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(54) LUGGAGE ARTICLE INCLUDING AN ADJUSTABLE DIVIDER SYSTEM

GEPÄCKSTÜCK MIT VERSTELLBAREM UNTERTEILUNGSSYSTEM

ARTICLE DE BAGAGE COMPRENANT UN SYSTÈME DE SÉPARATION AJUSTABLE

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Description

TECHNICAL FIELD

[0001] The present disclosure relates generally to luggage articles, and more specifically to a luggage article including an adjustable divider system.

BACKGROUND

[0002] Some luggage cases include interior fabric elements, such as fixed dividers, to provide various functional characteristics, such as protecting interior contents and/or dividing the storage volume into one or more compartments. Some traditional luggage case configurations, however, do not allow the dividers to be adjusted within the case, which may result in undesirable shifting of user contents within the case. In addition, some traditional luggage case configurations do not allow the dividers to be selectively removed from the case.

[0003] It is therefore desirable to provide an improved luggage case, and more specifically an improved frame structure that addresses one or all of the above-described problems and/or which more generally offers improvements or an alternative to existing arrangements.

[0004] Documents that may be related to the present disclosure include CN205658510U, CN206275299U, EP0379438B1, EP1833320A1, EP2230959B1, EP2904926B1, EP3073853B1, FR2711044B1, FR2921237A1, GB161117A, TW283890B, US4854432A, US5947286A, US6305513B1, US6435324B1, US20050098402A1, and US20090166138A1.

[0005] WO2015079143A1 discloses an item of luggage or suitcase comprising means for retaining the contents of the item of luggage or suitcase. The retaining means comprise a removable retaining plate and a plurality of downwardly open hooks that are secured to the item of luggage or suitcase.

SUMMARY

[0006] The present disclosure provides an adjustable divider system for a luggage article, as described below and defined in the accompanying claims. The divider system may include one or more dividers that separate the internal storage volume of the luggage article into multiple storage compartments, and one or more adjustment assemblies movably securing each divider within the luggage article. Each adjustment assembly may include an anchor secured, such as fixedly in one example, to the luggage article and a slide assembly slidably connected to the anchor. The anchor may include one or more engagement plates and a plurality of teeth. The slide assembly may include a connection structure that slidably connects the slide assembly to the one or more engagement plates of the anchor. The slide assembly may also include an engagement structure selectively engaging the teeth of the anchor. Actuation of the engagement structure may disengage the slide assembly from the teeth to allow select positioning the slide assembly along the anchor.

[0007] Embodiments of the present disclosure may include a luggage article. The luggage article includes a housing defining an internal storage volume, one or more dividers dividing the internal storage volume of the housing into multiple storage compartments, and an adjustment assembly movably securing each of the one or more dividers within the housing. The housing is defined by first and second shell portions hingedly connected together at a split line. The adjustment assembly movably secures each of the one or more dividers within at least one of the first and second shell portions. The adjustment assembly includes a ratchet mechanism selectively positioning the one or more dividers at a desired level within the at least one of the first and second shell portions.

[0008] In some examples, each adjustment assembly may include an anchor and a slide assembly connected to the anchor. The anchor may include one or more engagement or slide plates and a plurality of teeth. The slide assembly may include a connection structure slidably connecting the slide assembly to the one or more slide plates of the anchor. The slide assembly may include an engagement structure selectively engaging the teeth of the anchor. The connection structure may include first and second members. The first member may slidably engage a front surface of the one or more slide plates. The second member may slidably engaging a rear surface of the one or more slide plates.

[0009] The engagement structure may include one or more protrusions selectively engaging the teeth of the anchor. The engagement structure may include one or more actuators connected to the one or more protrusions. User actuation of the one or more actuators may move the one or more protrusions away from the teeth of the anchor to allow sliding movement of the slide assembly relative to the anchor.

[0010] Additionally, the teeth may extend laterally outwardly from a side of the anchor, and the one or more protrusions may extend laterally inwardly from a side of the slide assembly. Further to this example, the one or more protrusions may be biased into engagement with the teeth.

[0011] In another example, the teeth may extend rearwardly from a rear face of the anchor towards the panel and the one or more protrusions may extend from the slide assembly and away from the panel.

[0012] Additionally or separately, each tooth may include a top face, a bottom face, and a leading edge at the intersection between the top face and the bottom face. The top face of each tooth may be angled to allow ratcheting movement of the one or more protrusions along the plurality of teeth as the slide assembly is moved along the anchor in a first direction. The bottom face of each tooth may be angled to limit movement of the slide assembly along the anchor in an opposite second direc-

tion. User actuation of the one or more actuators may move the one or more protrusions away from the plurality of teeth sufficient to clear the leading edges of the teeth.

[0013] In some examples, the one or more dividers may include a first divider and a second divider. The first divider may be connected to the first shell portion by a first plurality of adjustment assemblies. The second divider may be connected to the second shell portion by a second plurality of adjustment assemblies.

[0014] In some examples, at least one of the one or more dividers may be removable from the luggage article. The slide assembly may be removable from the anchor to remove the at least one of the one or more dividers from the luggage article. The at least one of the one or more dividers may be a self-supporting panel. The self-supporting panel may be removable from the slide assembly to remove the at least one of the one or more dividers from the luggage article. The self-supporting panel may include a perimeter frame. The perimeter frame may be removable from the slide assembly. The at least one of the one or more dividers removable from the luggage article may function as a garment bag, a travel organizer, or a toiletry organizer.

[0015] Additional embodiments and features are set forth in part in the description that follows, and will become apparent to those skilled in the art upon examination of the specification or may be learned by the practice of the disclosed subject matter. A further understanding of the nature and advantages of the present disclosure may be realized by reference to the remaining portions of the specification and the drawings, which forms a part of this disclosure. One of skill in the art will understand that each of the various aspects and features of the disclosure may advantageously be used separately in some instances, or in combination with other aspects and features of the disclosure in other instances The scope of the invention is limited by the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] The description will be more fully understood with reference to the following figures in which components are not drawn to scale, which are presented as various examples of the present disclosure and should not be construed as a complete recitation of the scope of the disclosure, characterized in that:

FIG. 1 is a front isometric view of a luggage article according to some examples of the present disclosure;

FIG. 2 is an isometric view of the luggage article in an open configuration and showing an adjustable divider system;

FIG. 3 is an enlarged detail view of the adjustable divider system and showing a slide assembly in a first position;

FIG. 4 is an enlarged detail view of the adjustable divider system and showing the slide assembly in a second position;

FIG. 5 is a cross-sectional view of the adjustable divider system taken along line 5-5 in FIG. 3;

FIG. 6 is a fragmentary cross-sectional view of the adjustable divider system take along line 6-6 in FIG. 3;

FIGS. 7A-7C are isometric views of alternative dividers detachable with the adjustable divider system according to some examples of the present disclosure;

FIG. 8 is an isometric view of the luggage article in an open configuration and showing an additional adjustable divider system;

FIG. 9 is an isometric view of the luggage article in an open configuration and showing an additional adjustable divider system;

FIG. 10 is an enlarged detail view of the adjustable divider system of FIG. 9;

FIG. 11 is a cross-sectional view of the adjustable divider system of FIG. 9 taken along line 11-11 in FIG. 10 and showing a slide assembly engaged with an anchor; and

FIG. 12 is a cross-section view of the adjustable divider system of FIG. 9 taken along line 11-11 in FIG. 10 and showing a portion of the slide assembly disengaged from the anchor.

DETAILED DESCRIPTION

[0017] According to the present disclosure, an adjustable divider system is provided for adjustably coupling one or more internal dividers within a luggage case. The divider system includes an anchor secured to the luggage case, and a slide assembly slidably connected to the anchor. The dividers are secured to the slide assembly such that relative movement between the slide assembly and the anchor allows the adjustment of the position of the dividers within the case.

[0018] FIGS. 1 and 2 illustrate an exemplary luggage article 100 according to some examples of the present disclosure. The luggage article 100 includes a housing 102 formed from a plurality of walls or panels (hereinafter "panels" for the sake of convenience without intent to limit) defining an internal storage volume 104 in which to carry a user's belongings. In one example, the housing 102, may be formed from opposing front and rear panels 110, 112 and a plurality of side panels extending between the front and rear panels 110, 112. For instance, the luggage article 100 may include opposing top and bottom panels 120, 122 and opposing left and right side panels 130, 132 extending between the front and rear panels 110, 112. Corner regions 140 may be defined by the intersection of any two or three adjacent panels. For example, corners formed by the intersection of any three adjacent panels may be considered a "corner region." Edges formed by the intersection of any two adjacent panels may also be considered a "corner region."

[0019] The various panels may be configured or ar-

ranged to provide a desired size and shape of the housing 102. As shown in FIG. 1, the various panels may be sized and shaped to provide a height H, width W, and depth D of the housing 102. The height H of the housing 102 may be defined as the distance between the top and bottom panels 120, 122. The width W of the housing 102 may be defined as the distance between the left and right side panels 130, 132. Similarly, the depth D of the housing 102 may be defined as the distance between the front and rear panels 110, 112. The panels may be sized and shaped such that the luggage article 100 is taller than it is wide and wider than it is deep, such as that shown in at least FIG. 1. Other sizes and shapes of the housing 102 are contemplated, and the examples shown and described are for illustration purposes only.

[0020] The luggage article 100 illustrated in FIGS. 1-4 is an upright spinner hard side case but may be many types of luggage, including a soft side spinner case, a container, a backpack, a duffle bag, a purse, or the like. As shown, the luggage article 100 includes a first shell portion 180 and a second shell portion 182 defined by a split line 184. The first and second shell portions 180, 182, which may be right and left shell portions or front and rear shell portions, respectively, may be sized similarly to each other, or one of the shell portions may be sized to include a larger or smaller internal volume. Each shell portion may include a perimeter rim 190 at the split line 184. The perimeter rims 190 may abut each other when the luggage article 100 is closed. In some examples, each shell portion may include an edge piece 196 along its respective perimeter rim 190. The edge pieces 196 may provide a desired aesthetic and/or functional characteristic of the luggage article 100. For instance, the edge pieces 196 may facilitate closing of the luggage article 100, as explained below. The edge pieces 196 may also trim the perimeter rims 190 to conceal sewing lines and/or any imperfections and provide a clean appearance to, and/or a clean interface between, the first and second shell portions 180, 182.

[0021] The luggage article 100 is illustrated as a hard side luggage case, but may be formed from many combinations of hard side and soft side material. For example, the housing 102 may be molded from hard side material, or formed from a combination of hard side material and soft side material (known as "hybrid" construction). In some examples, the housing 102 may be formed entirely from soft side material supported by a frame structure suitably configured to allow for the divider system as described herein. The hard side material may be a thermoplastic material (self-reinforced or fiber-reinforced), ABS, polycarbonate, polypropylene, polystyrene, PVC, polyamide, PTFE, or biaxially oriented polypropylene, among others. The soft side material may be nylon, canvas, polyester, leather, PVC, polypropylene, polyethylene, and/or PTFE, among others.

[0022] The luggage article 100 may be moved between a closed configuration (see FIG. 1) and an open configuration (see FIG. 2). In the closed configuration, the first and second shell portions 180, 182 may be positioned adjacent to each other, and in one example with the respective perimeter rims 190 in engagement, to enclose a user's belongings within the internal storage volume 104 of the luggage article 100. In one example, the respective perimeter rims 190 may each, along at least a portion of the perimeter, have a shape to fit together and form corresponding overlapping or interlocking structures, such as a tongue and groove structure, to enhance the structural performance of the engaged rims 190 when closed. Alternatively or additionally, the respective perimeter rims 190 may each, along at least a portion of the perimeter, have a trim structure attached thereto, which is shaped to fit together and form corresponding overlapping or interlocking structures when the luggage case is closed. The corresponding shapes, or trim structures, may extend along the entire length of the perimeter rims 190, or along a single portion of each rim 190, or along more than one portion of each rim 190.

[0023] In the open configuration, the first and second shell portions 180, 182 may be reoriented relative to each other, such as in one example towards and away from each other, to allow user access to the interior of the luggage article 100. In one example, reorientation of the first and second shell portions 180, 182 positions the respective opening formed by each perimeter rim 190 facing upwardly (in Fig. 2), which allows a user easy access to the storage volume 104 of each shell portion 180, 182. To allow selective movement of the first and second shell portions 180, 182 between the open and closed configurations, the first and second shell portions 180, 182 may be pivotably attached together by a hinge 210 or similar mechanism.

[0024] The hinge 210 may include many configurations arranged to allow selective positioning, such as in one example by rotation about an axis of the hinge 210, of the first shell portion 180 relative to the second shell portion 182 from fully closed to fully open. For example, the hinge 210 may include any number or combination of a fabric strip, a strip of rubber, a piano hinge, a living hinge, spaced-apart discrete hinges, a zipper structure, an articulating joint made of elastomeric material, or other suitable structures that allow relative movement between the first and second shell portions 180, 182.

[0025] With continued reference to FIGS. 1 and 2, the luggage article 100 may include one or more support members 220 to support the luggage article 100 against a support surface (e.g., against the ground). The support members 220, which may be a foot, a fixed wheel assembly, a spinner wheel assembly, or any combination thereof, may be associated with any suitable panel of the housing 102, such as in at least one example connected to at least the bottom panel 122. As shown, the luggage article 100 may include four support members 220. In such examples, the luggage article 100 may include two support members 220 connected to each of the first shell portion 180 and the second shell portion 182. The support members 220 may be connected to any suitable portion

of the housing 102, such as at or near the corner regions 140 along the bottom panel 122.

[0026] The luggage article 100 may include a closure mechanism 280 to selectively secure the first shell portion 180 and the second shell portion 182 together. The closure mechanism 280 may be positioned along or adjacent to the split line 184 between the first shell portion 180 and the second shell portion 182 to engage each of the shell portions 180, 182 and allow selective actuation for opening and closing of the luggage article 100. The closure mechanism 280 may be a discrete mechanism, such as a latch, or may be a continuous-closure mechanism positioned along at least a part of the length of the split line 184, such as a zipper closure 282.

[0027] FIG. 2 is an isometric view showing, in part, an adjustable divider system that allows a user to adjust a storage volume of one or more shell portions. FIG. 3 is an enlarged detail view of the divider system and showing a divider in a first position. FIG. 4 is an enlarged detail view of the divider system and showing the divider in a second position. FIG. 5 is a cross-sectional view of the divider system and taken along line 5-5 in FIG. 3. FIG. 6 is a fragmentary cross-sectional view of the divider system and taken along line 6-6 in FIG. 3. Referring to FIGS. 2-6, the luggage article 100 includes an adjustable divider system 350 comprising an adjustment assembly 352 and one or more dividers 354. The dividers 354 may divide the internal storage volume 104 into multiple storage compartments. At least one of the first shell portion 180 and the second shell portion 182 may include a divider 354 therein. In some examples, the divider 354 may be a self-supporting panel. For example, the divider 354 may be formed from rigid or partially rigid material, may include an interior frame structure, or the like. In some examples, the divider 354 may include a central section 360 and/or a perimeter frame 362. The perimeter frame 362 may provide support and/or structure to the central section 360 of the divider 354. For example, the perimeter frame 362, which may be a wire loop frame, may tension the central section 360.

[0028] As shown in FIG. 10, the central section 360 may include many configurations, such as defining a laundry bag, a garment bag, a travel organizer, a toiletry bag or organizer, or the like. The divider 354 may also be a panel of relatively rigid material without a separate frame required, and may also include additional soft bag portions secured thereto, forming a laundry bag, garment bag, travel organizer, toiletry bag, or the like. The illustrated examples are non-limiting, and the central section 360 could be mesh and/or a strap or series of straps connected to the perimeter frame 362, among others. Depending on the particular application, the central section 360 may or may not cover the entire area of the shell opening.

[0029] In some examples, each of the first shell portion 180 and the second shell portion 182 may include a respective divider 354. For example, as shown in FIG. 8, the luggage article 100 may include a first divider 370 within the first shell portion 180 and a second divider 372 within the second shell portion 182. Depending on the particular application, the first divider 370 may be similar, if not identical, to the second divider 372. In alternative examples, the first divider 370 may be configured differently than the second divider 372 as desired.

[0030] With continued reference to FIGS. 2-6, each divider 354 may be connected to one or more adjustment assemblies 352. As described herein, each adjustment assembly 352 may allow select movement of a connected divider 354 within the housing 102. In particular, each adjustment assembly 352 may include a ratchet mechanism 353 that allows the user to move a connected divider 354 within the housing 102 to position the divider 354 as desired. In some examples, each adjustment assembly 352 may allow the user to move a connected divider 354 towards or away from a panel of the housing 102, such as down to reduce the storage volume under the divider, or up to increase the storage volume under the divider, when the luggage article 100 is open. Each adjustment assembly 352 may, in various embodiments, be connected with or attached directly to a panel of the luggage case, such as to an end panel 120, 122, or a side panel 130, 132. In one example, an adjustment assembly 352 is positioned on each of the opposing end panels 120, 122. In another example, an adjustment assembly 352 is positioned on each of the opposing side panels 130, 132.

[0031] As shown in FIG. 2, the first shell portion 180 may include a first plurality of adjustment assemblies 380, with the first divider 370 connected thereto. The first plurality of adjustment assemblies 380 may allow user-positioning of the first divider 370 towards (reducing storage volume) or away (increasing storage volume) from the panel of the housing 102 positioned therebelow. Such configurations may allow the user to vary a storage volume within the first shell portion 180 as desired. For instance, the user may move the first divider 370 towards the perimeter rim 190 of the first shell portion 180 to increase a storage volume within the first shell portion 180, such as to accommodate packing of a relatively larger amount of user belongings. In like manner, the user may move the first divider 370 away from the perimeter rim 190 of the first shell portion 180 to decrease a storage volume within the first shell portion 180, such as to accommodate packing of a relatively small amount of user belongings. Additionally or alternatively, the user may move the first divider 370 away from the perimeter rim 190 of the first shell portion 180 to tension the first divider 370 against the user belongings positioned below the first divider 370, which may be beneficial to limit shifting of the user belongings during transport, for instance.

[0032] The second shell 182 may be configured similarly to the first shell portion 180. In particular, as shown in FIG. 2, the second shell portion 182 may include a second plurality of adjustment assemblies 384, with the second divider 372 connected thereto. The second plurality of adjustment assemblies 384 may allow user po-

sitioning of the second divider 372 towards or away from the panel of the housing 102 positioned therebelow. Such configurations may allow the user to vary a storage volume within the second shell portion 182 as desired. For instance, the user may move the second divider 372 towards the perimeter rim 190 of the second shell portion 182 to increase a storage volume within the second shell portion 182, such as to accommodate packing of a relatively larger amount of user belongings. In like manner, the user may move the second divider 372 away from the perimeter rim 190 of the second shell portion 182 to decrease a storage volume within the second shell portion 182, such as to accommodate packing of a relatively small amount of user belongings. Additionally or alternatively, the user may move the second divider 372 away from the perimeter rim 190 of the second shell portion 182 to tension the second divider 372 against the user belongings positioned between the second divider 372 and the left side panel 130.

[0033] The adjustment assembly 352 may include many configurations. As one example, each adjustment assembly 352 may include an anchor 390 and a slide assembly 392 connected to the anchor 390. As shown, the anchor 390 is connected, either directly or indirectly, to the housing 102 of the luggage article 100, such as to the top panel 120 and/or to the bottom panel 122 of the housing 102. The anchor 390 may be an elongate member extending between the perimeter rim 190 of a respective shell and an opposite panel of the housing 102. The anchor 390 may include many configurations allowing movement of the slide assembly 392 relative thereto. For instance, the anchor 390 may be a plate, a toothed member, an indented member, or the like, as explained in more detail below. Depending on the particular application, one or more adjustment assemblies 352 may be positioned to support a divider 354. For instance, one or more adjustment assemblies 352 may be positioned at opposing sides or ends of the storage volume to support a divider 354 therein.

[0034] In one example, such as illustrated in FIGS. 3 and 4, the adjustment assembly 352 is connected to and positioned on a panel of the luggage article, such as including one of the opposing end panels 120, 122 or one of the opposing side panels 130, 132. The anchor 390 includes one or more engagement or slide plates 400 and a plurality of teeth 402. Depending on the particular application, the teeth 402 may be arranged in two sets on opposite lateral sides of the anchor 390, or may be arranged along a face of the anchor 390. In some examples, the teeth 402 may be biased or otherwise include a nonsymmetrical profile shape. For instance, as shown in FIG. 6, each tooth 402 may include a top face 410, a bottom face 412, and a leading edge 414 at the intersection between the top face 410 and the bottom face 412. The top face 410 may be angled away from the perimeter rim 190 of the connected shell. The bottom face 412 may be angled differently than the top face 410. For example, the bottom face 412 may extend substantially parallel to the perimeter rim 190 of the connected shell. As explained below, such a configuration may allow the slide assembly 392 to easily move downwards along the anchor 390 while also limiting upward movement of the slide assembly 392 without additional user actuation. In one example, the teeth 402 may extend laterally outwardly from a side of the anchor 390, and the one or more protrusions 450 may extend laterally inwardly from a side of the slide assembly 392.

[0035] The slide assembly 392 may include many configurations allowing sliding movement of the slide assembly 392 relative to the anchor 390. In one example, each slide assembly 392 includes a connection structure 422 slidably connecting the slide assembly 392 to the slide plate 400 of the anchor 390, and an engagement structure 424 engaging the teeth 402 of the anchor 390. The connection structure 422 may include first and second members 430, 432 positioned on opposite sides of the slide plate 400 of the anchor 390. For instance, the first member 430 of the connection structure 422 may slidably engage a front surface 438 of the anchor's slide plate 400. The second member 432 of the connection structure 422 may slidably engage a rear surface 440 of the anchor's slide plate 400. Depending on the particular application, the connection structure 422 may wrap around, sandwich, or otherwise engage the slide plate 400 of the anchor 390 to secure the slide assembly 392 to the anchor 390.

[0036] The engagement structure 424 of the slide assembly 392 may engage the teeth 402 of the anchor 390 to secure the slide assembly 392 in position along the anchor 390. For example, the engagement structure 424 may include one or more protrusions 450 arranged to selectively engage the teeth 402 of the anchor 390. In one example, the protrusions 450 may be biased towards the teeth 402 of the anchor 390. This biasing may maintain the protrusions in engagement with the teeth, and thus keep the slide assembly 392 engaged with the anchor 390 to keep the slide assembly 392 from moving upwardly (relative to Fig. 6) without the user moving the actuators to disengage the teeth 402 from the anchor 390 as described elsewhere herein.

[0037] As shown, for instance in Fig. 6, each protrusion 450 may engage the bottom face 412 of one tooth 402 and the top face 410 of a subjacent tooth 402 to limit movement of the slide assembly 392 along the anchor 390 in the upward direction relative to Fig. 6. To allow select movement of the slide assembly 392 along the anchor 390, such as in this example upwardly in Fig. 6, the slide assembly 392 may include one or more actuators 460, which may be referred to as buttons. In such examples, user actuation of the one or more actuators 460 may move the protrusions 450 away from the teeth 402 of the anchor 390 to disengage the protrusions 450 from the teeth 402 (as shown in dash in Fig. 6) a sufficient amount to allow the teeth 402 to protrusions clear the teeth and facilitate movement of the slide assembly 392 relative to the anchor 390, as explained below. The ac-

tuators 460 may be operably associated with, connected to, or directly attached with a respective protrusion or protrusions such that movement of the actuator moves the respective protrusion or protrusions. The biasing of the protrusions may be by a spring or springs 461, such as a coil spring, leaf spring (for instance made of metal or plastic), or an integral spring formed as part of the sliding assembly 392. As shown, the spring 461 may be positioned between one of more protrusions 350 and a portion of the slide assembly 392, or between the actuators and a portion of the slide assembly 392.

[0038] As shown in Fig. 6, the slide assembly 392 may be moved downwardly along the anchor 390 without the user engaging the actuators. Since the top face 410 of each tooth is angled upwardly, and the portion of the corresponding protrusion 350 that engages the tooth is angled downwardly, as the slide assembly 392 is pushed downwardly by the user, the protrusion is moved inwardly against the outward-bias of the spring 461 (or springs 461) to move the protrusion 350 relative to the corresponding tooth 402 a sufficient distance (see, for instance the dashed lines in Fig. 6 showing an inner position of each protrusion 350) and allow the slide assembly 392 move downwardly (relative to Fig. 6) on the anchor 390.

[0039] The slide assembly 392 may include other features. For instance, the slide assembly 392 may include a contact surface 468. As explained below, a user may engage the contact surface 468 to move the slide assembly 392 downwards along the anchor 390. In some examples, the slide assembly 392 may be arranged to engage the divider 354. For example, the slide assembly 392 may include a clip structure 474 operable to engage the perimeter frame 362 of the divider 354. In such examples, the clip structure 474 may be clipped onto the perimeter frame 362 of the divider 354. In some examples, the perimeter frame 362 may be clipped onto the clip structure 474 of the slide assembly 392.

[0040] Operation of the divider system 350 will now be discussed in more detail. For ease of reference and clarity, the operation will be described with respect to the divider system 350 of the first shell portion 180. Operation of the divider system 350 of the second shell portion 182 may be similar, if not identical. To move the first divider 370 towards the right side panel 132 (such as downwardly relative to Fig. 6), a user may engage the contact surface 468 of each slide assembly 392 and bias the slide assembly 392 towards the right side panel 132. Biasing the slide assembly 392 towards the right side panel 132 may cause the protrusion 450 of the connection structure 422 to engage and slide along the top face 410 of a subjacent tooth 402. Continued movement of the slide assembly 392 towards the right side panel 132 may cause the protrusion 450 to ride up the top face 410 of the subjacent tooth 402 and towards the tooth's leading edge 414 until the protrusion 450 clears the leading edge 414 of the tooth 402. Once the protrusion 450 clears the leading edge 414 of the tooth 402, the protrusion 450 may be biased towards the next subjacent tooth 402. This process may be repeated until the slide assembly 392 is ratcheted or clicked down along the anchor 390 a desired amount to reach an intended position on the anchor 390.

[0041] To move the first divider 370 away from the right side panel 132 (such as upwardly relative to Fig. 6), a user may engage the one or more actuators 460 of the slide assembly 392. Engagement of the one or more actuators 460 by the user may cause the one or more protrusions 450 of the connection structure 422 to disengage from the teeth 402. Depending on the particular application, the one or more actuators 460 may be pressed, squeezed, lifted, depressed, or otherwise moved to disengage the protrusions 450 from the teeth 402 (for example, such as is shown by the dashed lines in Fig. 6). For instance, with reference to FIGS. 5 and 6, engagement of the actuators 460 may move a pair of protrusions 450 towards each other to disengage the protrusions 450 from teeth 402 arranged in two sets on opposite lateral sides of the anchor 390. Continued actuation of the one or more actuators 460 by the user may move the protrusions 450 away from the teeth 402 until the protrusions 450 clear the leading edges 414 of the teeth 402. Once the protrusions 450 clear the leading edges 414 of the teeth 402, the sliding assembly 392 may move along the anchor 390 up or down. For example, once the protrusions 450 disengage the teeth 402, the sliding assembly 392 may be biased to move away from the right side panel 132 to a desired position along the anchor 390. Once the slide assembly 392 is positioned in a desired position, the one or more actuators 460 may be released causing the protrusions 450 to engage the teeth 402 of the anchor 390 and secure the slide assembly 392 in place.

[0042] FIGS. 7A-7C illustrate various views of alternative dividers 354. In some examples, the dividers 354 may be removable from the adjustment assemblies 352. For instance, the dividers 354 may be removed from the luggage article 100 for hanging in a closet or on a hook for use or storage. As one example, the divider 354 may define a garment bag for hanging in a closet. As another example, the divider 354 may define a toiletry organizer for convenient hanging in a bathroom. Other configurations of the dividers 354 are contemplated, including a laundry bag, a travel organizer, a business organizer, or the like. For example, the divider 354 may include one or more compartments defined by a flap cover 480 or zip closure 482. In some examples, the divider 354 includes a hanging member 484 for hanging from a structure, such as a shower bar, a clothes bar, or a hook. The hanging member 484 may be a hook, a loop, a hook and loop fastener, or the like.

[0043] Depending on the particular application, the self-supporting panel of the dividers 354 may be removable from the slide assemblies 392. In examples where the dividers 354 include a perimeter frame 362, the perimeter frame 362 of the dividers 354 may be removable from the slide assemblies 392 of the adjustment assemblies 352 to remove the dividers 354 from the luggage

article 100. Additionally or alternatively, the slide assemblies 392 may be removable from the anchors 390 secured to the housing 102 of the luggage article 100. The examples illustrated in FIG. 10 are for illustrative purposes only, and the dividers 354 may include other configurations. In some examples, panels may not be used, and instead a flexible strap or a plurality of flexible straps may be attached to a slide assembly or slide assemblies 392, which may be movable with the slide assembly in the anchor.

[0044] FIG. 8 is an isometric view showing, in part, an additional divider system 850. Except as otherwise described below, the divider system 850 illustrated in FIG. 8 may be similar to the divider system 350 described above. For example, the divider system 850 may include a slide assembly 392 slidably connected to an anchor 390 for relative movement therebetween. Like the divider system 350, the slide assembly 392 of divider system 850 may selectively engage a plurality of teeth 402 of the anchor 390 to hold the slide assembly 392 in position along the anchor 390. The divider system 850 may also include a disengagement mechanism to disengage the slide assembly 392 from the teeth 402 of the anchor 390. Unlike divider system 350, however, the slide assembly 392 may be disengaged from the teeth 402 by a mechanism different than a push button, as explained below.

[0045] Referring to FIG. 8, the actuation of the engagement structure 424 to remove or change the position of the slide assembly 392 relative to the anchor 390 of the divider system 850 may be accomplished by a loop 500 connected to the slide assembly 392. More specifically, the loop 500 may be connected to, or otherwise function as, the one or more actuators 460 of the slide assembly 392. For instance, the loop 500 may be connected, either directly or indirectly through one or more intermediate elements, to the protrusions 450. In such examples, the user may grasp and pull the loop 500 to cause the protrusions 450 of the slide assembly 392 to disengage the teeth 402 of the anchor 390. Once the protrusions 450 disengage the teeth 402 of the anchor 390, continued pulling of the loop 500 may cause the slide assembly 392 (and divider 354) to move upwardly toward the perimeter rim 190 of a respective shell portion. The slide assembly 392 of FIG. 8 may be ratcheted downwards to another position on the anchor 390 in substantially the same manner as described above. For example, the slide assembly 392 may be pressed downwardly by the user, whereupon the protrusions 450 slide along the top faces 410 of the teeth 402 in a ratcheting fashion.

[0046] FIG. 9 is an isometric view showing, in part, an additional divider system 1350 including an adjustment assembly 352. FIG. 10 is an enlarged detail view of the divider system 1350 of FIG. 9. FIG. 11 is a cross-sectional view of the divider system 1350 of FIG. 9 and showing a protrusion of a slide assembly engaged with teeth of an anchor. FIG. 12 is a cross-sectional view of the divider system 1350 of FIG. 9 and showing the protrusion of the slide assembly disengaged from the teeth of the anchor. Except as otherwise described below, the divider system 1350 illustrated in FIGS. 9-12 may be similar to the divider systems 350, 850 described above. The adjustment assembly 352 is connected to and positioned on a panel of the luggage article, such as including one of the opposing end panels 120, 122 or one of the opposing side panels 130, 132. For example, the divider system 1350 may include an adjustment assembly 352, which in turn includes a slide assembly 392 slidably connected to an anchor 390 for relative movement therebetween. Like the divider systems 350 and 850, the slide assembly 392 of divider system 1350 may selectively engage a plurality of teeth 402 of the anchor 390 to hold the slide assembly 392 in position along the anchor 390. The divider system 1350 may also include a disengagement mechanism to disengage the slide assembly 392 from the teeth 402 of the anchor 390. Unlike divider system 850, however, the slide assembly 392 may be disengaged from the teeth 402 by a mechanism different than a pull loop or a push buttons, as described in the above examples.

[0047] Referring to FIGS. 9-12, the teeth 402 may be arranged on the rear surface 440 of the anchor 390, such as between the slide plate 400 and the panel of the shell of the luggage article 100 to which it is connected and positioned. The slide assembly 392 may slide along the front surface 438 of the anchor 390. The slide assembly 392 may include a single lever-type actuator 460 on the bottom of the slide assembly 392. The slide assembly 392 may also include a single protrusion 450 engaging the teeth 402 on the rear face of the anchor 390 (see FIG. 11). The actuator 460, which may be referred to as a lever, may be connected, either directly or through one or more intermediate elements, to the protrusion 450. The actuator 460 may be pivotably connected to the slide assembly 392 and pivot about a pivot axis, such as defined by a pin 510, to move the protrusion 450 to release the protrusion 450 from engagement with the teeth 402 (see FIG. 12). In one example, the user may pinch or squeeze a portion of the engagement structure 424 to disengage the protrusion 450 from the teeth 402. For example, the user may place one or more fingers underneath the actuator 460 and a thumb on the contact surface 468 and squeeze or pinch the elements towards each other. The actuator 460 may be pivotably connected to the first member 430 or the second member 432 of the slide assembly 392.

[0048] In such examples, the user may lift up on the lever-type actuator 460 to disengage the protrusion 450 of the slide assembly 392 from the teeth 402 of the anchor 390, such as by moving the protrusion 450 away from the teeth 402. Once the protrusion 450 disengages the teeth 402 of the anchor 390, continued lifting of the actuator 460 may cause the slide assembly 392 (and divider 354) to move upwardly toward the perimeter rim 190 of the respective shell portion.

[0049] The slide assembly 392 of FIGS. 9-12 may be ratcheted downwards in substantially the same manner as described above. For example, the slide assembly

392 may be pressed downwardly by the user, such as in one example by pressing downward on the contact surface 468, whereupon the protrusions 450 slide along the top faces 410 of the teeth 402 in a ratcheting fashion. In some examples, the ratcheting movement of the slide assembly 392 downwardly along the anchor 390 may cause the actuator 460 to oscillate up and down as the protrusion 450 moves over each subjacent tooth 402.

[0050] The luggage article 100 may be formed from a variety of materials and means. For example, the housing 102, among others, may be formed from a thermoplastic material (self-reinforced or fiber reinforced), ABS, polycarbonate, polypropylene, polystyrene, PVC, polyamide, and/or PTFE, among others. In some examples, portions of the luggage article 100 may be extruded from aluminum or other similar metal. In addition, the housing 102 may be formed from fiber reinforced epoxy, resin, or other similar material. The luggage article may be formed or molded in any suitable manner, such as by plug molding, blow molding, injection molding, extrusion, casting, or the like. As noted above, the luggage article may be formed from soft side material and/or hard side material. Exemplary materials are noted above.

[0051] All relative and directional references (including: upper, lower, upward, downward, left, right, leftward, rightward, top, bottom, side, above, below, front, middle, back, vertical, horizontal, and so forth) are given by way of example to aid the reader's understanding of the particular examples described herein. They should not be read to be requirements or limitations, particularly as to the position, orientation, or use unless specifically set forth in the claims. Connection references (e.g., attached, coupled, connected, joined, and the like) are to be construed broadly and may include intermediate members between a connection of elements and relative movement between elements. As such, connection references do not necessarily infer that two elements are directly connected and in fixed relation to each other, unless specifically set forth in the claims.

[0052] Those skilled in the art will appreciate that the presently disclosed examples teach by way of example and not by limitation. Therefore, the matter contained in the above description or shown in the accompanying drawings should be interpreted as illustrative and not in a limiting sense. The following claims are intended to cover all generic and specific features described herein, as well as all statements of the scope of the present system, which, as a matter of language, might be said to fall there between.

Claims

1. A luggage article comprising:

a housing 102 defined by first 180 and second 182 shell portions hingedly connected together at a split line 184, the housing 102 defining an internal storage volume;

one or more dividers 354 dividing the internal storage volume of the housing 102 into multiple storage compartments; and

an adjustment assembly 352 movably securing each of the one or more dividers 354 within at least one of the first 180 and second 182 shell portions, the adjustment assembly 352 including a ratchet mechanism 353 selectively positioning the one or more dividers 354 at a desired level within the at least one of the first 180 and second 182 shell portions.

2. The luggage article of claim 1, wherein each adjustment assembly 352 comprises:

an anchor 390 secured to the housing 102, the anchor 390 including one or more slide plates 400 and a plurality of teeth 402; and

a slide assembly 392 connected to the anchor 390, the slide assembly 392 comprising:

a connection structure 422 slidably connecting the slide assembly 392 to the one or more slide plates 400 of the anchor 390; and

an engagement structure 424 selectively engaging the teeth 402 of the anchor 390.

3. The luggage article of claim 2, wherein the connection structure 422 of the slide assembly 392 comprises:

a first member 430 slidably engaging a front surface 438 of the one or more slide plates 400; and

a second member 432 slidably engaging a rear surface 440 of the one or more slide plates 400.

4. The luggage article of claim 2 or 3, wherein the engagement structure 424 comprises:

one or more protrusions 450 selectively engaging the teeth 402 of the anchor 390; and

one or more actuators 460 connected to the one or more protrusions 450, wherein user actuation of the one or more actuators 460 moves the one or more protrusions 450 away from the teeth 402 of the anchor 390 to allow sliding movement of the slide assembly 392 relative to the anchor 390.

5. The luggage article of claim 4, wherein:

a plurality of teeth 402 each include a top face 410, a bottom face 412, and a leading edge 414 at the intersection between the top face 410 and the bottom face 412;

the top face 410 is angled to allow ratcheting

movement of the one or more protrusions 450 along the plurality of teeth as the slide assembly 392 is moved along the anchor 390 in a first direction; and
the bottom face 412 is angled to limit movement of the slide assembly 392 along the anchor 390 in an opposite second direction.

6. The luggage article of claim 5, wherein user actuation of the one or more actuators 460 moves the one or more protrusions 450 away from the plurality of teeth 402 sufficient to clear the leading edges 414 of the plurality of teeth.

7. The luggage article of claim 2, wherein:

the one or more dividers 354 includes a first divider 370 and a second divider 372;
the first divider 370 is connected to the first 180 shell portion by a first plurality of adjustment assemblies 352; and
the second divider 372 is connected to the second 182 shell portion by a second plurality of adjustment assemblies 352.

8. The luggage article of claim 2, wherein at least one of the one or more dividers 354 is removable from the luggage article.

9. The luggage article of claim 8, wherein the slide assembly 392 is removable from the anchor 390 to remove the at least one of the one or more dividers 354 from the luggage article.

10. The luggage article of claim 8 or 9, wherein:

the at least one of the one or more dividers 354 is a self-supporting panel; and
the self-supporting panel is removable from the slide assembly 392 to remove the at least one of the one or more dividers 354 from the luggage article.

11. The luggage article of claim 10, wherein:

the self-supporting panel includes a perimeter frame 362; and
the perimeter frame 362 is removable from the slide assembly 392.

12. The luggage article of any of claims 8-10, wherein the at least one of the one or more dividers 354 removable from the luggage article functions as a garment bag, a travel organizer, or a toiletry organizer.

13. The luggage article of claim 4, wherein the teeth 402 extend laterally outwardly from a side of the anchor 390, and the one or more protrusions 450 extend laterally inwardly from a side of the slide assembly 392.

14. The luggage article of claim 13, wherein the one or more protrusions 450 are biased into engagement with the teeth 402.

15. The luggage article of claim 4, wherein the teeth 402 extend rearwardly from a rear face 439 of the anchor 390 towards the panel 120, 122, 130, 132, and the one or more protrusions 450 extend from the slide assembly 392 away from the panel 120, 122, 130, 132.

Patentansprüche

1. Gepäckstück, umfassend:

ein Gehäuse 102, das durch den ersten 180 und den zweiten 182 Schalenabschnitt definiert ist, die an einer Spaltlinie 184 scharniermäßig verbunden sind, wobei das Gehäuse 102 ein inneres Verstauvolumen definiert,
einen oder mehrere Teiler 354, die das innere Verstauvolumen des Gehäuses 102 in mehrere Verstaufächer unterteilen, und
eine Verstellanordnung 352, die jeden des einen oder der mehreren Teiler 354 in dem ersten 180 und/oder dem zweiten 182 Schalenabschnitt befestigt, wobei die Verstellanordnung 352 einen Ratschenmechanismus 353 aufweist, der den einen oder die mehreren Teiler 354 gezielt auf einer gewünschten Höhe in dem ersten 180 und/oder dem zweiten 182 Schalenabschnitt positioniert.

2. Gepäckstück nach Anspruch 1, wobei jede Verstellanordnung 352 Folgendes umfasst:

einen an dem Gehäuse 102 befestigten Anker 390, wobei der Anker 390 eine oder mehrere Schieberplatten 400 und eine Vielzahl von Zähnen 402 aufweist, und
eine Schieberanordnung 392, die mit dem Anker 390 verbunden ist, wobei die Schieberanordnung 392 Folgendes umfasst:

eine Verbindungsstruktur 422, die die Schieberanordnung 392 verschiebbar mit der einen oder den mehreren Schieberplatten 400 des Ankers 390 verbindet, und
eine Eingriffsstruktur 424, die die Zähne 402 des Ankers 390 gezielt in Eingriff nimmt.

3. Gepäckstück nach Anspruch 2, wobei die Verbindungsstruktur 422 der Schieberanordnung 392 Fol-

gendes umfasst:

ein erstes Glied 430, das eine Vorderfläche 438 der einen oder der mehreren Schieberplatten 400 verschiebbar in Eingriff nimmt, und
ein zweites Glied 432, das eine Rückfläche 440 der einen oder der mehreren Schieberplatten 400 verschiebbar in Eingriff nimmt.

4. Gepäckstück nach Anspruch 2 oder 3, wobei die Eingriffsstruktur 424 Folgendes umfasst:

einen oder mehrere Vorsprünge 450, die die Zähne 402 des Ankers 390 gezielt in Eingriff nehmen, und
einen oder mehrere Aktuatoren 460, die mit dem einen oder den mehreren Vorsprüngen 450 verbunden sind, wobei der eine oder die mehreren Vorsprünge 450 durch Betätigung des einen oder der mehreren Aktuatoren 460 durch einen Benutzer weg von den Zähnen 402 des Ankers 390 bewegt werden, um eine Schiebebewegung der Schieberanordnung 392 bezüglich des Ankers 390 zu gestatten.

5. Gepäckstück nach Anspruch 4, wobei:

eine Vielzahl von Zähnen 402 jeweils eine obere Fläche 410, eine untere Fläche 412 und einen vorderen Rand 414 an der Kreuzung zwischen der oberen Fläche 410 und der unteren Fläche 412 aufweisen,
die obere Fläche 410 abgewinkelt ist, um eine Ratschenbewegung des einen oder der mehreren Vorsprünge 450 entlang der Vielzahl von Zähnen zu gestatten, wenn die Schieberanordnung 392 entlang des Ankers 390 in eine erste Richtung bewegt wird, und
die untere Fläche 412 abgewinkelt ist, um eine Bewegung der Schieberanordnung 392 entlang des Ankers 390 in eine entgegengesetzte zweite Richtung zu begrenzen.

6. Gepäckstück nach Anspruch 5, wobei der eine oder die mehreren Vorsprünge 450 durch Betätigung des einen oder der mehreren Aktuatoren 460 durch einen Benutzer hinreichend weit weg von der Vielzahl von Zähnen 402 bewegt werden, dass sie an den vorderen Rändern 414 der Vielzahl von Zähnen vorbeigehen.

7. Gepäckstück nach Anspruch 2, wobei:

der eine oder die mehreren Teiler 354 einen ersten Teiler 370 und einen zweiten Teiler 372 aufweisen,
der erste Teiler 370 über eine erste Vielzahl von Verstellanordnungen 352 mit dem ersten 180 Schalenabschnitt verbunden ist und
der zweite Teiler 372 über eine zweite Vielzahl von Verstellanordnungen 352 mit dem zweiten 182 Schalenabschnitt verbunden ist.

8. Gepäckstück nach Anspruch 2, wobei mindestens einer des einen oder der mehreren Teiler 354 aus dem Gepäckstück entfernbar ist.

9. Gepäckstück nach Anspruch 8, wobei die Schieberanordnung 392 aus dem Anker 390 entfernbar ist, um den mindestens einen des einen oder der mehreren Teiler 354 aus dem Gepäckartikel zu entfernen.

10. Gepäckstück nach Anspruch 8 oder 9, wobei:

der mindestens eine des einen oder der mehreren Teiler 354 eine selbststützende Tafel ist und die selbststützende Tafel aus der Schieberanordnung 392 entfernbar ist, um den mindestens einen des einen oder der mehreren Teiler 354 aus dem Gepäckartikel zu entfernen.

11. Gepäckstück nach Anspruch 10, wobei:

die selbststützende Tafel einen Umfangsrahmen 362 aufweist und
der Umfangsrahmen 362 von der Schieberanordnung 392 entfernbar ist.

12. Gepäckstück nach einem der Ansprüche 8 - 10, wobei der mindestens eine des einen oder der mehreren Teiler 354, die aus dem Gepäckstück entfernbar sind, als ein Kleidersack, ein Reisenecessaire oder ein Kulturbeutel wirkt.

13. Gepäckstück nach Anspruch 4, wobei sich die Zähne 402 von einer Seite des Ankers 390 seitlich nach außen erstrecken und sich der eine oder die mehreren Vorsprünge 450 von einer Seite der Schieberanordnung 392 seitlich nach innen erstrecken.

14. Gepäckstück nach Anspruch 13, wobei der eine oder die mehreren Vorsprünge 450 in Eingriff mit den Zähnen 402 vorgespannt sind.

15. Gepäckstück nach Anspruch 4, wobei sich die Zähne 402 von einer Rückfläche 439 des Ankers 390 zu der Tafel 120, 122, 130, 132 nach hinten erstrecken und sich der eine oder die mehreren Vorsprünge 450 von der Schieberanordnung 392 von der Tafel 120, 122, 130, 132 weg erstrecken.

Revendications

1. Article de bagage comprenant :

un logement 102 défini par des première 180 et seconde 182 parties de coque articulées entre elles au niveau d'une ligne de partage 184, le logement 102 définissant un volume de stockage interne ;
au moins un séparateur 354 séparant le volume de stockage interne du logement 102 en plusieurs compartiments de stockage ; et
un ensemble d'ajustement 352 fixant de manière mobile chacun de l'au moins un séparateur 354 dans au moins une des première 180 et seconde 182 parties de coque, l'ensemble d'ajustement 352 comprenant un mécanisme à cliquet 353 positionnant sélectivement l'au moins un séparateur 354 à un niveau souhaité dans l'au moins une des première 180 et seconde 182 parties de coque.

2. Article de bagage selon la revendication 1, l'ensemble d'ajustement 352 comprenant :

un dispositif d'ancrage 390 fixé au logement 102, le dispositif d'ancrage 390 comprenant au moins une plaque coulissante 400 et une pluralité de dents 402 ; et
un ensemble coulissant 392 relié au dispositif d'ancrage 390, l'ensemble coulissant 392 comprenant :

une structure de liaison 422 reliant de manière coulissante l'ensemble coulissant 392 à l'au moins une plaque coulissante 400 du dispositif d'ancrage 390 ; et
une structure de mise en prise 424 venant en prise sélectivement avec les dents 402 du dispositif d'ancrage 390.

3. Article de bagage selon la revendication 2, la structure de liaison 422 de l'ensemble coulissant 392 comprenant :

un premier élément 430 venant en prise de manière coulissante avec une surface avant 438 de l'au moins une plaque coulissante 400 ; et
un second élément 432 venant en prise de manière coulissante avec une surface arrière 440 de l'au moins une plaque coulissante 400.

4. Article de bagage selon la revendication 2 ou 3, la structure de mise en prise 424 comprenant :

au moins une saillie 450 venant sélectivement en prise avec les dents 402 du dispositif d'ancrage 390 ; et
au moins un actionneur 460 relié à l'au moins une saillie 450, l'actionnement par l'utilisateur de l'au moins un actionneur 460 éloignant l'au moins une saillie 450 des dents 402 du dispositif d'ancrage 390 pour permettre le mouvement coulissant de l'ensemble coulissant 392 par rapport au dispositif d'ancrage 390.

5. Article de bagage selon la revendication 4,
une pluralité de dents 402 comprenant chacune une face supérieure 410, une face inférieure 412, et un bord d'attaque 414 au niveau de l'intersection entre la face supérieure 410 et la face inférieure 412 ;
la face supérieure 410 étant inclinée pour permettre un mouvement d'encliquetage de l'au moins une saillie 450 le long de la pluralité de dents lorsque l'ensemble coulissant 392 est déplacé le long du dispositif d'ancrage 390 dans une première direction ; et
la face inférieure 412 étant inclinée pour limiter le mouvement de l'ensemble coulissant 392 le long du dispositif d'ancrage 390 dans une seconde direction opposée.

6. Article de bagage selon la revendication 5, l'actionnement par l'utilisateur de l'au moins un actionneur 460 éloignant l'au moins une saillie 450 de la pluralité de dents 402 suffisamment pour dégager les bords d'attaque 414 de la pluralité de dents.

7. Article de bagage selon la revendication 2,
l'au moins un séparateur 354 comprenant un premier séparateur 370 et un second séparateur 372 ;
le premier séparateur 370 étant relié à la première partie de coque 180 par une première pluralité d'ensembles d'ajustement 352 ; et
le second séparateur 372 étant relié à la seconde partie de coque 182 par une seconde pluralité d'ensembles d'ajustement 352.

8. Article de bagage selon la revendication 2, au moins un de l'au moins un séparateur 354 pouvant être retiré de l'article de bagage.

9. Article de bagage selon la revendication 8, l'ensemble coulissant 392 pouvant être retiré du dispositif d'ancrage 390 pour retirer au moins un de l'au moins un séparateur 354 de l'article de bagage.

10. Article de bagage selon la revendication 8 ou 9,
l'au moins un de l'au moins un séparateur 354 étant un panneau autoportant ; et
le panneau autoportant pouvant être retiré de l'ensemble coulissant 392 pour retirer l'au moins un de l'au moins un séparateur 354 de l'article de bagage.

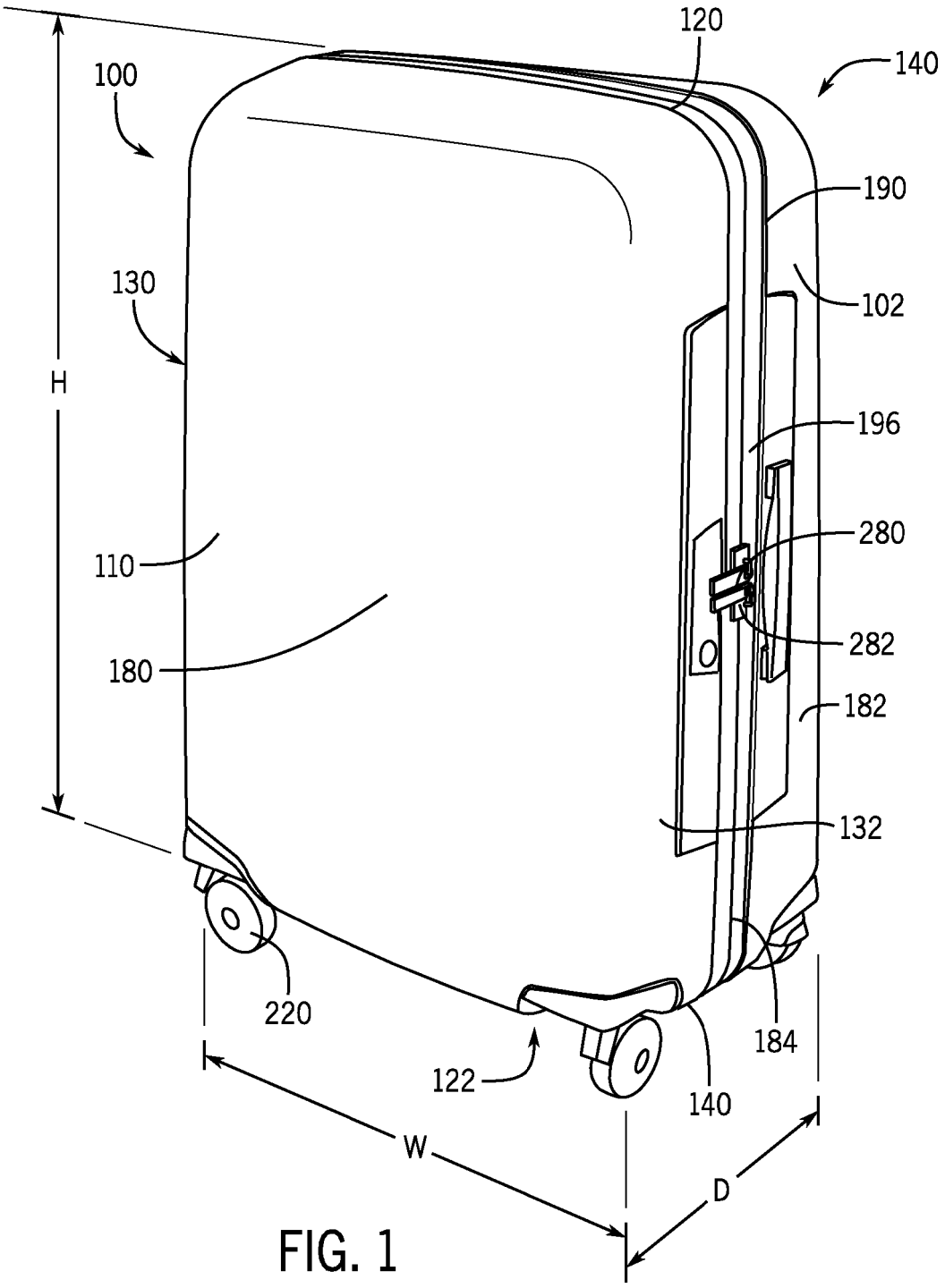
11. Article de bagage selon la revendication 10,
le panneau autoportant comprenant un cadre périmétrique 362 ; et
le cadre périmétrique 362 pouvant être retiré de l'ensemble coulissant 392.

12. Article de bagage selon l'une quelconque des revendications 8 à 10, l'au moins un de l'au moins un séparateur 354 pouvant être retiré de l'article de bagage servant de sac à vêtements, d'organisateur de voyage ou d'organisateur de toilette.

13. Article de bagage selon la revendication 4, les dents 402 s'étendant latéralement vers l'extérieur depuis un côté du dispositif d'ancrage 390, et l'au moins une saillie 450 s'étendant latéralement vers l'intérieur depuis un côté de l'ensemble coulissant 392.

14. Article de bagage selon la revendication 13, l'au moins une saillie 450 étant sollicitée en prise avec les dents 402.

15. Article de bagage selon la revendication 4, les dents 402 s'étendant vers l'arrière depuis une face arrière 439 du dispositif d'ancrage 390 vers le panneau 120, 122, 130, 132, et l'au moins une saillie 450 s'étendant depuis l'ensemble coulissant 392 à l'opposé du panneau 120, 122, 130, 132.


120
140
100
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102
H
196
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110
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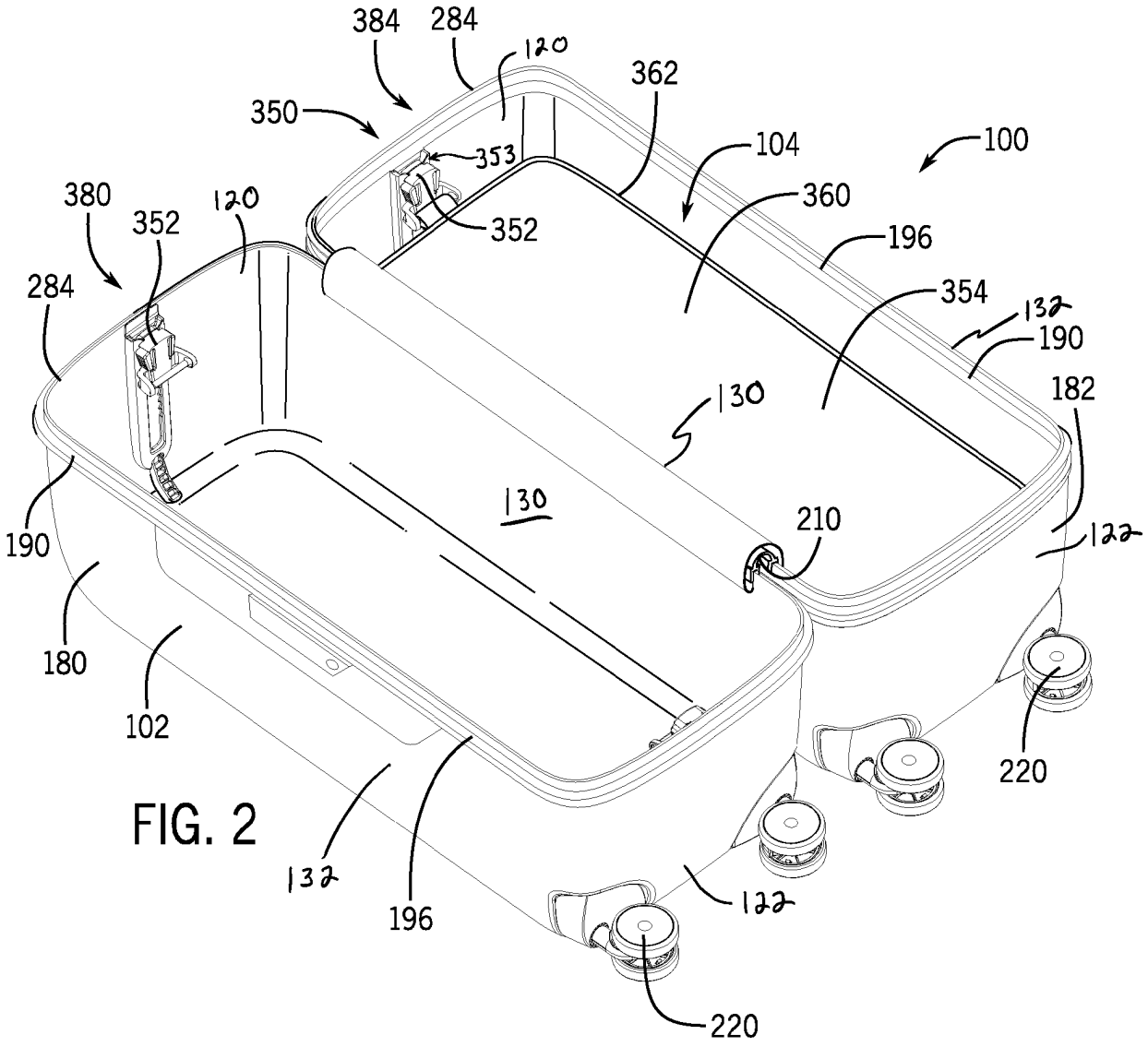
180
182
132
220
184
122
140
W
D

FIG. 1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284
120
362
350
353
104
100
380
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352
360
196
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210
190
122
180
102
220
132
196
122
220

FIG. 2

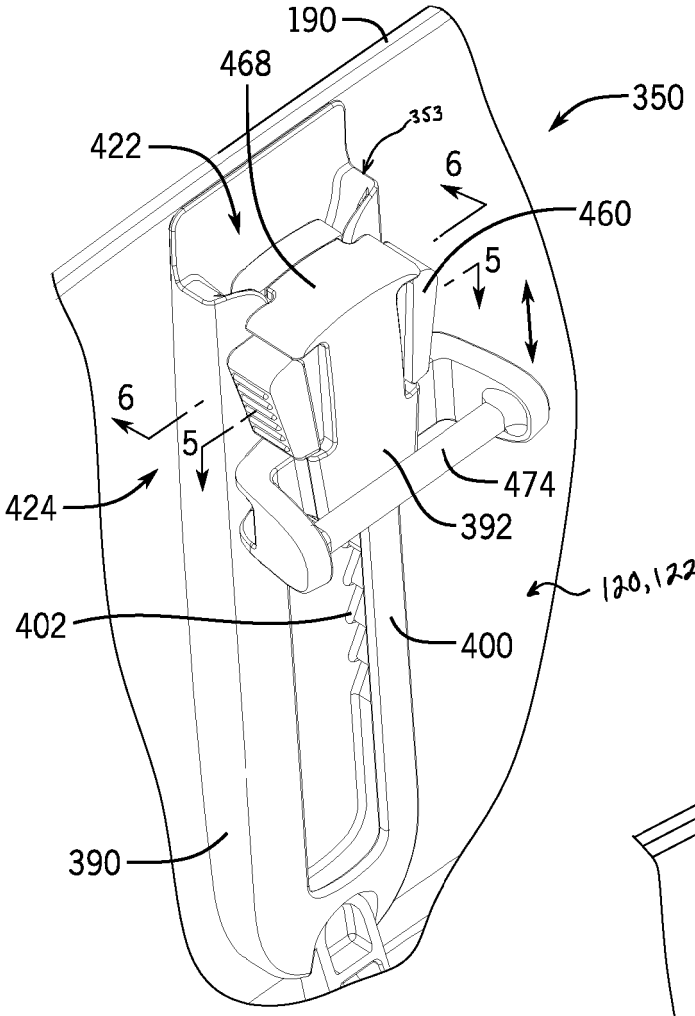

190
468
422
353
350
6
460
5
6
5
424
474
392
120,122,130,132
402
400
390

FIG. 3

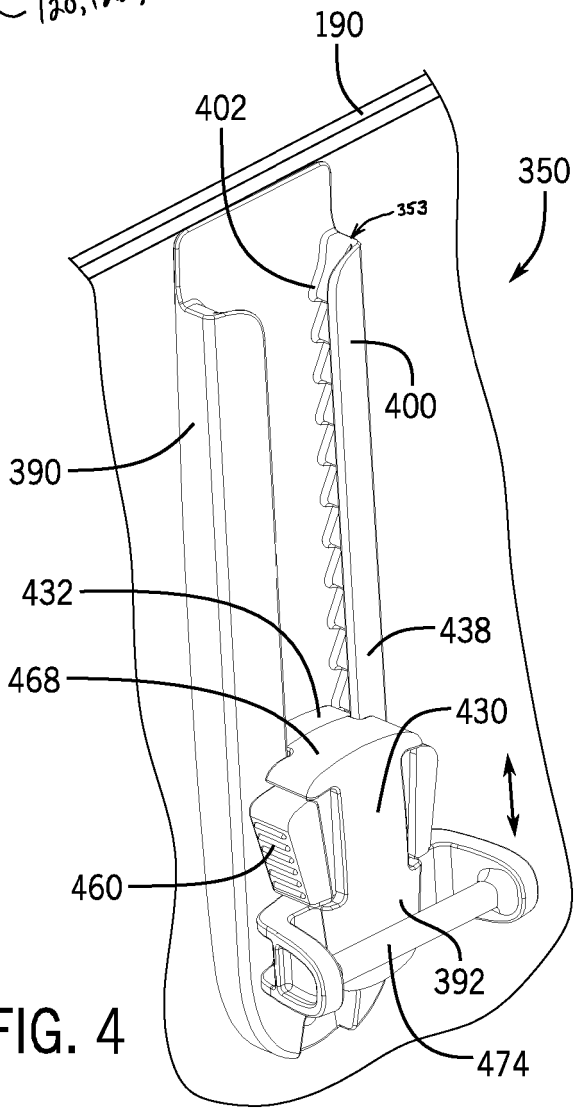
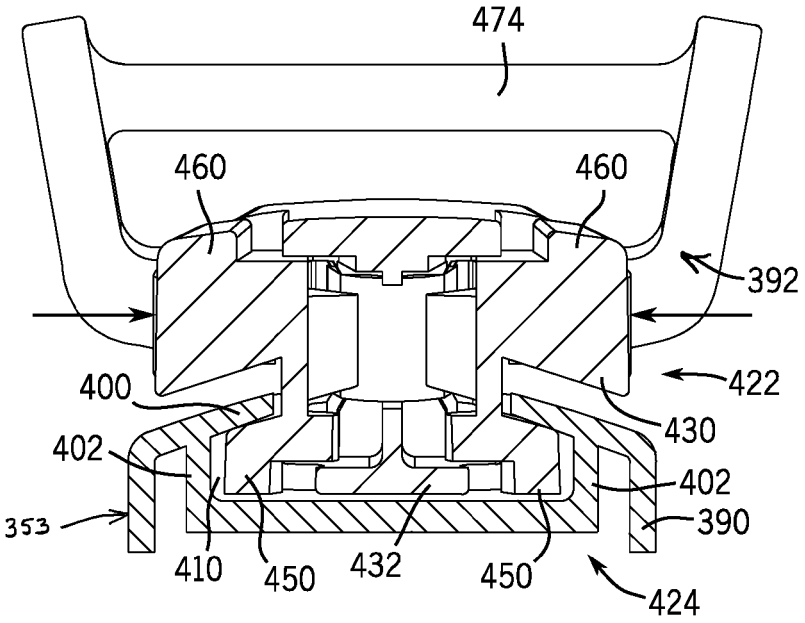

190
402
350
353
400
390
432
438
468
430
460
392
474

FIG. 4

FIG. 5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460
460
392
422
400
430
402
402
353
390
410
450
432
450
424

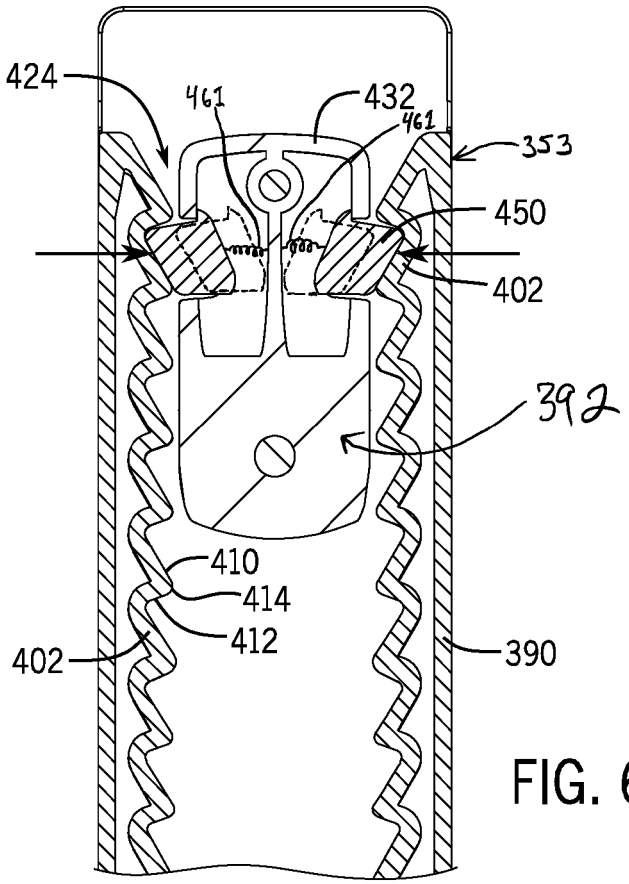

424
461
432
461
353
450
402
392
410
414
412
402
390

FIG. 6

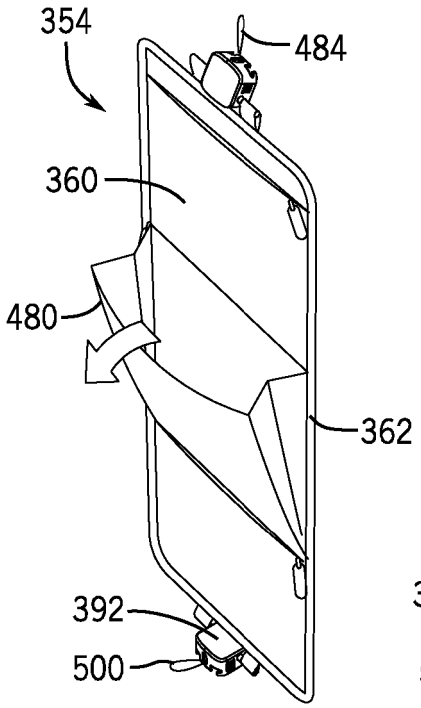


FIG. 7A

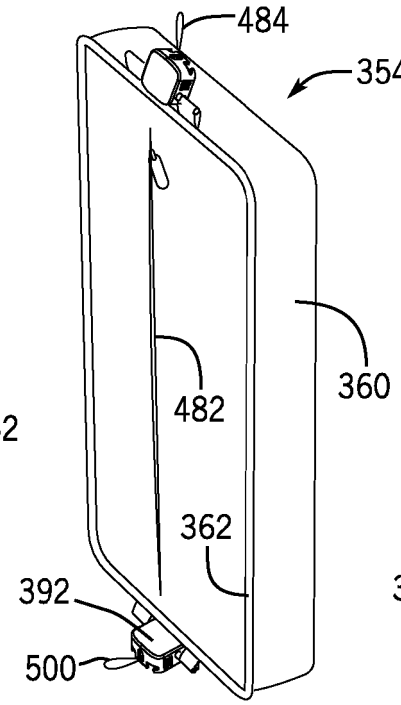


FIG. 7B

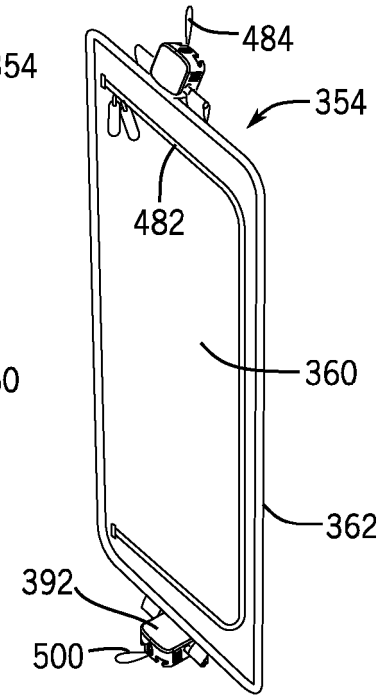


FIG. 7C

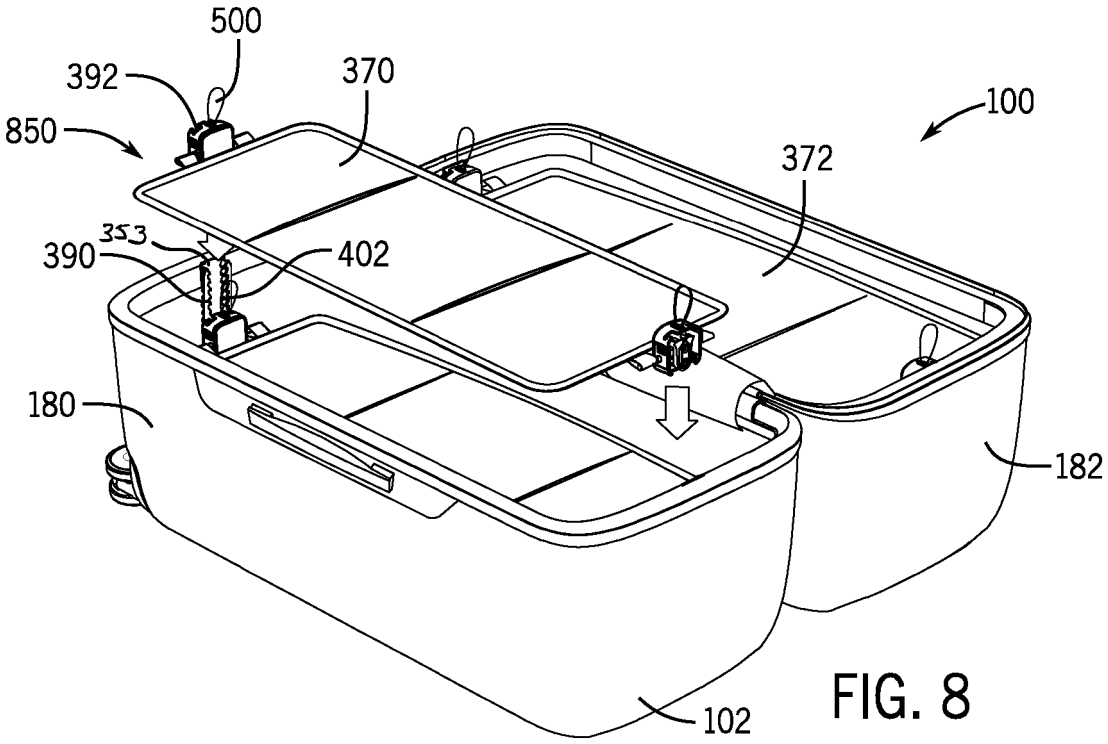


FIG. 8

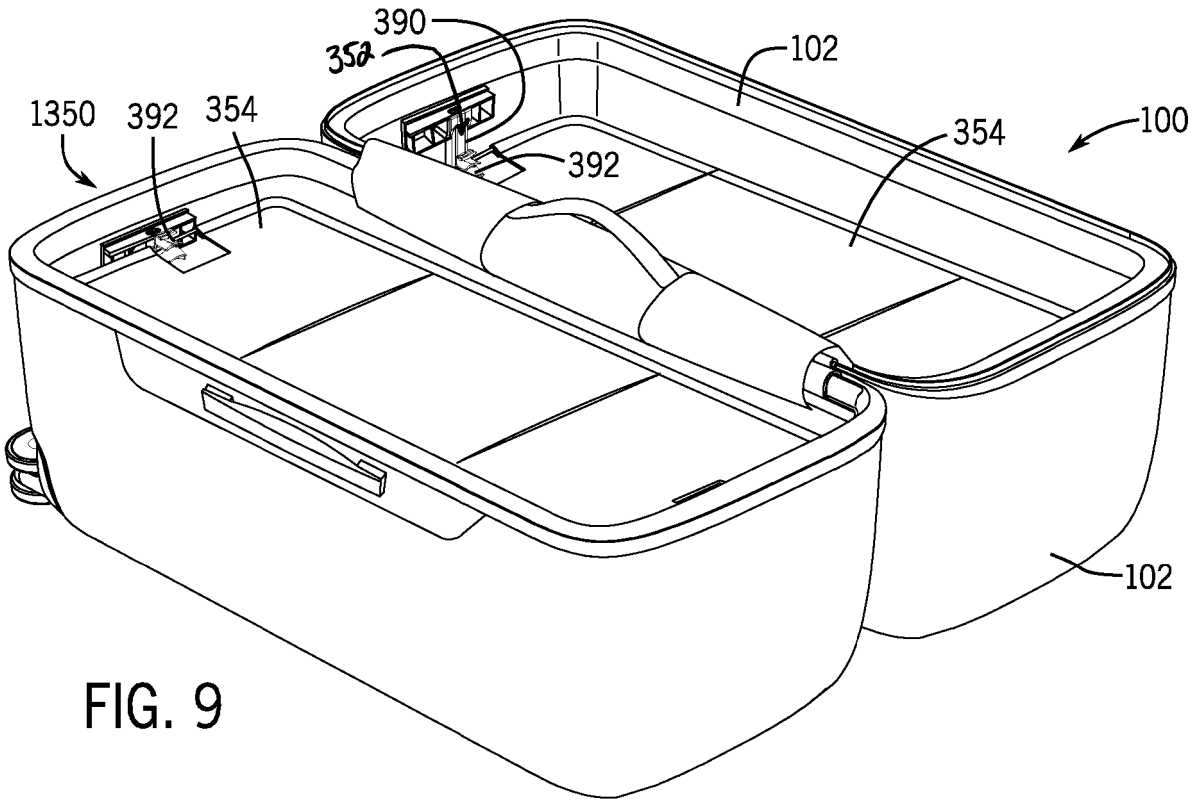
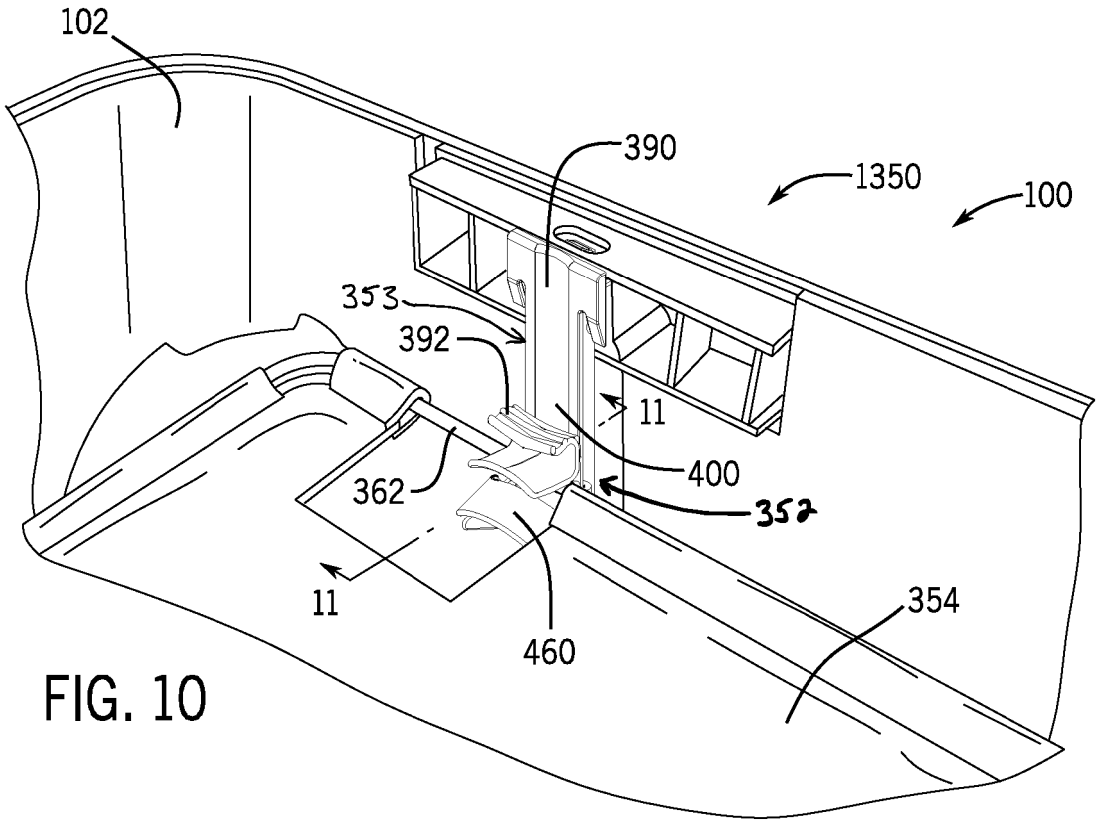

390
352
102
1350
392
354
354
100
392
102

FIG. 9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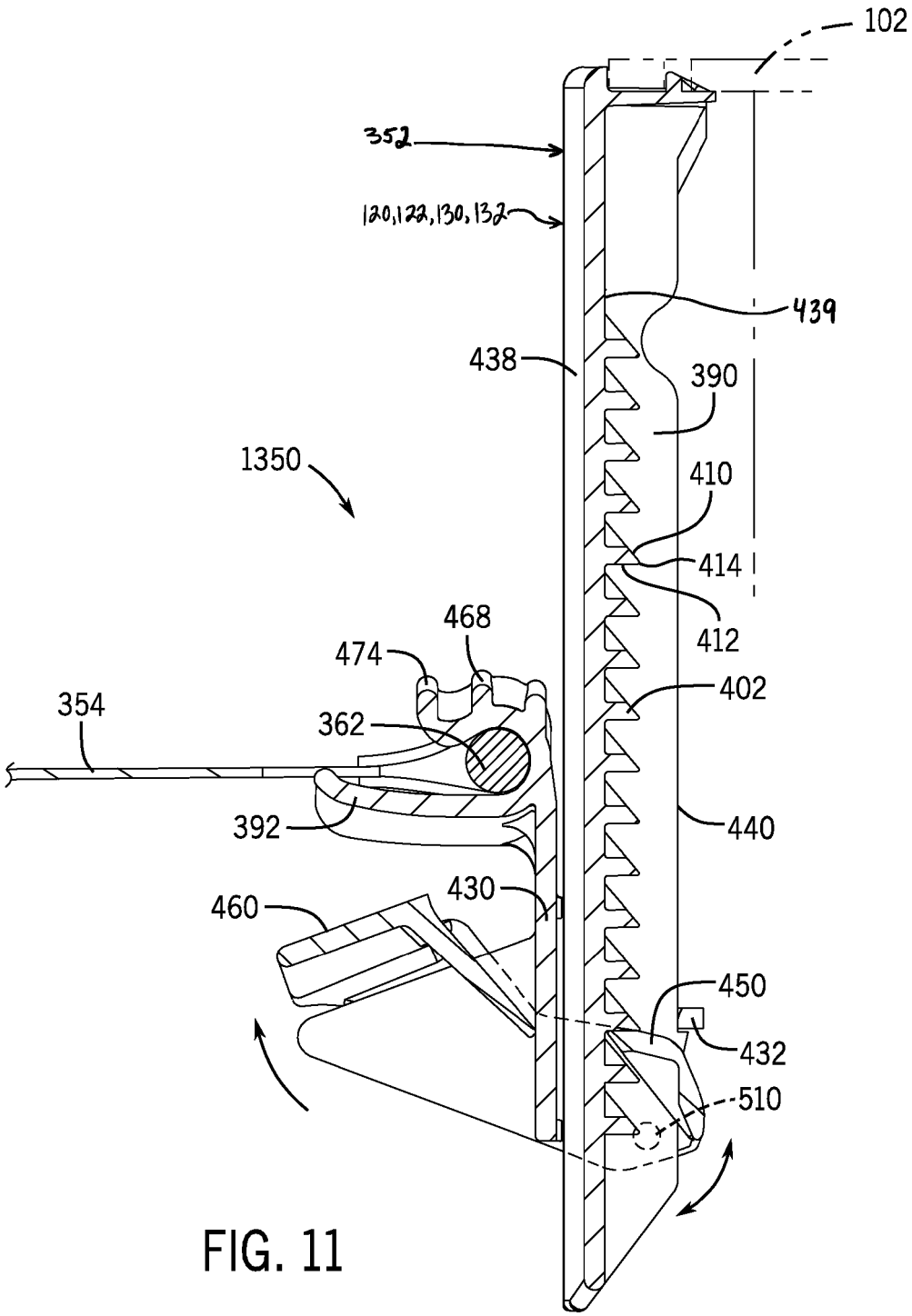
390
1350
100
353
392
11
400
362
352
11
460
354

FIG. 10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352
120,122,130,132
439
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414
412
468
474
402
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362
392
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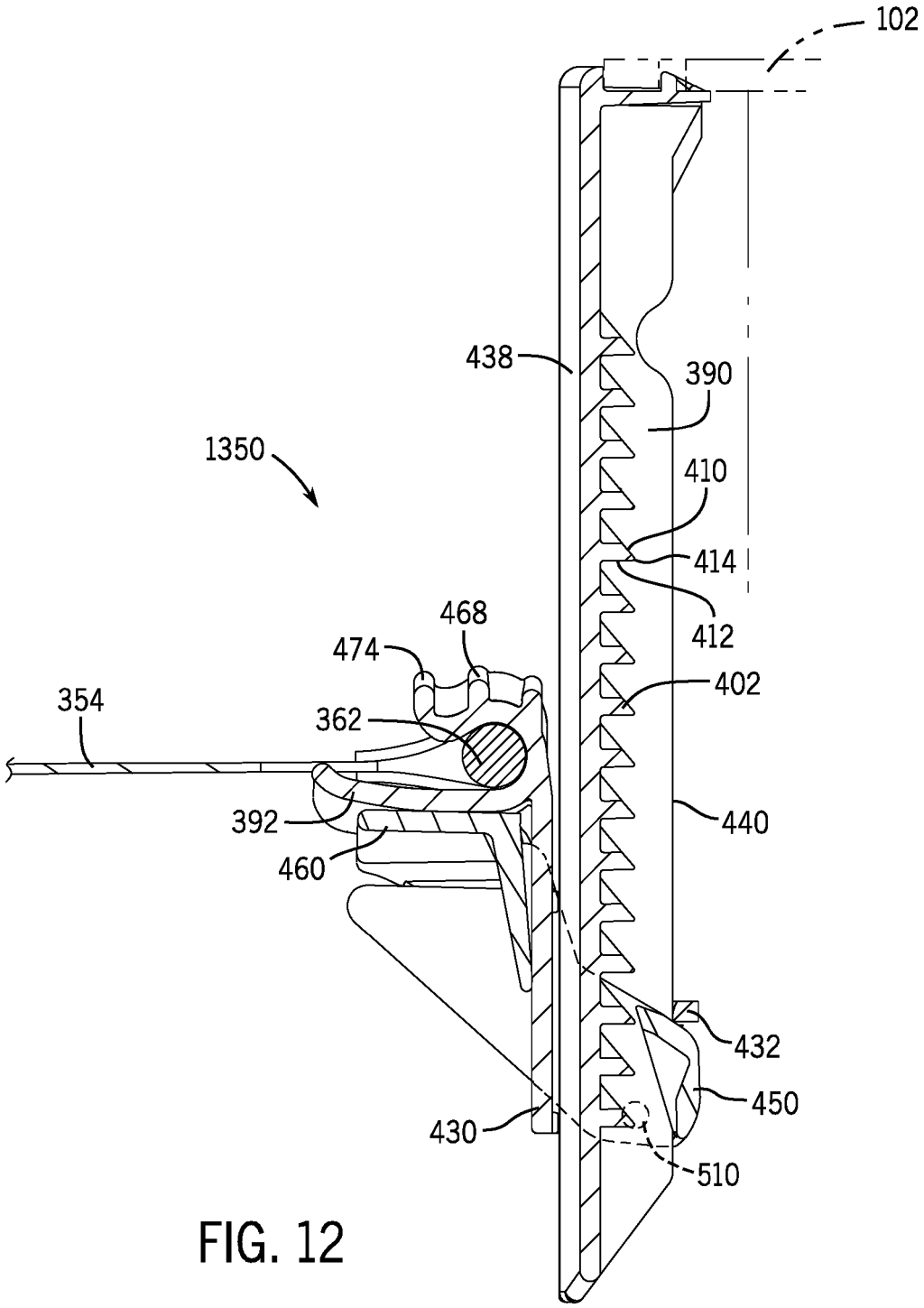
430
460
450
432
510

FIG. 11


102
438
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1350
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414
412
468
474
402
354
362
440
392
460
432
450
430
510

FIG. 12

REFERENCES CITED IN THE DESCRIPTION

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