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#### (54) BACK SUPPORT CUSHION

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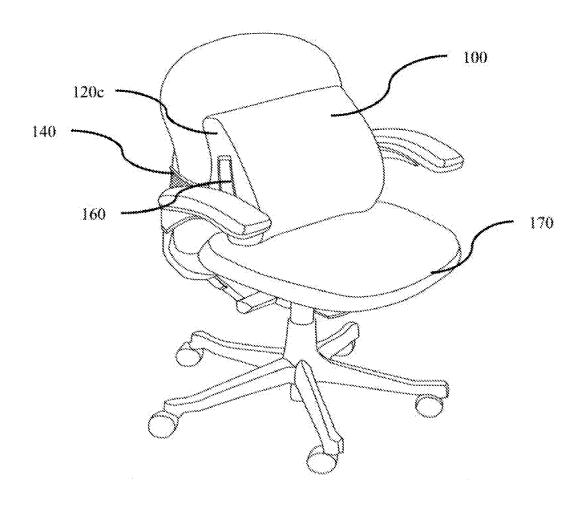
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#### (57) ABSTRACT

The present invention provides a back support cushion that includes a foam, a composite board, a cover for accommodating the foam and the composite board, a fastening means, an opening and at least one handle. The composite board is placed between rear side of the foam and rear side of the cover for additive support. The opening includes a zipper means, or a Velcro means to secure the composite board and the foam inside the cover.



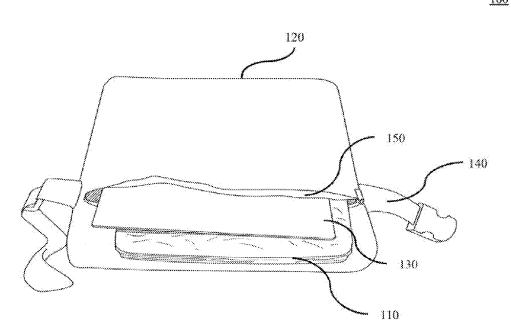


Figure 1

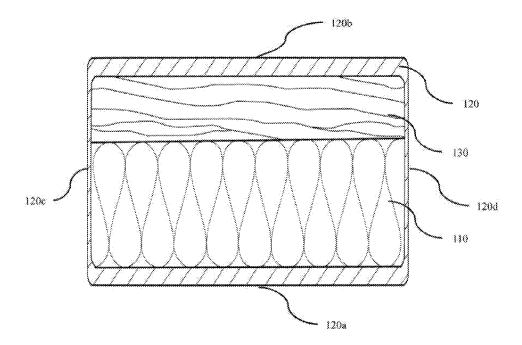


Figure 2

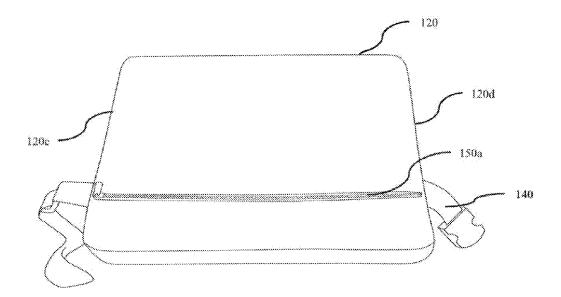


Figure 3

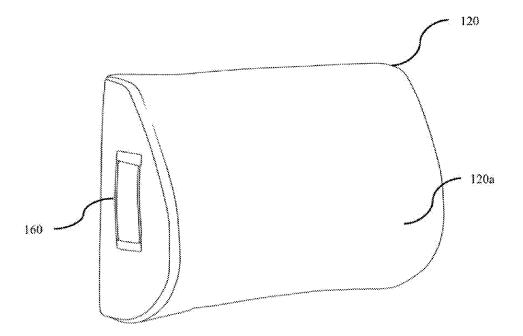


Figure 4

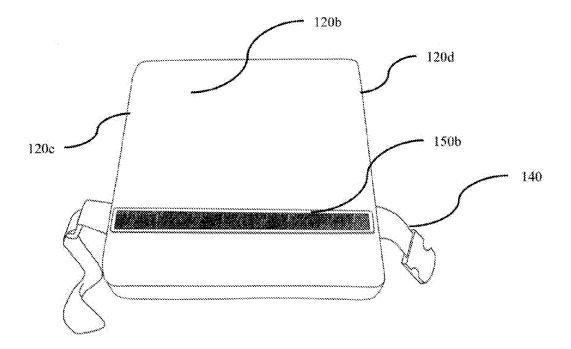


Figure 5

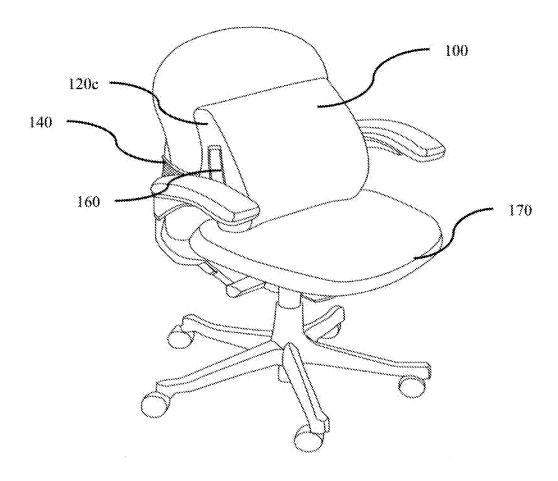


Figure 6

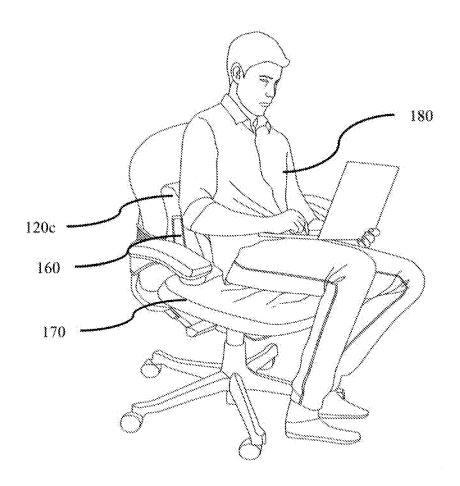


Figure 7

#### BACK SUPPORT CUSHION

#### FIELD OF THE INVENTION

[0001] The present invention relates to back support cushion and in particular, it relates to a cushion that enhances support to the back and spine of a user and encourages proper posture.

#### BACKGROUND

[0002] Low back pain is a costly and often serious disabling condition. Strategies to prevent back injuries are an important public health issue. Back support cushions, covering the abdomen and the low back, are commonly fabricated from soft elastic material with rigid support from metal stays or plastic inserts. Back supports are frequently used in the management of low back pain by stabilizing the lumbar region.

[0003] However, the conventional back support cushions are just comfortable and are not very supportive.

[0004] In light of the above discussion, there is a need for back support cushion, which overcomes all the above stated problems.

#### **SUMMARY**

[0005] Before the present systems and methods, enablement are described, it is to be understood that this application is not limited to the particular systems, and methodologies described, as there can be multiple possible embodiments which are not expressly illustrated in the present disclosures. It is also to be understood that the terminology used in the description is for the purpose of describing the particular versions or embodiments only, and is not intended to limit the scope of the present application. [0006] In accordance with the present application, the primary objective is to provide a back support cushion. The back support cushion includes a foam, a cover for accommodating the foam, the cover includes a front side, a rear side, a right sidewall and a left sidewall, a composite board disposed between the rear side of the foam and the rear side of the cover, a fastening means that includes at least one adjustable strap attached to the cover for placing the back support cushion to a desired position, and at least one handle attached to at least one of the right sidewall, the left sidewall of the cover.

[0007] Another objective of the present invention is to provide the composite board that is adapted to be removably placed within the cover.

[0008] Another objective of the present invention is to provide an opening at the rear side of the cover to receive the composite board and the foam.

[0009] Systems and methods of varying scope are described herein. In addition to the objectives and advantages described in this summary, further objectives and advantages will become apparent by reference to the drawings and with reference to the detailed description that follows.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0010] The foregoing summary, as well as the following detailed description of preferred embodiments, is better understood when read in conjunction with the appended drawings. There is shown in the drawings example embodi-

ments, however, the application is not limited to the specific system and method disclosed in the drawings.

[0011] FIG. 1: illustrates an isometric view of a back support cushion, in accordance with an embodiment of the present invention.

[0012] FIG. 2: shows a cross sectional view of the back support cushion, in accordance with an embodiment of the present invention.

[0013] FIG. 3: shows an isometric view of the back support cushion with an opening having a zipper means, in accordance with an embodiment of the present invention.

[0014] FIG. 4: shows an isometric view of the back support cushion with a handle, in accordance with an embodiment of the present invention.

[0015] FIG. 5: shows an isometric view of the back support cushion with an opening having a Velcro means, in accordance with another embodiment of the present invention

[0016] FIG. 6: shows an isometric view of the back support cushion fastened to a chair.

[0017] FIG. 7: shows a user's back rested against the chair with the back support cushion.

#### DETAILED DESCRIPTION

[0018] Some embodiments, illustrating its features, will now be discussed in detail. The words "comprising," "having," "containing," and "including," and other forms thereof, are intended to be equivalent in meaning and be open ended in that an item or items following any one of these words is not meant to be an exhaustive listing of such item or items, or meant to be limited to only the listed item or items. It must also be noted that as used herein and in the appended claims, the singular forms "a," "an," and "the" include plural references unless the context clearly dictates otherwise. Although any methods, and systems similar or equivalent to those described herein can be used in the practice or testing of embodiments, the preferred methods, and systems are now described. The disclosed embodiments are merely exemplary.

[0019] FIG. 1 illustrates an isometric view of a back support cushion, in accordance with an embodiment of the present invention. The back support cushion 100 includes a foam 110, a cover 120, a composite board 130, a fastening means 140, and an opening 150.

[0020] In one embodiment, the foam 110 is a memory foam or an inert foam, although this is not a limitation of the present invention as any appropriate material having sufficient density yet providing sufficient support is considered to be within the scope of the present invention. The flexibility of the memory foam will allow it to contour to almost any shape seat design when pressure is applied by a user 180 (as shown in FIG. 7) utilizing it. In another embodiment of, the foam 110 is high resilience (HR) foam. The HR foams are configured to increase the supporting strength and working life of a person utilizing it.

[0021] As shown in FIG. 2, the cover 120 of the back support cushion 100 includes a front side 120a, a rear side 120b, a right sidewall 120c, and a left sidewall 120d. The rear side 120b of the cover 120 includes the opening 150. The cover 120 of the back support cushion 100 is configured to accommodate the foam 110 and the composite board 130 through the opening 150. The cover 120 is made of, but may not be limited to cloth, fabric, leather, vinyl and the like.

[0022] In one embodiment, the opening 150 includes a zipper means 150a, best shown in FIG. 3. In another embodiment, the opening 150 may include a Velcro means 150b best shown in FIG. 5 to securely hold the foam 110 and the composite board 130 inside the cover 120. In yet another embodiment, the opening may include buttons or any other suitable means (not shown).

[0023] The cover 120 serves to keep the foam 110 clean, and help keep the foam 110 intact and prevent from shifting from its place. The cover 120 may further provide the cushion 100 with various styles and other stylistic effects such as color, pattern, brand name, logo or the like. The cover 120 will generally be manufactured in sections and sewed, stitched, glued or otherwise formed into the proper desired shape and size and placed around the foam 110.

[0024] As shown in FIG. 1 and FIG. 2, the composite board 130 is removably placed between the rear side of the foam 110 and the rear side 120b of the cover 120 through the opening 150 present at the rear side 120b of the cover 120. It should be appreciated by those skilled in the art that, the composite board 130 may be made of soft wood or hard wood or any other derivatives which are manufactured by binding or fixing the strands, particles, fibers, or veneers or boards of wood, together with adhesives, or other methods of fixation to form composite boards 130.

[0025] The fastening means 140 of the back support cushion 100 includes at least one adjustable strap. The adjustable strap comprises a long, flat, nylon cord. In one embodiment, the adjustable strap includes a hook-and-loop apparatus on its each end to fasten the cushion 100 against back of a chair 170, when in use. When in use, the adjustable strap tightly encircles the user's chair 170 (as shown in FIG. 6) and holds the cushion 100 in place using the hook-andloop apparatus. In an alternative embodiment, the adjustable strap can attach using buttons, additional straps, zippers, or any other suitable attachment means. The fastening means 140 may be tightened or loosened as necessary to affix the back support cushion 100 to the chair 170. The fastening means 140 is attached to the laterally opposing points (i.e. on the right sidewall 120c and the left sidewall 120d) of the cover 120.

[0026] FIG. 3 shows an isometric view of the back support cushion 100 with the opening 150 having zipper means 150a, in accordance with an embodiment of the present invention. The zipper means 150a securely holds the foam 110 and the composite board 130 inside the cover 120 of the cushion 100.

[0027] FIG. 4 shows an isometric view of the back support cushion 100 with a handle, in accordance with an embodiment of the present invention. The handle 160 is attached to at least one of the right sidewall 120c, or the left sidewall 120d of the cover 120, to make pick-up and carrying the back support cushion 100 easier. The handle 160 is made of flexible materials such as vinyl, leather, but preferably are made of a sturdy flexible woven cord material of a type known to those skilled in the art or it may also be formed of material used for the cover 120. Although a single handle 160 is shown in FIG. 4, this is not a limitation of the present invention as more than one handle can be considered to be within the scope of the present invention.

[0028] FIG. 5 shows an isometric view of the back support cushion 100 with the opening 150 having Velcro means 150b, in accordance with another embodiment of the present invention. Like the zipper means 150a, the Velcro means

150b may alternatively be used to securely hold the foam 110 and the composite board 130 inside the cover 120 of the cushion 100.

[0029] FIG. 6 shows an isometric view of the back support cushion 100 fastened to the chair 170 using the fastening means 140. Additionally, FIG. 7 shows the user 180 resting against the chair 170 with the back support cushion 100. As shown in FIG. 6 and FIG. 7, the back support cushion 100 is fastened to the chair 170 using a suitable fastening means like adjustable strap with hook and loop apparatus 140. When in use, the back support cushion 100 is placed adjacent to the back rest of the chair 170. The user 180 is sitted onto the chair 170 aligning his lower back with the back support cushion 100, which is held in place by the fastening means 140. When seated, the user's 170 shoulders will inherently move backwards and apply pressure on the foam 110, which in turn applies pressure on the composite board 130. The user's 170 posture will instantly become proper due to the composite board 130 disposed between the rear side 120b of the cover 120 and the rear side of the foam 110. In another embodiment, the back support cushion 100 may be vertically/horizontally moved with the help of the handle 160 attached to the right sidewall 120c of the cover 120 (as shown in FIG. 6) to align the back support cushion 100 to a desired position of the user's body. The back support cushion 100 will be an add-on piece to any existing chair or seat, including, but not limited to, cars, wheelchairs, offices, homes, couches, and the like.

[0030] Thus, the back support cushion 100 provides improved spinal support and increased comfort, particularly over long seated durations wherein fatigue is an issue. The back support cushion 100 provides greater comfort to the user 180, and promotes reduction of neck and back injuries due to lack of spinal support.

[0031] The illustrations of arrangements described herein are intended to provide a general understanding of the structure of various embodiments, and they are not intended to serve as a complete description of all the elements and features of apparatus and systems that might make use of the structures described herein. Many other arrangements will be apparent to those of skill in the art upon reviewing the above description. Other arrangements may be utilized and derived therefrom, such that structural and logical substitutions and changes may be made without departing from the scope of this disclosure. Figures are also merely representational and may not be drawn to scale. Certain proportions thereof may be exaggerated, while others may be minimized. Accordingly, the specification and drawings are to be regarded in an illustrative rather than a restrictive sense.

[0032] The preceding description has been presented with reference to various embodiments. Persons skilled in the art and technology to which this application pertains will appreciate that alterations and changes in the described structures and methods of operation can be practiced without meaningfully departing from the principle, spirit and scope of the invention.

- I claim:
- 1. A back support cushion, comprising:
- a foam;
- a cover for accommodating the foam, wherein the cover comprises a front side, a rear side, a right sidewall, and a left sidewall;

- a composite board, wherein the composite board is disposed between the rear side of the foam and the rear side of the cover;
- a fastening means, wherein the fastening means comprises at least one adjustable strap attached to the cover for placing the back support cushion to a desired position; and
- at least one handle attached to at least one of the right sidewall, and the left sidewall of the cover.
- 2. The back support cushion of claim 1, wherein the composite board is adapted to be removably placed within the cover.
- 3. The back support cushion of claim 1, wherein the rear side of the cover having an opening to receive the composite board, and the at least one foam.
- **4.** The back support cushion of claim **3**, wherein the opening comprises at least one of a zipper means, and a Velcro means to close the opening for securing the composite board and the foam inside the cover.
- 5. The back support cushion of claim 1, wherein the foam is a memory foam.
- **6**. The back support cushion of claim **1**, wherein the foam is a high resilience (HR) foam.
- 7. The back support cushion of claim 1, wherein the cover is selected from at least one of cloth, fabric, leather and vinyl.

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