A yoga mat comprising at least one folding depression which enables folding and rolling of a yoga mat so that the width of the mat is typically less than the shoulder width of the user of the yoga mat. The at least one folding depression is typically on the upper, user-contacting surface of the yoga mat. In instances where the overall thickness of the yoga mat is greater than about 0.35 inches, it is advisable to use a location matching folding depression on each side of the yoga mat. The folding depression may be deeper on the user-contacting surface than on the floor contacting surface of the yoga mat. In an alternative embodiment, the upper surface of the yoga mat may be a solid layer, with at least two underlying spaced lower sections to permit folding inward upon the solid layer.
FOLD AND ROLL PORTABLE YOGA MAT

BACKGROUND OF THE INVENTION

[0001] Field of the Invention

[0002] The present invention relates to a yoga mat which can be reduced in exterior surface area to promote easy handling, carrying, and storage.

[0003] Description of the Background Art

[0004] This section describes background subject matter related to the disclosed embodiments of the present invention. There is no intention, either express or implied, that the background art discussed in this section legally constitutes prior art.

[0005] Yoga has become increasingly popular in the United States over the past decade. Classes and practice groups outside the home are becoming more available and offer advantageous opportunities for enthusiasts. As a result, there is a need for a convenient manner for transport of the yoga mat.

[0006] There are a number of U.S. patents which relate to yoga mats, and a portion of these are briefly discussed below to illustrate concepts which, while different from the present invention, illustrate functional capabilities which are of interest to a yoga mat user. However, none of these patents relate to a yoga mat which has a structural configuration comparable with the present inventive yoga mat.

[0007] U.S. Pat. No. 8,608,381 to Woods et al., issued Dec. 17, 2013, relates to a yoga or exercise mat shape that allows instructors and students to see each other in all yoga poses without re-positioning mats. The mat shape also ensures that the participants maintain all body parts on the mat during all poses. The mat is further provided as a one-piece configuration to allow an easy and hassle-free set up and use experience. In particular, the mat is a one-piece integral yoga mat, comprising: (a) an elongate yoga mat body portion; (b) first and second cross arm portions extending from the elongate yoga mat body portion and integrally formed with the elongate yoga mat body portion such that the cross arms are not removable therefrom, wherein the cross arms extend from the yoga mat body portion in such a way as to define a head portion and a lower portion, . . . further comprising a score line formed where each cross arm extends from the elongate yoga mat body portion, wherein each score line defines a line where the thickness of the yoga mat is decreased in order to ease inward folding of the first and second cross arm portions.

[0008] U.S. Pat. No. 8,765,253 to Smaldone et al., issued Jul. 1, 2014, describes an exercise mat which includes a knit spacer fabric having a first ground fabric spaced apart from a second ground fabric in an uncompressed state. The exercise mat can be configured to be rolled up and compressed for storage and to expand into a planar spaced apart arrangement between the first and second ground fabrics for use.

[0009] U.S. Pat. No. 8,769,742 to Thornton et al., issued Jul. 8, 2014, discloses a device that is comprised of a flexible material and a roll mechanism associated with the flexible material. A bistable resilient member maintains the flexible material flat due to a tension force within the body of the bistable resilient member in a first stable state, and maintains the flexible material to a rolled-up, bundled closed position after the tension force within the body of the bistable resilient member is fully released (the second stable state). Further, the bistable resilient member compels the flexible material to a self-roll-up motion (during the transition state) while a tension force within the body of the bistable resilient member is released.

[0010] U.S. Pat. No. 8,822,012 to Franks et al., issued Sep. 2, 2014, discloses a mat including a compressible first layer, openings formed through one or more first portions and columns disposed in proximity to the openings. One or more second portions, or at least one column, or both may be configured to be depressed to provide support and traction. The disclosure further provides a towel including an absorption layer and a compressible region of flexible fiber disposed on one or more first portions of a top surface of the absorption layer.

[0011] U.S. Pat. No. 8,966,681 to Burch, issued Mar. 3, 2015, describes a mat which comprises an origin that is positioned along one of a first axis and a second axis; a first indicia that is positioned symmetrically relative to the origin; and a second indicia that is positioned symmetrically relative to only one of the axes. The first indicia can include a plurality of longitudinal lines that are substantially parallel to one another. The plurality of longitudinal lines can include (i) a longitudinal centerline, (ii) a pair of second longitudinal lines that are equally spaced on either side of the longitudinal centerline, (iii) a pair of second longitudinal lines that are equally spaced on either side of the longitudinal centerline, and (iv) a pair of third longitudinal lines that are equally spaced on either side of the longitudinal centerline.

[0012] U.S. Pat. No. 9,004,967 to Yeh, issued Apr. 14, 2015, relates to a skid-proof sports mat. The sports mat includes a foam sheet, an adhesive bonding film, a patterned layer, and a skid proof layer. The foam sheet is made of polyethylene foam. The adhesive bonding film applied to a top surface of the foam sheet. The patterned layer has a plastic film and a pattern printed in a bottom surface of the plastic film. The plastic film together with the pattern is joined on top of the adhesive bonding film. The skid proof layer, made of thermal plastic rubber, is coated over a top surface of the plastic film. Additionally, the skid proof layer together with the patterned layer, the adhesive bonding film and the foam sheet defines a plurality of indentations and protrusions over a top surface of the skid proof layer so as to strengthen connection thereby.

[0013] U.S. Pat. No. 9,028,383, issued May 12, 2015 relates to portable containers and accessories. A core provides a form for rolling an accessory around it. The accessory wrapped around the core may include a mat. The core includes a bottle and a container, utilizing what would otherwise be a void at the center of a rolled up mat for storage. The bottle and container may have twist-off lids which form resealable closures. The bottle and container may also couple with one another via opposing reverse threads at the bottom of each of the bottle and container. The twist-off lids may also include connection points for a carry-strap, the carry-strap including a buckle for adjusting the length of the carry-strap to make it a yoga stretching-strap. The mat includes elastic bands through grommets at an end of the mat. The bands are tensioned to secure the core when it is rolled inside the mat via the bands being wrapped around the rolled-up mat and core.

[0014] The references discussed above may be a small portion of the references which exist in the art. Applicant is providing these references because the technology of the kind described below could be used in combination with
other technology to implement features of yoga mats which can benefit from applicant’s invention.

SUMMARY OF THE INVENTION

[0015] The invention relates to a yoga mat which comprises at least one folding depression, which is generally located within the upper portion of the yoga mat, which extends downward from the surface on which the user of the yoga mat stands during practice. The depth of the depression depends upon the thickness of the yoga mat. When the yoga mat is a thicker mat, where the overall thickness ranges from about 0.25 inch to about 0.35 inch, for example and not by way of limitation, it may be desirable to place an additional folding depression in the lower, floor-contacting surface of the yoga mat which is aligned with the folding depression located within the upper portion of the yoga mat.

[0016] Typically folding depression(s) are not placed solely on the lower, floor-contacting surface area, because the upper surface of the yoga mat needs to be kept clean, and folding the upper surface together keeps that surface clean while the mat is handled. When the mat is sufficiently thick, depressions may be placed on the lower, floor-contacting surface area of the mat at a location which directly opposes the depressions on the upper surface of the mat. The lower depressions are used to reduce the stress created on the lower surface of the mat when the upper surface of the mat is folded together. The at least one depression in the upper surface of the mat enables the easy and flat folding of the mat, in a manner such that the upper surface portion of the mat, which contacts a user’s body during use of the mat, is not in contact with any other mat surface (than the upper surface portion of the mat) when the folded yoga mat is rolled up.

[0017] The folding depressions of the yoga mat are designed to permit folding of the mat in a manner which provides a smaller dimension across the width of the folded mat, so that when the mat is rolled up, the mat can be carried on the user’s back more easily, without bumping. The folded mat can be rolled up and carried more easily because the edges of the folded mat are designed not extend past the shoulder width of most users of the mat. This reduces problems when the mat is carried on public transportation, in elevators, into cafes/restaurants, on camping expeditions, and within automobiles having limited trunk space.

[0018] The depressions which permit easier folding of the mat are formed using techniques which reduce the probability that, upon repeated folding of the mat, the upper surface of the mat and/or the interior material of the mat which lies beneath the upper surface, will crack or deteriorate over time. For example, depending on the material used to form the mat, the mat may be extruded with the depressions in place. In an alternative, heat and pressure may be applied to the upper surface of a mat to permanently deform the upper surface into the desired depressions. The purpose is not to cut or slice the mat surface, as this creates stress points within the mat which may fracture upon use of the mat and aging of the mat materials.

[0019] The folded mat rolls up evenly due to the folding depression design, and fits easily into a washing machine used to clean the mat. The folded mat may be strapped to the back of the user; may be carried in a carry bag with strap, purse, motorcycle saddle bags, a scooter top box, bicycle basket or rack; and may be easily stored in a gym locker, and in other confined spaces, for example and not by way of limitation.

[0020] The yoga mat lower surface which contacts a floor, for example, typically comprises a plastic, preferably elastomeric material. This material may have been chemically treated, texturized, or coated to provide a frictional contact with the flooring surface. By contrast, the upper contact surface is frequently formed from a fibrous material, such as a woven fabric, which is capable of resisting soiling, but simultaneously provides a good feeling on the feet of the user of the mat, while enabling traction by the user upon the upper surface of the mat.

[0021] In one preferred embodiment, the main body section of the yoga mat is consistent in composition throughout, down to a direct frictional contact with the floor, or down to a frictional coating which is in contact with the floor. The folding depressions formed into the upper portion of the main body section of the mat, may be formed into the mat, followed by a texturizing of the upper surface of the mat, or followed by application of the fibrous or woven layer to produce a desired feeling on the surface of the mat. In a second preferred embodiment, the depressions may be formed into the upper portion of the main body section of the mat after a fibrous or woven layer is applied, so that both the surface layer and the underlying main body are deformed simultaneously.

[0022] In some embodiments, where the mat is particularly thick, it may be advisable to have a folding depression both on the top surface and directly beneath on the bottom surface of the mat. This helps to reduce stress on both the top surface and the bottom surface of the yoga mat. The yoga mat then includes an upper contact surface with a folding depression, supported by a main body portion which typically also contains a folding depression directly beneath the upper contact surface, and a frictional floor-contacting layer on the bottom includes a folding depression directly in line with the folding depression pattern on the top surface of the mat.

[0023] Typical yoga mat overall thicknesses range from about 0.125 inches to about 0.35 inches, by way of example, and not by way of limitation. When desired for use on a hard surface, the mat overall thickness may exceed the 0.35 inch dimension, in which case, it is helpful if there is a folding depression both on the top and the bottom of the mat to reduce stress within the mat. The depth of an individual folding depression depends mainly on the overall thickness of the mat, but may also be influenced by the materials of construction of the mat (which affect ease of folding). Typical folding depression depth for a single depression on the upper surface of the yoga mat ranges from about 20% to about 50% of the overall thickness of the mat, for example and not by way of limitation.

[0024] As discussed above, for yoga mats which are thicker, in excess of about 0.35 inch, it is helpful to use a folding depression on each surface of the yoga mat. The folding depression on the lower surface of the yoga mat may be less deep than the folding depression on the upper surface of the yoga mat, with the idea of reducing stress at the lower surface in the folded mat, while the folding depression on the upper surface provides for flat folding of the mat. This is particularly helpful when the lower portion of the mat is a high density foam material which provides a padding effect to reduce the transfer of forces from the floor into the body.
of the user of the mat. The thick-layer high density foam materials are more stress sensitive upon stretching than the thin layer, typically low density upper mat surface materials, and therefore the thick-layer main body of the yoga mat benefits from at least a small amount of surface depression (about 10% or less of the overall thickness) to reduce stress.

Since many polymeric materials are notch sensitive, it is recommended that the folding depression be a gradually sloping depression formed using heat and pressure when possible, and that use of a knife edge slit to form a depression should be avoided, to increase the lifetime of the yoga mat.

The shape of the depression is a gradual slope toward the bottom of the depression. One preferred embodiment is a slope such that the depression forms a circle when the mat is folded. A circle is a very strong shape and this helps prevent crushing of the mat material over time, extending the useful lifetime of the mat.

**BRIEF DESCRIPTION OF THE DRAWINGS**

So that the manner in which the exemplary embodiments of the present invention are attained is clear and can be understood in detail, with reference to the particular description provided above, and with reference to the detailed description of exemplary embodiments, applicants have provided illustrating drawings. It is to be appreciated that the drawing is provided only to assist in understanding of the invention, and that certain well known materials and processes are not illustrated herein in order not to obscure the inventive nature of the subject matter of the disclosure.

**FIG. 1** shows a view of an opened yoga mat 100. The mat has a folding depression 104 running lengthwise down the center of the yoga mat 100. The upper surfaces 102 and 103 of yoga mat 100 are the contact surfaces with the user of yoga mat 100. The bottom surfaces 105 and 106 of yoga mat 100 are in contact with a floor or other surface which is used to support yoga mat 100.

**FIG. 2** shows a view 110 of the yoga mat 100 when the yoga mat 100 is folded around folding depression 104, so that the upper surfaces 102 and 103 (not shown) are in the center of folded mat 100, and the bottom surfaces 105 and 106 are exposed.

**FIG. 3** shows a view 120 of the yoga mat shown in view 110 of FIG. 2 after the mat has been rolled up. The bottom surfaces 105 and 106 of the yoga mat 100 which are in contact with a floor (not shown) when the yoga mat 100 is used, form the exposed surface on each side of the rolled yoga mat 120, while the upper surfaces 102 and 103 of yoga mat 100 which come in contact with the user of the yoga mat 100 are on the interior of the folded, rolled yoga mat 100 and are protected from contamination during handling and storage of the rolled yoga mat 100.

**FIGS. 4 and 5** show a first example of a folding depression 134 which is present in an unfolded mat, as illustrated in FIG. 4, and in a folded mat as illustrated in FIG. 5. The shape of depression 134 is designed to produce a round folded shape interior to the yoga mat, when the yoga mat is folded as shown in FIG. 5.

**FIG. 4** shows the unfolded yoga mat 130 where the surface of the yoga mat which contacts a floor surface (not shown) is numbered 136 on the left side (which remains on the lower exterior of the yoga mat after folding) and is numbered 135 on the right side (which moves to the upper exterior surface of the yoga mat after folding). The surface 133, which is in contact with the user of the mat, becomes the interior surfaces after folding of yoga mat 130.

**FIG. 5** shows the folded yoga mat 140 where areas 135 and 136 are now on the exterior of folded yoga mat 140, and surface 133 is on the interior of folded yoga mat 140. The shape of the depression may be different from that shown in FIG. 4, and the shape of the depression after folding, as shown in FIG. 5, may not be a circle, but may be an oval (not shown). However, a circle is known in the mechanical arts to be a strong shape, resisting compression, and a shape which transfers a load along the circle inner surface evenly.

**FIGS. 6 and 7** show a second example, illustrating dual folding depressions, areas 152 and 154 of a kind which may be used when the yoga mat 150 is particularly thick and it is desired to reduce the stress on the exterior surface of the folded yoga mat.

**FIG. 6** shows the unfolded yoga mat, where the surfaces 155 and 156 of the yoga mat 150 contact the floor (not shown). Folding depressions 152 and 154 are on opposite sides of the yoga mat 150.

**FIG. 7** shows the folded yoga mat 160, where surface 153 is now interior of the folded mat 160. Bottom 156 is on the floor (not shown) and the upper exterior is 155. The folding depression 152 is now a circular opening through the folded mat 160. The folding depression 154 is now along the exterior edge of the fold, and provides stress relief for the exterior surface areas 155 and 156 which are now the folded exterior surface areas.

**FIGS. 8 and 9** show an example where there is no folding depression on the upper surface of a thin mat 170. Instead, a constant smooth surface 173 is present across an upper layer 172, which is present across the surface of the mat.

As shown in FIG. 8, there is a lower portion of the mat which is formed from two layers of material 174 and 176, which are separated by a space 178 having a width 179, where the width 179 depends upon the thickness of the two material layers 174 and 176. The width 179 is typically about the same as the thickness of the upper surface layer 172, so that when the mat is folded, as shown in FIG. 9, the amount of stress present within the folded upper surface layer 172 will be acceptable. Surface 171 shown in FIG. 8 is the surface of the mat 170 which is in contact with a floor, for example.

**FIG. 9** shows the folded mat from FIG. 8, where the lower sections of the mat, 174 and 176 are now on the exterior of the folded mat 180. The interior surfaces of folded layer 172 are internal to folded mat 180 and protected from soiling.

**FIGS. 10 and 11** show a yoga mat 190 (unfolded) and 200 (folded), where the yoga mat 190 is wider, such that two folds are required to reduce the width adequately before rolling the yoga mat 190.

**FIG. 10** shows a yoga mat 190 where the folded depressions 193 and 195 are present on the upper surface 194 of yoga mat 190. The width dimensions of sections 192 and 196 are such that the edges will mate at the center of section 194, when sections 192 and 196 are folded.

**FIG. 11** shows the folded yoga mat 200, where the folded depressions 193 and 195, each form circular spacing. The interior surfaces 192, 194, and 196 which are the contact surfaces with the user (not shown) are protected, and the
surfaces 197, 198, and 199, which have been in contact with a floor (not shown) are on the exterior of the folded mat 200. The folded mat 200 is now ready to be rolled, and will provide a narrow width (typically less than about 16 inches wide) which facilitates easy carrying strapped against the owner’s back, or packed into a small bag having a shoulder strap for carrying, by way of example.

DESCRIPTION OF EMBODIMENTS

[0043] One embodiment of the invention relates to a yoga mat which comprises at least one folding depression, which may be located on either side of the yoga mat. However, as illustrated in FIGS. 1, 10, and 11, the folding depression is generally located on the upper surface of the yoga mat, so that (as illustrated in FIGS. 1-3) when the side sections 102 and 103 of a yoga mat 100 are folded in, the upper surface 102 of the mat is protected from soiling, and the folding depression forms a circle (a particularly strong shape) 104 at the folded edge. Also, as illustrated in FIGS. 10 and 11, where there is a double folding of a wider mat, user surfaces 192, 194, and 196 are folded inward to prevent soiling, and folding depressions 193 and 195 preferably form circles 193 and 195 which provide strength along the outside edges of the folded mat 200.

[0044] The folding depression is typically a relatively shallow arc shape, which does not bother the user of the yoga mat, and which puts very little stress on the inside and outside surfaces of the mat when the mat is folded. In most instances a single fold in the mat is adequate to narrow the width of the mat sufficiently that a rolled up mat will not extend past the shoulders of the user. This permits the user to carry the folded and rolled mat easily strapped to his/her back, without bumping objects while carrying the mat. If the mat is particularly wide, it may be necessary to make two folds in the mat before rolling, as illustrated in FIGS. 10 and 11, where folding depressions 193 and 195 are used to assist folding of exterior sections 192 and 196 toward center section 194, forming a folded structure of the kind shown in FIG. 11.

[0045] When the yoga mat is a thicker mat, having a thickness greater than about 0.25 inches, for example and not by way of limitation, it may be desirable to place an additional folding depression in the lower, floor-contacting surface of the yoga mat. Typically the depressions on the upper surface and lower surface of the mat are aligned with each other. An example of this is illustrated in FIG. 6 where the yoga mat 150 comprises two folding depressions 152 and 154. FIG. 7 shows the folded mat 160, where there is an internal circle formed at the point where the upper and lower folding depressions meet; in addition, there is an external, stress relieving area 154 on the exterior fold area of the yoga mat 160. This relief on the exterior surface increases the service life of the yoga mat by reducing stress at the outside surface in the area of the fold.

[0046] Typically, for thinner mats, having a thickness of about 0.30 inch or less, the folding depression(s) are placed on the upper, user-contacting surface of the yoga mat, because this surface is folded to the inside to keep it clean; and, since the stretched distance is smaller at the inside surface, the mat will last longer. It is possible to place the folding depression(s) on the exterior surface, but just not as desirable. A single folding depression is shown unfolded and folded in Figure sets 1 and 2, 4 and 5, and 6 and 7.

[0047] FIGS. 8 and 9 show a different embodiment of a kind which is recommended for thicker mats. In this embodiment, the lower portion of the mat is formed from more than one section, sections 174 and 176. This mat structure is recommended for thicker mats, as a means of reducing the amount of stress created on the exterior folded surface 172.

[0048] As shown in FIG. 8, there is a lower portion of the mat which is formed from two layers of material 174 and 176, which are separated by a space 178 having a width 179, where the width 179 depends upon the thickness of the two material layers 174 and 176. Not by way of limitation, the width 179 is typically about the same as the thickness of the upper surface layer 172, so that when the mat is folded, as shown in FIG. 9, the amount of stress present within the folded upper surface layer 172 will be acceptable. Surface 171 shown in FIG. 8 is the surface of the mat 170 which is in contact with a floor, for example. As shown in FIG. 9, after folding of the mat, the lower sections of the mat, 174 and 176 are now on the exterior of the folded mat 180. The interior surfaces of folded layer 172 are internal to folded mat 180 and protected from soiling.

[0049] The folding depressions of the yoga mat, as illustrated in FIGS. 1-7, 10 and 11; or the spacing between bottom sections of the kind shown in FIGS. 8 and 9 are designed to permit folding of the mat in a manner which provides a smaller dimension across the width of the folded mat, so that when the mat is rolled up, the mat can be carried on the user’s back more easily, without bumping.

[0050] When the yoga mat is a wider mat of the kind shown in FIGS. 10 and 11, it is recommended to use two folding depressions 193 and 195 so that the overall width of the folded mat can be reduced substantially, as shown in FIG. 11. This same concept may be used with respect to the design shown in FIGS. 8 and 9, (not illustrated), where there are three lower sections of material, separated by two spacings beneath the upper surface layer of the mat, and the folded mat would resemble the mat shown in FIG. 9 on one edge, but the folded mat would have two folded edges which resemble fold 172. Again, the ability to reduce the width of a rolled mat reduces the probability of bumping objects when the mat is carried on the back of a person, and makes it easier to carry the folded, rolled mat in a carry bag, purse, motorcycle saddle bags, bicycle basket or racks of the automobile seating, gym locker, and in other confined spaces.

[0051] In the mat embodiments where there are folding depressions in a mat surface, or in the embodiment where there are spacings between bottom sections of a mat surface layer, this permits easier folding of the mat, and reduces the probability that, upon repeated folding of the mat, the upper surface of the mat and/or the interior material of the mat which lies beneath the upper surface, will crack or deteriorate over time. When shaped folding depressions are used, the folding depressions may be easily formed by applying moderate heat and pressure to a number of synthetic, thermoplastic materials.

[0052] The yoga mat lower contact surface 105 and 106 in FIG. 1, for example, is typically formed from a plastic or elastic, rubber-like material which has been chemically treated, texturized, or coated to enable the creation of a frictional contact with a flooring surface. The upper contact surface 102 and 103 in FIG. 1, for example, is frequently formed from a synthetic fibrous material, or may be a woven fabric or sprayed matrix which is capable of resisting soiling.
and which enables traction by the user on the upper contact surface of the mat. It is helpful if the upper contact surface is stain resistant, washable, and has a smooth and comfortable feel to the user, while still providing traction when pressure is applied to the surface. There are a number of synthetic materials available which can meet these requirements, and all of skill in the art can find the most advantageous materials by consulting with material suppliers. For purposes of forming the folding depressions, materials which can be thermofomed to produce the folding depressions are most advantageous. However, extrusion of a mat into a shape so that the mat contains folding depressions is adequate as long as the extruded material on the surface of the mat provides the desired surface properties. Grinding of surfaces to provide the folding depressions weakens the surface and will reduce the lifetime of the yoga mat, so is less desirable.

[0053] When the main body section of the yoga mat has a consistent composition throughout, down to a direct frictional contact with the floor, or down to a frictional coating in contact with the floor, the folding depressions are typically formed into the upper portion of the main body section of the mat, to the depth desired, followed by texturizing of the upper surface of the mat, or followed by application of a fibrous layer of the kind previously described, to produce a desired amount of frictional contact on the upper surface. When the composition of the lower portion of the yoga mat is different from the composition desired on the upper surface of the mat, the folding depressions are typically formed in the upper 20% to 50% of the lower section of the mat material, preferably (but not by way of limitation) followed by application of a layer of upper surface frictional material over the surface of the depression-containing layer, so that the upper surface conforms with the depressions in the lower section of the mat material.

[0054] In some embodiments, where the mat is particularly thick, it may be advisable to have a folding depression both on the top surface and on the bottom surface of the mat, to reduce stress when the mat is folded. This is illustrated in FIGS. 6 and 7. The yoga mat then includes an upper contact surface 150 and 153 with a folding depression 152, and a lower contact surface 156 and 155 with a folding depression 154. There may be a separate frictional floor-contacting layer (not shown) which has been applied over the lower contact surfaces 155 and 156.

[0055] Typical yoga mat overall thicknesses range from about 0.125 inches to about 0.35 inches, by way of example, and not by way of limitation. When desired for use on a hard surface, the mat overall thickness may exceed the 0.35 inch dimension, in which case, it is particularly helpful if there is a folding depression both on the top and the bottom of the mat to reduce stress within the mat when the mat is folded. The depth of an individual folding depression depends mainly on the overall thickness of the mat, but may also be influenced by the materials of construction of the mat (which affect ease of folding). Typical folding depression depth for a single depression on the upper surface of the yoga mat ranges from about 20% to about 50% of the overall thickness of the mat, for example and not by way of limitation.

[0056] For yoga mats which are thicker, in excess of about 0.35 inch, it is helpful to use a folding depression on each surface of the yoga mat, and may be advantageous to have the folding depression on the lower surface of the yoga mat may be less deep than the folding depression on the upper surface of the yoga mat, with the idea of reducing stress at the lower surface in the folded mat, which has to stretch a greater distance when the mat is folded. This is particularly helpful when the lower portion of the mat is a high density foam material which provides a padding effect to reduce the transfer of forces from the floor into the body of the user of the mat. The thick-layer high density foam materials are more stress sensitive upon stretching. With this in mind, it is advantageous to provide at least a low depth folding depression (10% or lower of the high density foam material overall thickness) to reduce stress.

[0057] As an alternative for yoga mats which are thicker, as described above, FIGS. 8 and 9 show an example where there is no folding depression on the upper surface of a thin mat 170. Instead, a constant smooth surface 173 is present across an upper layer 172, which is present across the surface of the mat.

[0058] As shown in FIG. 8, there is a lower portion of the mat which is formed from two layers of material 174 and 176, which are separated by a space 178 having a width 179, where the width 179 depends upon the thickness of the two material layers 174 and 176. The width 179 is typically about the same as the thickness of the upper surface layer 172, so that when the mat is folded, as shown in FIG. 9, the amount of stress present within the folded upper surface layer 172 will be acceptable. Surface 171 shown in FIG. 8 is the surface of the mat 170 which is in contact with a floor, for example. FIG. 9 shows the folded mat from FIG. 8, where the lower sections of the mat, 174 and 176 are now on the exterior of the folded mat 180. The interior surfaces of folded layer 172 are internal to folded mat 180 and protected from soiling.

[0059] The above described exemplary embodiments are not intended to limit the scope of the present invention, as one skilled in the art can, in view of the present disclosure, create many embodiments to correspond with the subject matter of the invention claimed below.

1 claim:
1. A foldable yoga mat having an upper surface upon which a user of the yoga mat stands and a lower surface which is placed in contact with a floor or other supporting surface when said yoga mat is in use, the invention comprising:
a) said yoga mat having at least one permanent depression upon said upper surface, wherein said depression assists in folding of said yoga mat, so that said upper surface is present on the interior of said folded yoga mat, and said lower surface is present on the exterior of said folded yoga mat, wherein said depression forms a circle or oval shaped hollow tubular area internal to said folded yoga mat, where said hollow tubular area travels in the longest dimension of said folded yoga mat.

2. A foldable yoga mat in accordance with claim 1, wherein said folded yoga mat width ranges from about 10 inches to about 16 inches, whereby said mat may be rolled to fit into a small space.

3. A foldable yoga mat having a single upper surface upon which a user of the yoga mat stands and a lower surface comprising at least two sections, wherein a space exists between each of said at least two sections, and wherein the number of spaced sections present enables the folding said yoga mat so that said single upper surface is internal to said folded yoga mat and said lower surface sections are external.
to said folded yoga mat, wherein a fold at each space between at least two sections travels in the longest dimension of said folded yoga mat.

4. A foldable yoga mat in accordance with claim 3, wherein a width of said folded yoga mat, which width is perpendicular to the length of said folded yoga mat, ranges from about 10 inches to about 16 inches.

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