, the drape **29** is characterized by first and second margins each defining an opening and continuous sidewalls therebetween that define an inner space or volume. As shown herein, this interior space provides, at least partly, a compartment for receiving the core (or top panel).

As illustrated herein, the cover assembly according to the present description is a multi-component, multi-functional mattress unit. The cover assembly provides a storage facility for the top panel prior to assembly and for the core after assembly. The cover assembly further provides and presents a cushioned sleeping surface and can contain multiple cushion and filler layers that may serve a variety of purposes (e.g., cover fabric, insulator, cushion, uniform surface and constitution and depth. The cover assembly also provides a platform for presenting decorative or aesthetically pleasing or neutral facings and dressings. The cover assembly is also configured so as to facilitate assembly of mattress, e.g., by virtue of elimination of components requiring manipulation or machination during assembly. The cover assembly also secures the top panel and border skirt with the core, imparts bias on the cover assembly components as desired, and facilitates and ensures fit and closure of components, as desired. In using the term "cover assembly", "top panel assembly" or "cushioned assembly", it should be clear, then, the choice of adjectives to qualify "assembly" is instructive and referential (to the present description) but should not be limiting. The term "cover assembly" is preferred herein, however, and correctly denotes, in a multi-component product incorporating textile materials, that the component provides at least partial coverage to another component.

With a cover assembly **29**, such as that depicted in FIGS. **1-3**, which has been presented as a unit at commencement of an assembly process according to the present disclosure, the unzipped **59** may be peeled back to reveal a top panel **27** disposed in the compartment **65**. Furthermore, the compartment **65** (and opening **63**) are closeable by fastening the zipper assembly **71** (i.e., fastening the flap **59** with the rest of or fixed section **61** of the underside cover **47**).

FIGS. **4-12** are simplified illustrations representing steps or stages in a process for forming or assembling a mattress such as mattress **21** described above and depicted in FIGS. **1-3**. In one respect, the assembly process starts with and requires only two starting components as shown in FIG. **4**A the top panel or cover assembly **25** and the supporting core **23** described above. These two functional units are integrated to form a complete, finished mattress unit **21** having a top panel **27** providing a pillowtop or cushion layers, a border or skirt **39**, and a core **23** covered by the cover assembly **25**. In FIGS. **4-12**, the cover assembly **25** is provided as a unitary construction with a top panel or pillow top **27** containing all desired layers or fillers (e.g., cushion layers) and a border skirt **39** (with underside cover extension) fixed to the top panel **27** in a pre-assembly, stored position. The cover assembly **25** may also be described as having a top portion configured to present the sleeping surface and a bottom portion configured to incorporate the supporting core **23** therewith. To this end, the cover assembly **25** provides, as described and illustrated herein, a storage compartment **65** that, in a pre-assembly or shipping disposition is stowed (secured within the cover assembly **25**) and closed. In an early stage of assembly, the compartment **65** in unlatched, opened, and placed in a disposition to engage, receive, and, at least partly, secure the core **23**.

In a stored or pre-assembly position, as shown in FIG. **4**A, the drape **29** is primarily held secured about and above the top panel **27**. See also FIG. **4**C. The drape **29** covers much of the top panel **27**, including panel top **27***a* and vertical side walls **85** of the top panel **27**. The underside cover **47** is disposed above the top panel **27** and self-secured by zipping extended flap **59** closed. Notably, much of the border skirt **39** is wrapped about sidewalls **85** (gusset **85**) of the top panel **27**, and extends toward panel top **27***a*. Typically, the side wall or gusset **85** of the top panel **27** is shorter, in height, than the core's side walls **41**. Thus, in the stored or pre-assembly configuration of the cover assembly **25**, border skirt **39** extends around tape edge **89** and above panel top **27***a*, as best shown in the detail of FIG. **4**C. Furthermore, the drape **29** covers top panel **27** and, in one respect, provides a container or compartment **65** in which top panel **27** is received. Furthermore, the drape **29** is secured to and about top panel **27**, in a stowed or circumscribed disposition (as opposed to its extended disposition described below).

The cover assembly **25** may be described as a core cover-top panel compact **25** (or simply compact **25**), particularly in a pre-assembly configuration wherein the drape **29** and top panel **27** are mutually secured and disposed in a compact, mutually serving disposition. In one aspect of the present description, such a configured core cover and top panel compact **25** facilitates pre-assembly storage and shipping, especially with the drape **29** secured tightly about the top panel **27** simultaneously covering much of the top panel **27** and somewhat recessed therein. Further, the provision of a unitary, pre-assembly cover assembly or compact **25** allows for a complete top panel and border skirt (for the core) to be manufactured, shipped, and provided separately and independently of the supporting core (except that it must satisfy a set of dimension requirements identified to one of a limited number of standard mattress and core sizes).

The configuration of the cover compact **25** also facilitates initial stages of assembly. As shown in FIG. **4**A, the cover compact **25** and the core **23** are brought together, for alignment, to commence assembly, with the bottom side **27***b* of the compact **25** facing the topside **23***b* of the core **23**. An insulating fabric (or other material surface) may be provided as a top planar surface **23***b* of the core **23**. Now aligned with the core **23** supported on a table or flat working station **99**, the mostly fabric and generally pliable compact **25** may be folded to facilitate access to the top surface **23***b*. This top surface **23***b* is then preferably applied with an adhesive **81** (via adhesive applicator **83**), as shown in FIG. **5**, to ease alignment and assembly. The compact **25** is then unfolded and set on the surface **23***a* (with adhesive **81** applied thereon), adhering the cover compact **25** (specifically the top panel **27**) in mutual alignment with the core **23**. See e.g. FIG. **6**.

At this stage, the underside cover **47** is actually presented on top, providing ready access to zipper **71** and flap **59**. FIGS. **7-9** now illustrate deployment of the drape **29** to integrate the core **23** with the cover assembly, while FIGS. **9-10** show securement of the underside cover **47** about the core **23** to complete the deployment. The diagram of FIG. **13** is also provided to illustrate, among other things, how efficiently the drape **29** is deployed and the core **23** IS integrated (with the cover assembly **25**) in accordance with assembly methods of the present description.

Referring now to FIGS. **7**A and **7**B, the flap **59** is detached from underside cover **47** by operating zipper **71**, and pulled away from the fixed sections **61** of the cover **47**. With the

cover **47** opened and exposing compartment **65** thereunder, sections **61** of the underside cover **47** remain fitted over top panel **27**, but loosened. This allows narrow sections **61** of the underside cover and border **47** to readily pulled away peeled back from top panel **27**. In fact, the loosened drape **30** may be pulled entirely away and downwardly from the sidewall **85** of the top panel **27**, as illustrated in FIG. **8**. As the drape **25** is pulled away from the top panel **27**, the border skirt **39** follows (or is also pulled away) and is rotated away from the top panel **27** and onto the sidewalls **41** of the core **23**. As illustrated also in FIG. **13**, the drape **29** is essentially inverted by pulling the free margins (or second margins) or un-detached sections **61** of the compact **25** and pivoting about top panel **27**. The border skirt **39** is turned through a tight 180 degrees rotation from the sidewalls **85** of the top panel **27** but readily inverts and transfers onto the core sidewalls **41**.

Now rotated 180 degrees from its original position and inverted, the deployed border skirt **39** fits tightly about the sidewall **41** of the core **23**. Free margins **93** of the drape **29**, including underside cover **47**, are extended beyond the bottom perimeter **45** of the core **23**. In this way, and with the margin sections properly tucked beneath the core **23**, the core **23** is received by the drape **29** in a defined compartment **65**. At this point, the flap **59** may hang freely from the rest of the mattress assembly **21** as shown in FIGS. **8** and **9**, and thus, compartment **65** remains open. Comparing the initial disposition of the cover assembly **25** in FIG. **6** with its disposition in the finished mattress assembly **21** in FIG. **1**, the cover assembly **25** and drape **29** has been inverted—in respect to the disposition of its respective surfaces (outer facing inside facing) as well vertical disposition relative to the top panel **27** (extending downwardly or upwardly). In this respect, the cover assembly **25** and drape **29** are referred to as being invertible, as well as being extendible relative to the top panel **27** (i.e., to integrate and receive the core **23**).

For convenience, the nearly-complete mattress assembly **21** is then flipped over, so as to expose and provide access to the underside cover **27** and the opening **63**. See FIGS. **9-10**. Here, the free margins **61** of the underside cover **47** may be pulled more tightly over and inwardly beyond the perimeter of the core **23**. This also ensures a snug fit of the border skirt **39** about the core sidewalls **41**. The extended flap **59** is then fastened using the zipper **71** to close opening **63** and compartment **63** and uniting flap **59** with the rest of the underside cover **47**. See FIG. **11**. At this stage, the core **23** is received in compartment **65** and secured with the cover assembly **25**.

FIG. **12** depicts the integrated mattress assembly **21** subsequently flipped over to its upright, normal position. The mattress assembly **21** is described, for purposes of the present description, a complete and finished mattress, which includes the supporting core **23** encompassed by, and in this design, completely encased by a cover assembly **25**, in accordance with one aspect of the present description. In one aspect of the present description, as described above, the top panel assembly incorporates at least a border skirt extending from the top panel or pillow top section and, optionally, further means for fastening to the supporting core. In another aspect, the top panel assembly includes a drape having free margins that are detachably engageable to secure the top panel assembly prior to assembly (e.g. by using zipper **71** to unite the cover **47** portion into a whole cover) and deployable therefrom to integrate or encase the core to complete the mattress assembly.

Referring again to FIGS. **1-3**, an exemplary fitted cover assembly **25** may be described a consisting of a cushioned subassembly or top panel **27** and a drape **29** extendible and deployable therefrom to capture or receive the supporting core **23**. In further designs contemplated by the present description, the drape may be an independent piece readily attachable to the top panel during an initial stage of assembly or an exaggerated, movable extension of a portion or component of the top panel (e.g. sidewall cover fabric). As a key feature, the drape **29** is detachably engageable or fastenable to/with the top panel **27** in a somewhat recessed fashion that is conducive to storage and shipping, and to initial alignment with the core. The drape **29** is also fixed with but movable relative to the top panel **29** (i.e., fixably movable), which means one point or portion remains affixed during assembly. The drape **29** in the cover assembly **25** of FIGS. **1-13** is, in particular, fixed to the top panel **29** at all times but the remaining length or extension of the drape **29** is extendible or deployable from the top panel **27** (as shown) and pivotable about the attachment point or edge **43**. In cover assembly **25**, this fixed edge **43** is provided by tape edge **43**, which clamps and affixes a fixed end or margin (first margin) of drape **29** to the top panel **27**. Other fastening means such as a stitched seam, hook and loop, staples, and the like may be used in alternative designs.

Aspects of the present design and present description are generally applicable to various known top panel configurations. A typical assembly for a top panel includes an outer fabric and bottom fabric serving, among other things, as a containment cover for a multiple quilting panels and filler layers, including foam, memory foam, latex, and/or micro-pocket coil, and/or fabric layers (sometimes referred collectively, herein as "fillers' when discussing material layers within the top panel). The bottom cover material may be a non-woven and/or also provide an insulating layer. A similar fabric may be use for the gusset and applied vertically between the cover layers and all around the top panel to cover the edges of the contained layers and present a more aesthetically desirable outer appearance. In one aspect of the present description, a tape edge is provided as an all-around bottom edge and all-around top edge of the top panel, as shown in the FIGURES. The tape edge may be applied at the bottom edge to join or close the ends or margins of the drape (por border portion), the top panel's sidewall cover fabric, and the bottom cover fabric. Similarly, a tape edge may be applied at the top edge to join or close the ends or margins of the top cover fabric and the sidewall cover fabric. In a further aspect, a tape edge is used to join the ends or margins of the border/skirt and the underside cover.

Although other fastening or closing means may be used to join various parts or sections of the fitted cushion assembly, as described above, the inclusion of tape edges offers additional benefits to the overall mattress design. Tape edges are generally regarded as a desirable aesthetic feature of the finished mattress, projecting a neat, layered, and sophisticated look to the design. In the present design, the all-around uniformity and robustness of tape edges also facilitate handling during mattress assembly and contributes to the snug fit of the cushioned assembly with the core. Further, the tape edges are particularly well suited to serve as joints and pivot points for the various parts or sections of the fitted cover assembly and top panel, which are advantageous during assembly and for maintaining fit.

Tape edges are known devices to close the edges of mattress layers. Tape edges may be applied manually or by use of a variety of tape machines, as generally known in the art. Tape edge machines may also be used implement a tape or band material to close the edges, as shown in FIGS. **1-12**. Other edge-closing techniques eliminate the use of a band or

tape. The use of these and other techniques, and various tape edge designs, are suited for use with the presently described designs, in accordance with the present description. U.S. Pat. Nos. 7,647,876, 6,995,043 and 5,432,964 provide descriptions of conventional or prior known methods of forming a mattress, and particularly, employing a tape edge or binding tape. These descriptions are hereby incorporated by reference, in their entirety, for purposes of providing background and general knowledge in the art that may be applicable to implementing certain features or techniques taught or used in the present description (including, but not limited to the use of tape edges and alternate fastening devices).

It should be noted, however, that the presently described designs and techniques offer, as one aspect, the inclusion of pre-implemented tape edges in the top panel assembly and for integration with the core to provide a mattress with one or more outwardly presenting tape edges. In a conventional method of manufacturing a mattress, tape edges are usually applied, in a late stage operation, to join or close the various layers or edges of the mattress (with the top panel and core already joined). Notably, typical machine-assisted application of tape edges on mattresses can be a laborious technique requiring expensive, specialized tape edge machines and skilled operators. Thus, the provision of a fitted cushion assembly with pre-installed edges that present, when the fitted cushion assembly is integrated with a core to make a finished mattress, offer unique manufacturing advantages. Firstly, the step of finishing the mattress assembly, or fitting and dressing the core and integrating a complete top panel and border, is greatly simplified and made more efficient and less costly. Secondly, the basic construction of the fitted cushion assembly allows flexibility in the division and selection of labor and sourcing aspects of the manufacturing process, in a way that can enhance quality and reduce cost. For example, the fitted cushion assembly may be manufactured remote and/or separate from the core or form the final assembly location, thereby taking advantage of access to materials and workforce. Also, the final mattress assembly (as described above) is much simplified, and requires little manpower, specialized machines, and additional materials or components. The final assembly may be located, therefore, at or closer to retail locations. It is particularly noted that the provision of a fitted cushion assembly as one of two (or more) components for assembling a complete mattress at or near end destination location allows the manufacturer or end user to take advantage of the benefits of manufacturing or assembling parts of the mattress at preferred manufacturing locations (e.g., lower material and labor cost, and the like, access to skilled artisans, etc.) without increasing cost and complexity of manufacture (e.g. due to a multi-part manufacturing process). In some situations, for example, as in the case of outsourcing mattress manufacturing outside of the United States, government or trade-related costs and levies may be reduced by shipping mattress parts to the United States as opposed to complete, finished mattresses.

The cover assembly **25** according to the present description is configurable in at least two dispositions a first (stored or pre-assembly) disposition wherein the drape **29** is secured about the top panel and a second disposition wherein the drape is deployed and secured about the core **23**, thereby integrating the core **23** with the top panel **27** (and cover assembly **25**) in a finished mattress assembly **21**. The diagram of FIG. **13** describes the deployment of the drape **29**, relative to the top panel **27** and the core **23**, from a starting configuration disposed about the top panel **27** (at top, denoted by "A"), in an open, intermediate (transitory) disposition (denoted by "B"), and finally, in a configuration disposed about the core **23** (at bottom, denoted by "C"). The directional arrows, D, in the diagram represent the rotation of the drape **29** from about the top panel **25** to about the core **23**, while pivoting about fixed edge **43** (tape edge **43**). The directional arrows, D, are bi-directional signifying that the drape **29** may be deployed back and forth between the two dispositions and associated configurations ("A", "C"). The underside cover **47** may also be described as pivotable about edge **53** (tape edge **53**), although edge **53** is in itself movable relative to the fixed edge **53**. Noting that the drape **29** is of a flexible material with all-around walls, the drape **29** is closeable at free margins **93** to enclose the cover assembly **25** about the top panel **27** or the core **23**. FIG. **13** also illustrates that to achieve the configuration or disposition in "C", the drape **29** is basically inverted from its initial disposition or configuration (in "A"). Notably, in FIG. **13**, drape surface **290** and **29***i* change from interior (facing) and exterior (facing) surfaces to opposite-facing surfaces as drape **29** is pivoted away from top panel **27**.

The discussion of certain aspects of the mattress assembly **2** land method according to the present description, as provided immediately above, may also be served by examination of the "before" and "after" illustrations of the cover assembly **25** or compact **25** provided by FIGS. **3**-**3**A and **4**A-**4**C. Along with the diagram of FIG. **13**, the details of FIGS. **3**A and **4**C also illustrate the movement and disposition of the drape **29** relative to the top panel **27** and core **23** prior to assembly and during (after) assembly. In the pre-assembly or storage configuration of the compact **25** in FIG. **4**C, the drape **29** is secured about the top panel **27**, with the backside surface of the drape **29** (the surface that is not intended to be facing outward in the finished mattress assembly **21**) presented outward and also covering and protecting the finished surfaces of the gusset **85** and panel top **27***a*, including the tape edges **43**, **89** of the top panel **27**. With the drape **29** fairly slacked relative to the top panel **27**, the bottom border skirt **39** and tape edge **53** may rest on or fall inwardly and away from the perimeter during storage and shipping. The drape **29** may otherwise be characterized as elongated and geometrically contrasting the top panel **27**, but, in one aspect, drape **29** is "recessed" within the top panel **27**, thereby making for a compact cover-top panel compact. That is the otherwise hollowed drape **29** enwraps the sidewalls **85** of top panel **27** instead of extending or protruding therefore and much of the underside cover **47** is turned into and onto the top panel **27**. Also, both the drape **29** and the panel **27** are primarily layered and pliable and thus, the drape **29** and the panel layers readily collapse upon each other. Atop the panel top **23** *a*, the relative stiff tape edge **53** helps support the unfolding drape **29** and the height difference (between the core side walls **85** and the skirt **39**) allows and urges the underside cover **47** to "fall" into and rest on the top panel. Notably, tape edge **53** is (facing) on the inside of the drape **29** in this stored or recessed (disposition of drape **29** relative the top panel **27** versus extended therefrom). Further, when drape **29** is detachably fastened and extended about (as opposed to being extended from or away) the top panel **27**, the drape **29** covers (and protects) tape edges **43**, **89**, and **53**.

When the cover **47** is opened and detached (by operating zipper **71**), the drape **29** may be pivoted about its fixed margin **29***a* and tape edge **43**. See again FIG. **13** and also FIG. **3**A. When deployed about core **23**, drape **29** reveals tape edges **43**, **87**, as well as tape edge **53**. Tape edge **53** is also moved away and flipped (inverted with the drape **29**) and is facing or presented outwardly with border skirt **39**

enwrapping the core sidewalls **41**. And, as further shown in FIG. **3**A, the inverted drape **29** also reveals and presents the finished surfaces of the border skirt **39**, gusset **85**, and panel top **27***a*. Moreover, when disposed about the core **23**, the inverted drape **29** may be tucked and fitted more tightly about the top panel **27** and core **23** to present a complete, finished mattress assembly **21**.

In alternate constructions or designs, additional fillers or layers may be included. Also, the top panel may be provided with openings or fasteners for accessing the inside of the top panel or providing an opening through which different or additional layers or fillers may be inserted. The inserts may be added at the mattress assembly location, during mattress assembly or immediately thereabout.

In alternate constructions or designs, the drape and/or the border skirt and/or underside cover may be fastened during mattress assembly. These same items may also be provided as detachably fastened items, using, for examples, zippers, buttons, hook and loop, and similar means, in addition to or in lieu of the tape edge connections. For example, the drape may be attached via detachable fastening means about a bottom perimeter of the top panel as an initial step in the assembly process. Then, the free margins of the drape is extended over or deployed onto the core and the core underside, before closing the free margins using the same fastening devices described herein.

In alternate constructions or designs, the border skirt or margin extension thereof may be attached to the core to help secure the border skirt and top panel. Alternatively, a separate underside cover material may be provided but provide less than complete coverage of the underside of the core. The margins of the underside cover may not be re-fastened to matching sections of the underside cover but to the sidewall or underside of the core. Securement may be achieved through use of all-around elasticized edges or margins, hook and loop systems or Velcro, buttons, clips, clamps, and the like, or combination thereof.

In alternate constructions or designs, drape may be provided with the core and is configured to be removably fastened to/with a top panel or pillowtop assembly. The drape may include an extendible fabric that can be opened, disengaged from the core and unraveled in two or more drape sections. The drape section may be pivoted and extended, from the underside of the core, with a top edge (e.g., tape edge) or margin about the top perimeter of the core, and brought about and atop the top panel, where the drape is fastened back together and closed to receive the top panel in a defined compartment. In this way, the re-fastened drape provides a fabric sidewall and top cover of the top panel, while integrating (securing) the top panel and core-border skirt to complete the finished mattress. Such a design variation may be achieved borrowing most of the structural aspects already described herein, except that the fixed edge about which the drape is pivoted (a tape edge) is provided about a top perimeter of the core. From an initial configuration affixed to the core, the drape is deployed by opening and then inverting the drape's margins and walls.

The simplified illustrations of FIGS. **14**A and **14**B show a further embodiment or variation of the mattress assembly **321** according to the present description and highlighting an alternate construction, design and/or features. These two FIGURES correspond with FIGS. **1** and **3**, respectively, and thus, employ similar/like reference numerals (in 300s series rather than in the 10s series) to enumerate like elements. In FIG. **14**A, a bottom portion of the mattress assembly **321** is shown in partial cross-sectional cut-out view to reveal an interior (which employs an alternate foam construction). FIG. **14**B is a further cross-sectional view of the same mattress assembly **321** with the remaining portions shown in cross-sectional view to highlight the connections and engagement between the core and the drape. As shown, the mattress assembly **321** includes a similar, but modified, cover assembly **325** and core **323** encased or engageable or encaseable/enclosable by the cover assembly **325**. The cover assembly **325** further includes a pillowtop or panel assembly **327** and a drape **329** (similar to the ones described in respect to FIGS. **1**-**13**).

Notably, the alternate construction of FIGS. **14**A and **14**B features a single top, tape edge **343** affixing the drape **329** (at perimeter edge **329***a*) near or about the (bottom) perimeter of the top panel **327** to a bottom perimeter of a top panel fabric **391**, and a bottom tape edge **353** closing a bottom perimeter of the mattress assembly **321**. In this design, there is no top perimeter edge of the top panel **327** to affix or attach, and thus, no top edge as in previously described embodiments. Instead, the cover fabric **319** extends (smoothly) from the top side **327***a* of the panel and downward to the drape **329** and edge **329***a*, with or without an interface (as shown) or seam at the top perimeter edge of the top panel **327**. The cover assembly **325** (and drape **329**) operates in the same manner as the cover assembly **325** previously described (FIGS. **1**-**13**) to integrate, attach, and otherwise engage the core **323** during storage, transport, assembly, and use. It is noted, however, that upon disengagement of the drape **329** from a stowage position above the top panel **329** and re-engagement about the core **323** (e.g., inverting the drape **329**), a complete and finished top panel **325** is revealed (as shown in FIGS. **14**A and **14**B).

The following is a non-exclusive listing of various, exemplary applications, variations, and/or embodiments contemplated by described concepts. The enumerated concepts include methods, products, assemblies, articles of manufacture and the like, that are characterized by the below listing of features. This list should not be considered limiting, however, as, for example, the elements or features listed below, in respect to a product, assembly, or structure, may be combined with each of the other elements associated with other product, assemblies, and structures. The same applies to methods and various, exemplary steps listed below. Also, the Specification, including the Summary, the Drawings, and the claims, describe or depict other applications, variations, embodiments, and combinations of elements which may not be included below, but are contemplated as encompassed by the described concepts.

1. A mattress assembly comprising:
   a support core; and
   a cover subassembly including a plurality of filler layers secured within a cushioned panel and a drape extending from the panel;
   wherein the drape includes a skirt secured about sidewalls of the core.

2. The mattress assembly of example 1, wherein the drape further includes a cover extension extending outward of the skirt, relative to the cushioned panel, to at, least partially, cover an underside of the mattress and securing, at least partly, the drape.

3. The mattress assembly of example 2, wherein the cover extension is secured beneath the core.

4. The mattress assembly of example 2, wherein the cover extension covers the entirety of the underside.

5. The mattress assembly of any one of examples 1, 2, 3, or 4, wherein the cover extension is secured beneath the mattress to encase the mattress within the cover subassembly.

6. The mattress assembly of example 5, wherein the cover extension is zippered.

7. The mattress assembly of any one of examples 2-7, wherein the cover extension includes a drape margin extended beyond the sidewalls of the core and fitted adjacent the underside of the core.

8. The mattress assembly of example 8, wherein the cover extension includes an extended flap secured, beneath the underside of the core, to sections of the drape margins to secure the cover extension beneath the core underside and encase the core.

9. The mattress assembly of example 8, wherein the cover extension is detachably fastenable.

10. The mattress assembly of any one of examples 1-9, wherein the drape is joined to the cushioned panel by a tape edge.

11. The mattress assembly of any one of examples 1-10, wherein drape further includes a tape edge defining a margin interface of the border and an underside cover extension commonly joined with the border.

12. The mattress assembly of any one of examples 1-11, wherein the cushioned panel includes a tape edge closed about edges of one or more layers of the cushioned panel.

13. The mattress assembly of example 12, wherein the cushion panel includes at least two tape edges, including a tape edge positioned adjacent a bottom perimeter of the cushioned panel and a tape edge positioned adjacent a top perimeter of the cushioned panel.

14. The mattress assembly of any one of examples 1-13, wherein the drape is invertible between a first disposition wherein the drape receives the core and a second disposition wherein the drape is extended about the cushioned panel.

15. The mattress assembly of any one of examples 1-14, wherein the drape is pivotable about an edge adjacent said cushioned panel to extend about the cushioned panel and pivotable about the edge to extend about the core.

16. A method of forming a mattress comprising the steps of:

providing a cover assembly including a top panel having one or more filler layers and a drape fixed to the cover assembly;

juxtaposing the cover assembly with a supporting core having a topside, an underside, and sidewalls therebetween; and extending the drape to integrate the core with the cover assembly to form a mattress.

17. The method of example 16, wherein said extending includes fastening the drape to the core.

18. The method of example 16, wherein said drape includes a border skirt and said extending includes engaging the core with the drape such that the border skirt wraps about the sidewalls of the core.

19. The method of any one of examples 16-18, wherein said extending includes encasing the core with the drape.

20. The method of example 19, wherein said encasing includes uniting free sections of the drape to encase the core.

21. The method of example 20, wherein said uniting includes zipping the free sections together.

22. The method of example 20, wherein said uniting includes fastening the free sections together to cover the underside of the core.

23. The method of any one of examples 16-21, wherein the extending includes detaching free sections of the drape and extending the free sections proximately about the core.

24. The method of example 23, wherein said drape has a fixed margin affixed to the top panel and fabric extending therefrom and the extended fabric incudes free margins detachably fastened to the top panel, said extending including detaching the free margins from the top panel.

25. The method of example 24, said extending including attaching, after said detaching, the free margins to the core.

26. The method of example 24, said extending including re-attaching, after said detaching, the free margins beneath the core.

27. The method of example 26, wherein, with said re-attaching, said cover assembly encases the core.

28. The method of any one of examples 16-27, wherein the drape is attached to said top panel at a tape edge, said extending including pivoting the drape about the tape edge to engage the core.

29. The method of example 28, wherein the tape edge is located about a bottom perimeter of the top panel and said pivoting reveals at least one other tape edge disposed about the top panel.

30. The method of example 28, wherein the drape includes a border skit for fitting about the side walls of the core and a cover extending outward from the border skit at a tape edge, said extending further including pivoting said cover at the top edge to extend over the underside the core and urge the border skirt about the sidewalls.

31. A mattress assembly comprising:

a support core mattress component including a core having a topside, underside, and all-around side construction therebetween; and

a cushion assembly mattress component including a plurality of filler layers secured within a layered cushion panel;

wherein a first of the mattress components further includes a drape having a fixed margin secured to that first component, and a free margin secured to the second of the mattress components.

32. The mattress assembly of example 31, wherein the drape is attached to the first component at a tape edge and extended over the second component.

33. The mattress assembly of example 32, wherein the drape is extended over the second component to encase the second component.

34. The mattress assembly of example 31, wherein the first component is a support core having a border skirt about said all-around side construction, the drape including a cover fabric extending from the border skirt and about the top panel.

35. The mattress assembly of example 31, wherein the first component is a cushion assembly including a top panel containing filler layers and at least two tape edges closing edges of the layers about a perimeter of the top panel, the drape extending from the top panel and about the sidewalls of the core to engage a border skirt thereabout.

36. The mattress assembly of example 35, wherein the drape further includes a cover extending from the border skirt and enclosing the underside of the core.

37. The mattress of example 36, wherein the cover includes detachably fastenable free margins that are united beneath the core to encase the core with the cushion assembly.

38. The mattress assembly of example 37, wherein the cover includes a fastener selected from the group consisting of: hook and loop, velcro systems, buttons, clasps, zipper, and combinations thereof; and wherein said free sections are fastened together with said fastener.

39. The mattress assembly of example 31, wherein the first component is a support core having a border skirt extending between the top side and the underside, the core further including a top tape edge defining an upper margin

of the border skirt and a bottom tape edge defining a lower margin of the border skirt; and wherein the drape is joined with the border skirt at the top tape edge and extends therefrom toward the cushion assembly.

40. The mattress assembly of example 39, wherein the drape further incudes a cover extension interfaced with border skirt at tape edge and extending beneath the core to enclose the core.

41. A mattress top panel subassembly for engagement with a support core to complete a mattress assembly, the top panel subassembly comprising:

a top panel containing a plurality of filler layers, the top panel having a topside, an underside, and an all-around cover facing extending between a perimeter of the topside and a perimeter of the underside; and

and a drape extending from the top panel proximate the perimeter of the top panel underside toward the topside and detachably fastened thereabout.

42. The mattress assembly of example 41, wherein the drape includes a cover extension extending inwardly of the top perimeter and over the topside.

43. The mattress assembly of example 42, wherein the cover extension includes free margins that are detachably united above the top panel.

44. The mattress assembly of example 42, wherein the cover extension covers the topside.

45. The mattress assembly of example 44, wherein the drape includes a zipper on the cover extension operable to secure the free margins above the panel and to mutually disengage the free margins.

46. The mattress assembly of any one of examples 41-45, wherein the drape is attached to the top panel at a tape edge located proximate a bottom perimeter of the top panel.

47. The mattress assembly of any one of examples 41-46, wherein the drape has first margin and a second margin, and further includes a border skirt attached at a first margin to the top panel and extending therefrom, the border skirt being movable, with the drape, from the cover facing of the top panel.

48. The mattress assembly of example 46, wherein the cover facing includes a tape edge proximate the topside and a tape edge proximate the underside.

49. The mattress assembly of any one of examples 41-48, wherein drape is extended vertically and about the cover facing.

50. The mattress assembly of any one of examples 41-49, wherein the drape further includes a tape edge defining a margin interface of the border and the cover extension.

51. The mattress assembly of any one of examples 50, wherein the cover is detachable so that the drape is pivotable, about a tape edge joining the drape with the panel, away from the top side and the top panel.

52. The mattress assembly of example 41, wherein the top panel assembly includes at least two or three tape edges, including a first tape edge joining the drape with the top panel, and (i) a second tape edge positioned about said cover facing in spaced apart relation with the first tape edge, and/or (ii) a third tape edge positioned about the drape in spaced apart relation with the first tape edge and the top panel.

53. A method of forming a mattress comprising the steps of:

providing a cover-cushion compact including a top panel having one or more filler layers and a drape affixed to the top panel about a first margin and secured outboard of said first margin about said top panel;

disengaging the drape from about said panel; and

while remaining affixed to the top panel about a first margin, extending said drape to engage a supporting core, thereby completing the mattress assembly.

54. The method of example 53, wherein said engaging a core includes securing the drape about the core.

55. The method of example 53 or 54, wherein said engaging the core further includes encasing the core with said compact.

56. The method of example 53, 54, or 55, further comprising detachably fastening sections of the drape, outboard of said first margin, to enclose the drape about the top panel.

57. The method of example 53, 54, 55, or 56, further comprising detaching said fastening sections to open the drape.

58. The method of any one of examples 53-57, wherein said extending includes inverting said drape to engage the core.

59. The method of example 58, wherein said inverting includes securing the drape about said core.

60. The method of any one of examples 58-59, wherein said first margin is affixed to said top panel at a fixed edge, said inverting including pivoting said drape about said fixed edge.

61. The method of any one of examples 58-60, wherein said inverting incudes encasing said core.

62. The method of any of examples 58-61, wherein said inverting includes receiving said core in a compartment defined by the compact.

63. The method of any one of examples 58-62, wherein said drape includes a border skirt, said providing said compact includes supporting said border skirt about said top panel and said inverting includes pivoting said border skirt toward said core.

64. The method of example 63, wherein said inverting includes pivoting said border skirt to said core and supporting said border skirt about said core.

65. The method of any one of example 53-64, wherein said top panel includes a topside and sidewalls, and said providing said compact includes situating said drape about said panel such that said compact covers said sidewalls and topside of said top panel.

66. The method of any one of examples 53-65, wherein said compact is affixed to said top panel about a first tape edge and said top panel further includes a second tape edge and said drape includes a third tape edge, and wherein said engaging said core is preceded by pivoting said compact about said first tape edge toward said core so as to reveal the second tape edge, and dispose said third tape edge about a perimeter of said core.

67. The method of any one of example 53-66, wherein said providing includes providing a drape having a first end defined by said first margin and a second end defined by a second margin, said drape having continuous sidewalls extending between said margins, said drape being situated such that said first margin enwraps said top panel and said second margin is closed such that said drape encloses at least a topside and sidewalls of the top panel.

68. The method of any one of examples 53-67, wherein said engaging said core includes pivoting said drape away from said top panel and toward and about said core to substantially encase said core.

69. The method of any one of examples 56-68, wherein said drape and said panel together include at least two tape edges, said detachably fastening step including covering said at least two tape edges, and said engaging said core includes uncovering said tape edges.

70. The method of any one of examples 56-69, wherein said drape and said panel together include at least three tape edges, said detachably fastening step including pivoting said drape toward said panel such that at least two of said tape edges are covered.

71. The method of any one of examples 56-70, wherein each of said drape and said top panel includes at least one tape edge, said detachably fastening includes covering said at least one tape edges, and said engaging said core is preceded by uncovering said at least one tape edges by moving said drape about said fixed margin and away from said top panel.

72. The method of any one of examples 56-70, wherein said drape and said top panel share at least a first tape edge and each of said drape and top panel further include another tape edge, said detachably fastening including covering said first tape edge and both of said another tape edge, and said engaging said core is preceded by uncovering said tape edges by moving said drape about said fixed margin and away from said top panel.

73. The mattress, mattress assembly, compact, mattress assembly, or other mattress component referred to in any of examples 1-72, which includes a first tape edge affixing, attaching, or engaging, about a perimeter edge, a top panel or cushion assembly to a drape extending therefrom and optionally, a second tape edge affixing, attaching, or engaging a border skirt of the drape to a core underside cover about a bottom perimeter edge of the core and, optionally, a top tape edge located about a top perimeter of the top panel or cushion assembly.

74. The present description also applies to methods of making, forming, or assembling each of the products, mattress assemblies, and sub-assemblies described above in Examples 1-15, 31-40, 41-52, and 73—as further examples of applications, variations, and embodiments.

75. The present description also applies to the products resulting from the methods of making, forming, or assembling described above in Examples 16-30 and 53-74—as further examples of applications, variations, and embodiments.

The foregoing has been presented for purposes of illustration and description. These descriptions are not intended to limit the disclosure or aspects of the disclosure to the specific mattress or mattress component constructions or articles, apparatus and processes disclosed. Various aspects of the disclosure are intended for applications other than the finished mattress referred to above. Certain manufacturing techniques and structural features and designs described may also be incorporated into or with other mattress designs, and other furniture pieces incorporating fabrics and layers, assemblies, or combinations thereof. The mattress assembly may also incorporate different components in alternate designs according to the present description. These and other variations of the disclosure will become apparent to one generally skilled in the relevant consumer product art provided with the present disclosure. Consequently, variations and modifications commensurate with the above teachings, and the skill and knowledge of the relevant art, are within the scope of the present disclosure. The embodiments described and illustrated herein are further intended to explain best or preferred modes for practicing the disclosure, and to enable others skilled in the art to utilize the disclosure and other embodiments and with various modifications required by the particular applications or uses of the present disclosure.

While specific embodiments and equipment are shown and described herein, one skilled in the art would understand that the methods, systems, and apparatus disclosed herein are not limited to these particular embodiments described.

Although the present embodiments and advantages have been described in detail, it should be understood that various changes, substitutions and alterations can be made herein without departing from the spirit and scope of the disclosure. Moreover, the scope of the present application is not intended to be limited to the particular embodiments of the process, machine, manufacture, composition of matter, means, methods and steps described in the specification. As one of ordinary skill in the art will readily appreciate from the disclosure, processes, machines, manufacture, compositions of matter, means, methods, or steps, presently existing or later to be developed that perform substantially the same function or achieve substantially the same result as the corresponding embodiments described herein may be utilized according to the present disclosure. Accordingly, the appended claims are intended to include within their scope such processes, machines, manufacture, compositions of matter, means, methods, or steps.

What is claimed is:

1. A mattress assembly comprising:

a cover assembly including a top panel having a panel bottom, a panel top, and a drape fixed to the top panel by a tape edge, wherein the tape edge is fixed about a perimeter of the top panel at a fixed margin of the top panel;

a support core having a topside, an underside, and sidewalls therebetween, wherein the panel bottom of the cover assembly is positioned on the topside of the support core; and

wherein the drape comprises a movable tape edge, wherein the drape is pivotable about the fixed margin between a first position wherein the drape and the movable tape edge are engaged above the panel top and a second position wherein the drape extends along the sidewalls of the support core and the movable tape edge is positioned about a perimeter of said support core.

2. The mattress assembly of claim **1**, comprising:

wherein the cover assembly comprises a plurality of filler layers secured within the top panel, wherein the top panel is a cushioned top panel;

wherein the drape includes a skirt secured about the sidewalls of the support core; and

wherein the drape further includes a cover extension extending from the skirt to at least partially cover an underside of the support core and secure, at least partly, the drape thereto, and wherein said cover extension includes two free sections mutually attachable to encase said support core within said cover assembly.

3. The mattress assembly of claim **1**, wherein said fixed margin is affixed about a bottom perimeter of the top panel and pivotable thereabout to mutually engage said free sections above the top panel or about the support core, and wherein said skirt extends from said fixed margin and from said bottom perimeter.

4. The mattress assembly of claim **3**, wherein said cover extension is secured beneath said support core; and

wherein said drape is detachable at the free sections and pivotable about said tape edge to cover said tape edge.

5. The mattress assembly of claim **4**, wherein said cover extension is secured beneath said support core to encase said support core within said cover assembly; and

wherein said cover assembly further includes a fixed top tape edge about a top panel perimeter, said drape being

detachable at said free sections and pivotable about said top panel to cover said fixed top tape edge and said tape edge.

6. The mattress assembly of claim **5**, wherein said cover extension is zippered.

7. The mattress assembly of claim **2**, wherein said cover extension includes a drape margin extended beyond the sidewalls of the support core and fitted adjacent the underside of the support core.

8. The mattress assembly of claim **7**, wherein said cover extension includes an extended flap secured, beneath the underside of the support core, to sections of said drape margins to secure the cover extension beneath the support core underside and encase the support core.

9. The mattress assembly of claim **8**, wherein said cover extension covers an entirety of said underside and is detachably fastenable.

10. The mattress assembly of claim **2**, wherein said tape edge defines a margin interface of the skirt and an underside cover extension commonly joined with the skirt.

11. The mattress assembly of claim **2**, wherein the tape edge is closed about edges of one or more layers of the top panel.

12. The mattress assembly of claim **2**, wherein said drape is invertible between a first disposition wherein said drape receives said support core and a second disposition wherein said drape is extended about said top panel.

13. The mattress assembly of claim **2**, wherein said drape is pivotable about the tape edge adjacent said top panel to extend about said top panel and is pivotable about said tape edge to extend about said support core.

14. A method of forming a mattress comprising the steps of:

providing a cover assembly including a top panel having one or more filler layers and a drape fixed to the top panel by a tape edge that is affixed about a perimeter of the top panel at a fixed margin of the top panel, wherein the drape comprises a movable tape edge, including pivoting at least two free sections of the drape about the fixed margin of the top panel and engaging the free sections thereabove, thereby detachably fixing the drape about the top panel;

juxtaposing the cover assembly with a supporting core having a topside, an underside, and sidewalls therebetween; and

detaching the free sections and extending the drape to integrate the supporting core with the cover assembly to form a mattress, wherein the movable tape edge is located above said top panel prior to said extending, wherein said extending includes detaching said free sections from above said top panel and pivoting said drape about said fixed margin to uncover said tape edge and positioning said movable tape edge about a perimeter of said supporting core.

15. The method of claim **14**, wherein said extending includes fastening the drape to the supporting core; and

wherein said drape includes a border skirt and said extending includes engaging the supporting core with the drape such that the border skirt wraps about the sidewalls of the supporting core.

16. The method of claim **14**, wherein said extending includes encasing the supporting core with the drape.

17. The method of claim **16**, wherein said encasing includes uniting the free sections of the drape to encase the supporting core.

18. The method of claim **17**, wherein said uniting includes zipping said free sections together.

19. The method of claim **14**, wherein said extending includes detaching the free sections of the drape and extending the free sections proximately about the supporting core.

20. The method of claim **19**, wherein said drape has a fabric extending from the fixed margin and said fabric includes free margins detachably fastened to the top panel, said extending including detaching the free margins from the top panel.

21. The method of claim **20**, said extending including attaching, after said detaching, the free margins about the supporting core.

22. The method of claim **20**, said extending including re-attaching, after said detaching, the free margins beneath the supporting core, including pivoting said free sections relative to the top panel and beneath and about the supporting core placed adjacent the cover assembly.

23. The method of claim **22**, wherein, with said re-attaching, said cover assembly encases the supporting core.

24. The method of claim **16**, wherein said drape includes a border skirt for fitting about the sidewalls of the supporting core and a cover extending outward from the border skirt at the tape edge, said extending further including pivoting said cover at said tape edge to extend over the underside of the supporting core and urge said border skirt about said sidewalls.

25. The method of claim **14**, wherein said fixed margin is affixed about a bottom perimeter of the top panel and said drape includes a border skirt that extends from said fixed margin and from said bottom perimeter and wherein said providing is preceded by pivoting said drape about said fixed margin to mutually attach said free sections above the top panel; and

wherein said top panel has a panel top and a panel bottom including said bottom perimeter, and said juxtaposing includes placing said panel bottom adjacent a top side of the supporting core; and

wherein said extending further includes pivoting said drape about said fixed margin to extend the drape below the top panel and then attaching said free sections beneath the supporting core.

26. The method of claim **25**, wherein said drape further includes a cover extension such that upon said extending, said border skirt extends relative to the top panel to at least partially cover an underside of the supporting core and secure, at least partly, the drape, and wherein said two free sections mutually attach to encase said supporting core within said cover assembly.

27. The method of claim **26**, wherein said pivoting includes pivoting said drape about said tape edge to cover said tape edge.

28. The method of claim **27**, wherein said cover assembly further includes a top tape edge fixed about a top panel perimeter, wherein said extending includes detaching said free sections and pivoting said drape about said fixed margin to uncover said top tape edge and said tape edge and uncover and locate said movable tape edge about a bottom perimeter of said supporting core, wherein the cover extension extends from said movable tape edge.

29. A method of forming a mattress comprising the steps of:

providing a cover assembly including a top panel and a drape fixed to the top panel by a tape edge, wherein the tape edge is fixed about a perimeter of the top panel at a fixed margin of the top panel, wherein the drape comprises a movable tape edge, including pivoting the drape about the fixed margin of the top panel and

engaging the drape thereabove, thereby detachably fixing the drape about the top panel;

juxtaposing the cover assembly with a supporting core having a topside, an underside, and sidewalls therebetween; and

detaching and extending the drape to integrate the supporting core with the cover assembly to form a mattress, wherein the movable tape edge is located above said top panel prior to said extending, wherein said extending includes detaching said drape from above said top panel and pivoting said drape about said fixed margin to uncover said tape edge and positioning said movable tape edge about a perimeter of said supporting core.

30. An unassembled mattress system comprising:

a support core having a topside, an underside, and sidewalls therebetween;

a cover assembly including a top panel having a panel bottom, a panel top, and a drape fixed to the top panel by a tape edge, wherein the tape edge is fixed about a perimeter of the top panel at a fixed margin of the top panel;

wherein the panel bottom of the cover assembly is alignable with the topside of the support; and

wherein the drape comprises a movable tape edge, wherein the drape is pivotable about the fixed margin between a first position wherein the drape and the movable tape edge are engaged above the panel top and a second position wherein the drape is extended to secure about the sidewalls of the support core and the movable tape edge is positionable to be secured about a perimeter of said support core.

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