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**Pefley et al.**

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(54) **ORGANIZATIONAL CLASP FOR COOLER**  
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USPC ..... 248/231.51, 100, 101, 316.7, 316.5; 220/592.2; 24/455, 543  
See application file for complete search history.

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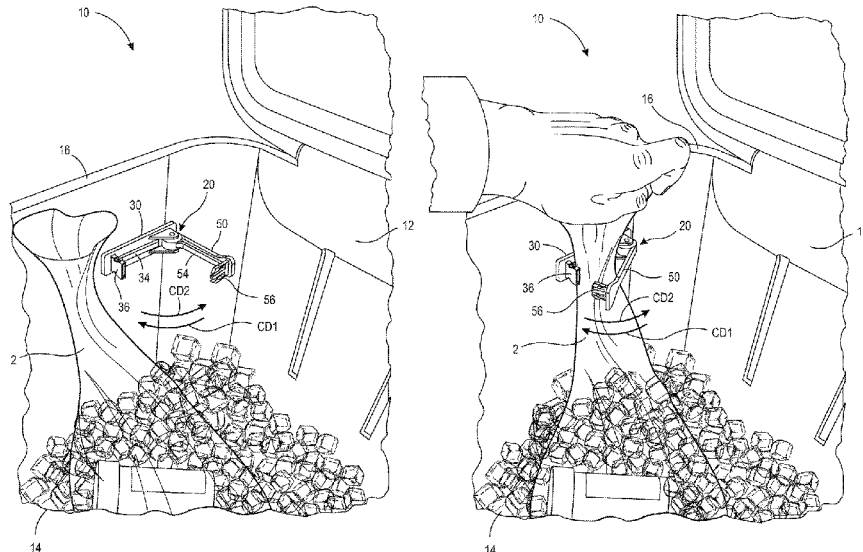
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(57) **ABSTRACT**  
A clasp, including an inferior component, including a first surface, a first pad connected to the first surface, and a first buckle portion connected to the first surface, and a superior component displaceable relative to the inferior component, the superior component including a second surface, a second pad connected to the second surface, and a second buckle portion operatively arranged to engage the first buckle portion and secure the superior component to the inferior component, wherein in a fully closed position, the first pad and the second pad form a clamp.

**19 Claims, 9 Drawing Sheets**



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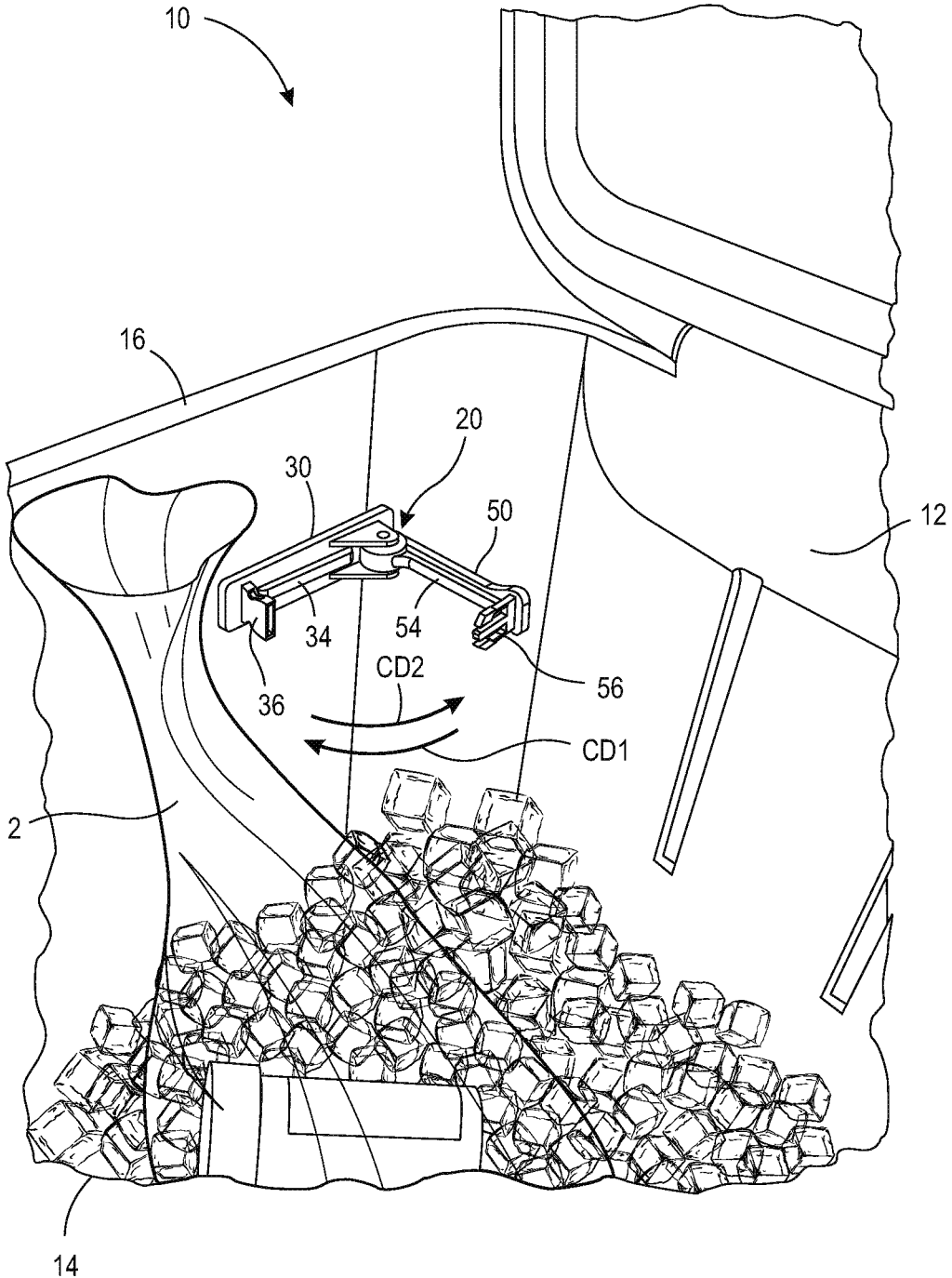


FIG. 1A

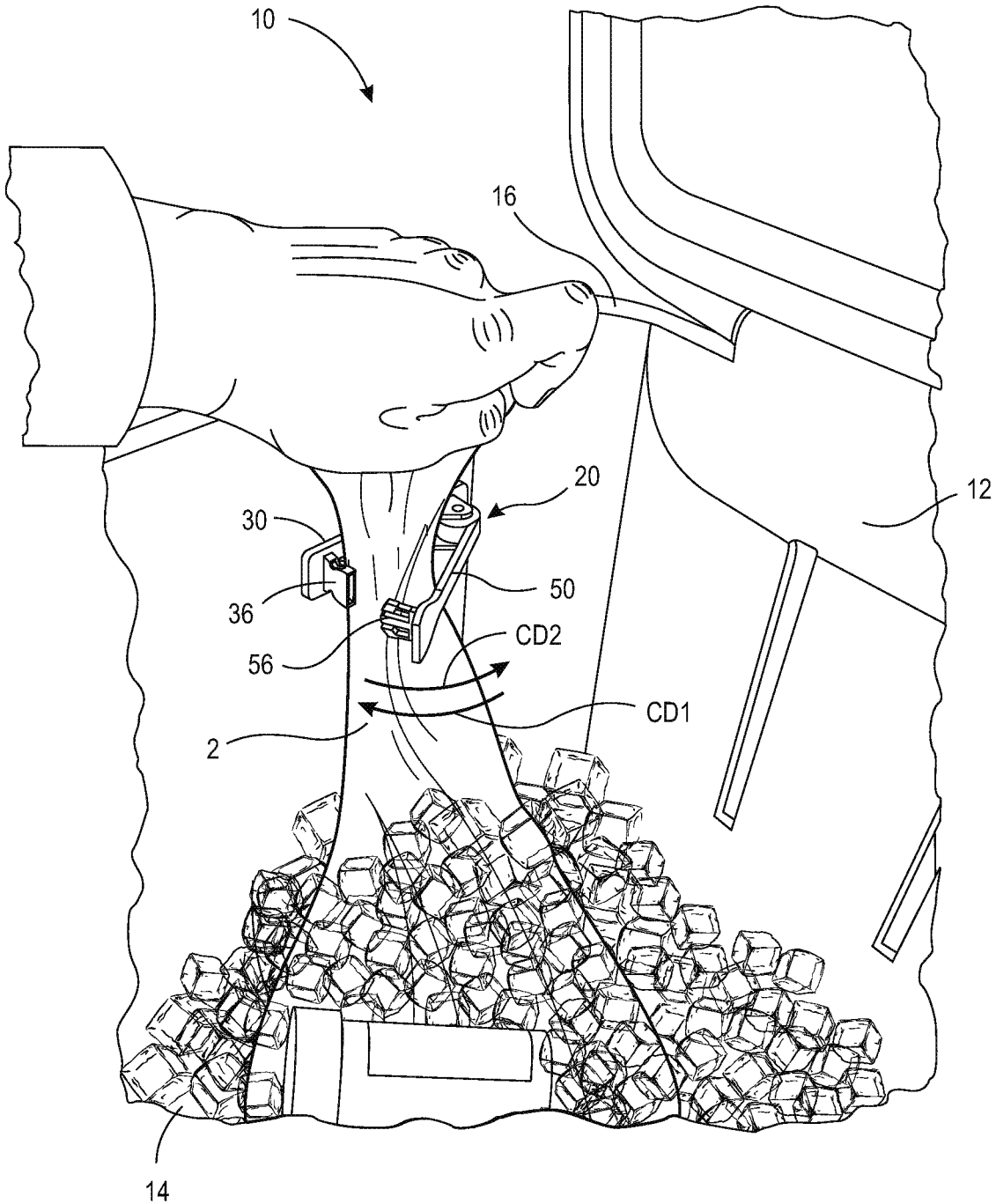


FIG. 1B

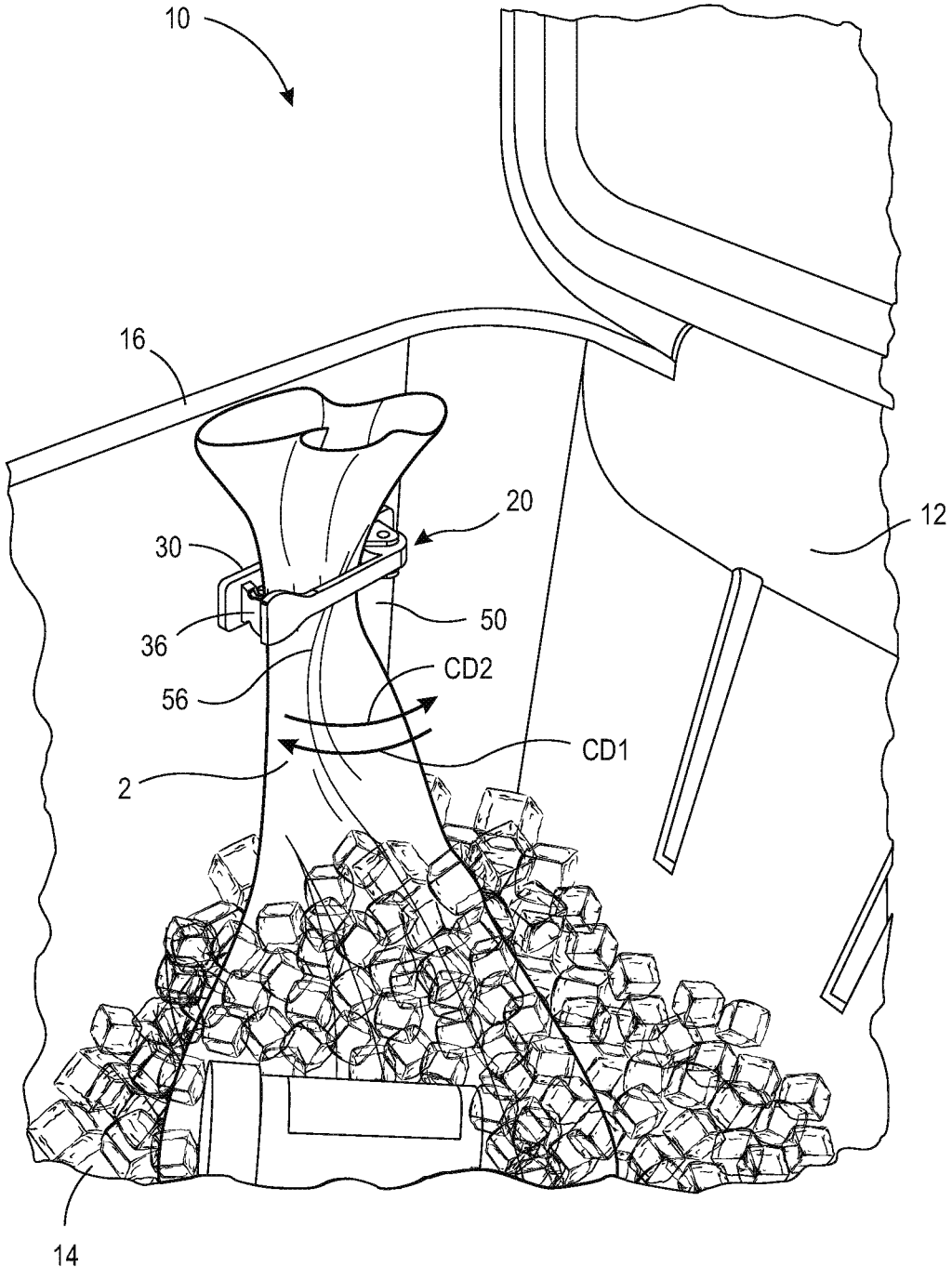


FIG. 1C

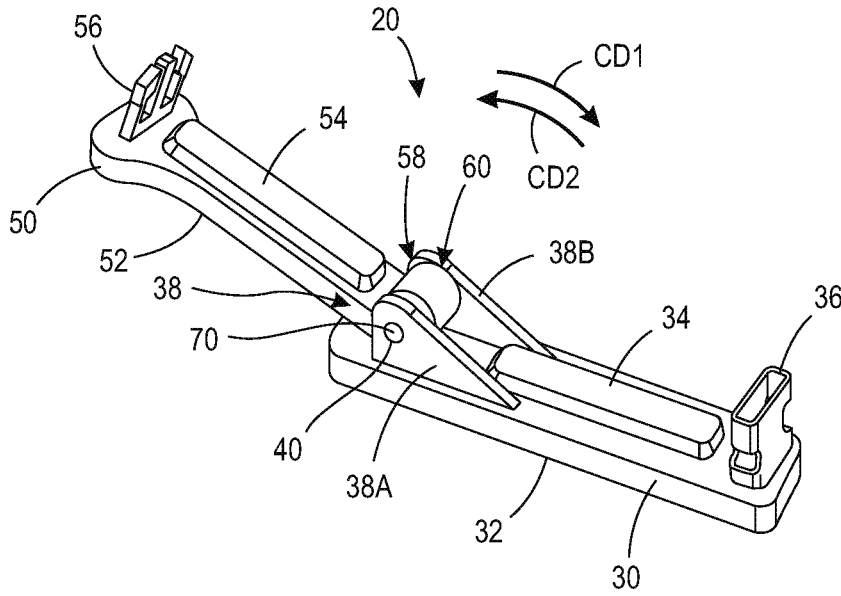


FIG. 2A

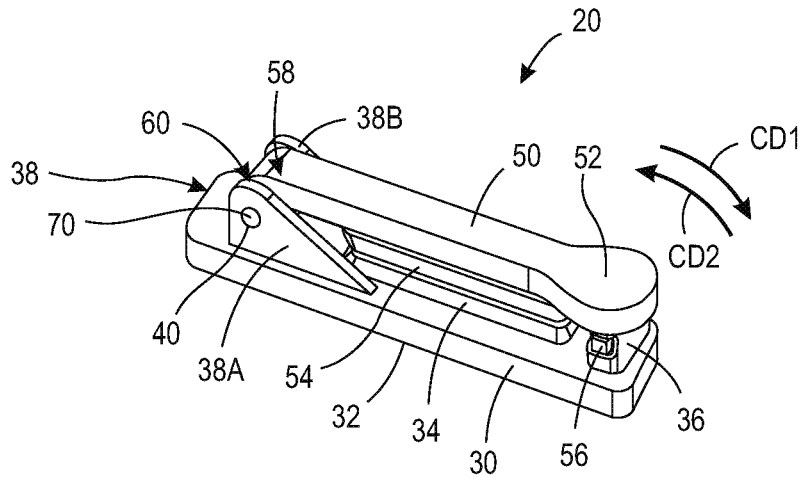


FIG. 2B

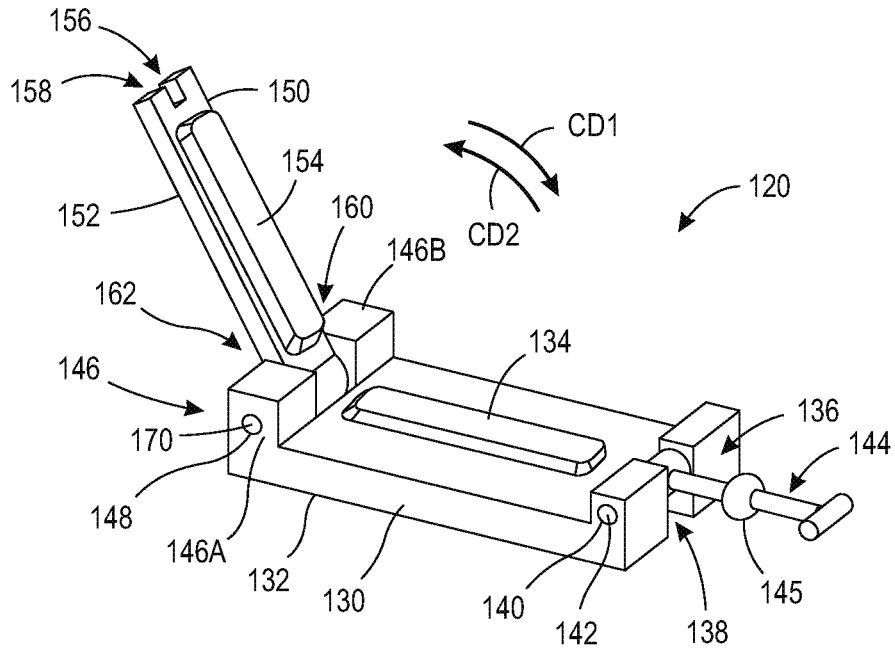


FIG. 3A

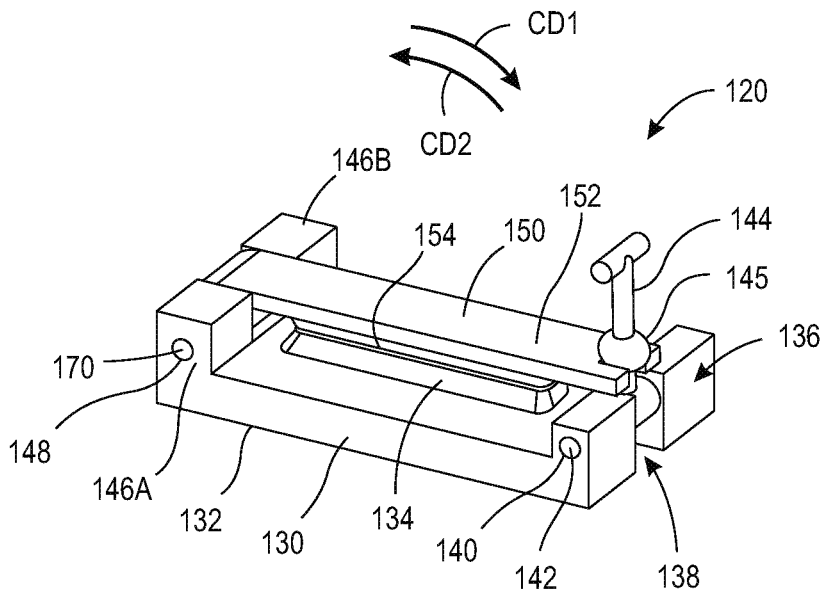


FIG. 3B

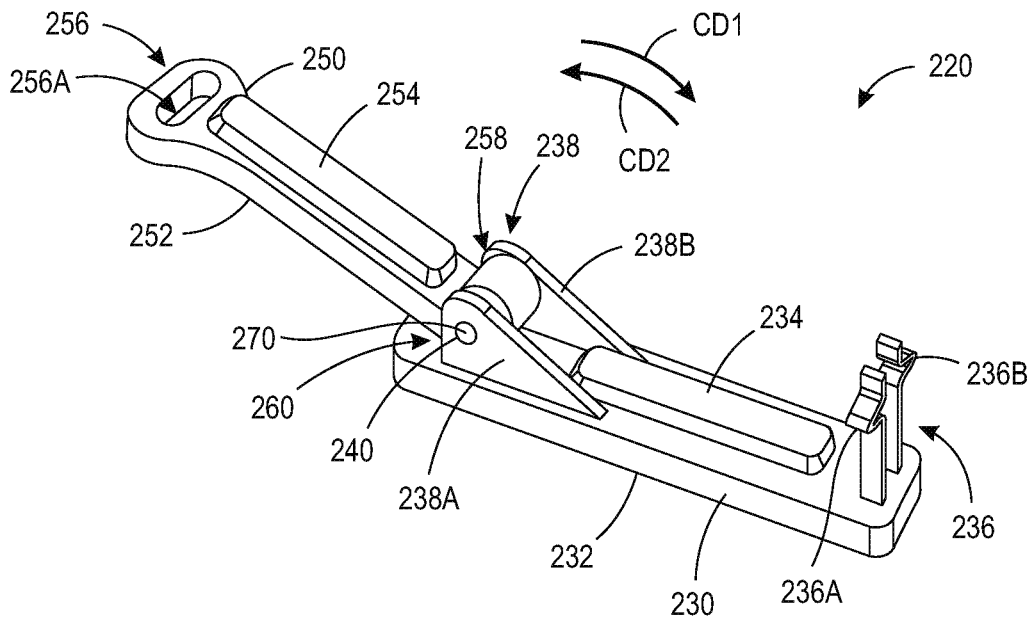


FIG. 4A

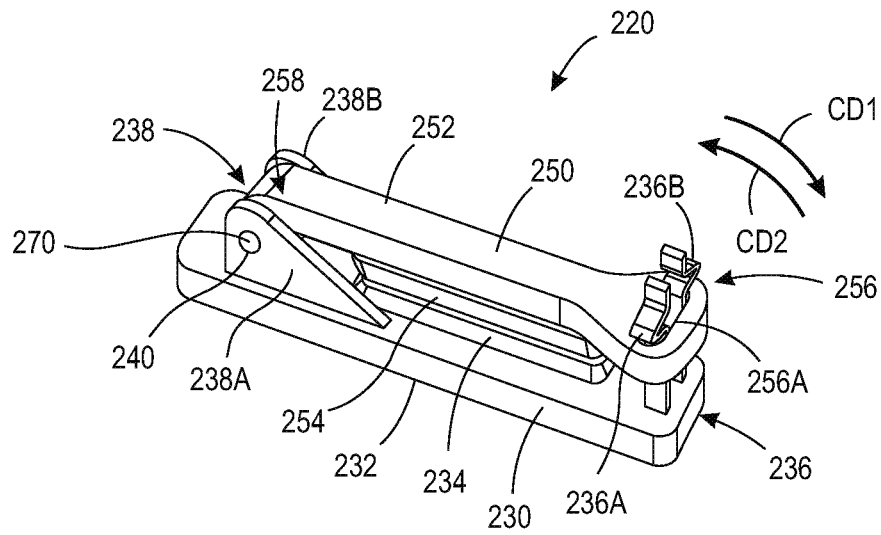


FIG. 4B



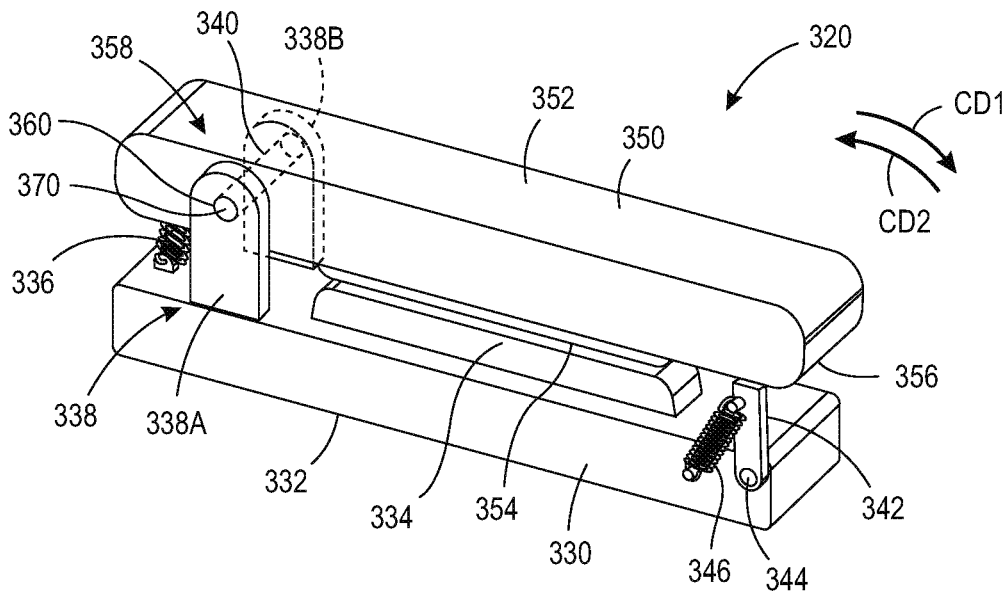


FIG. 5A

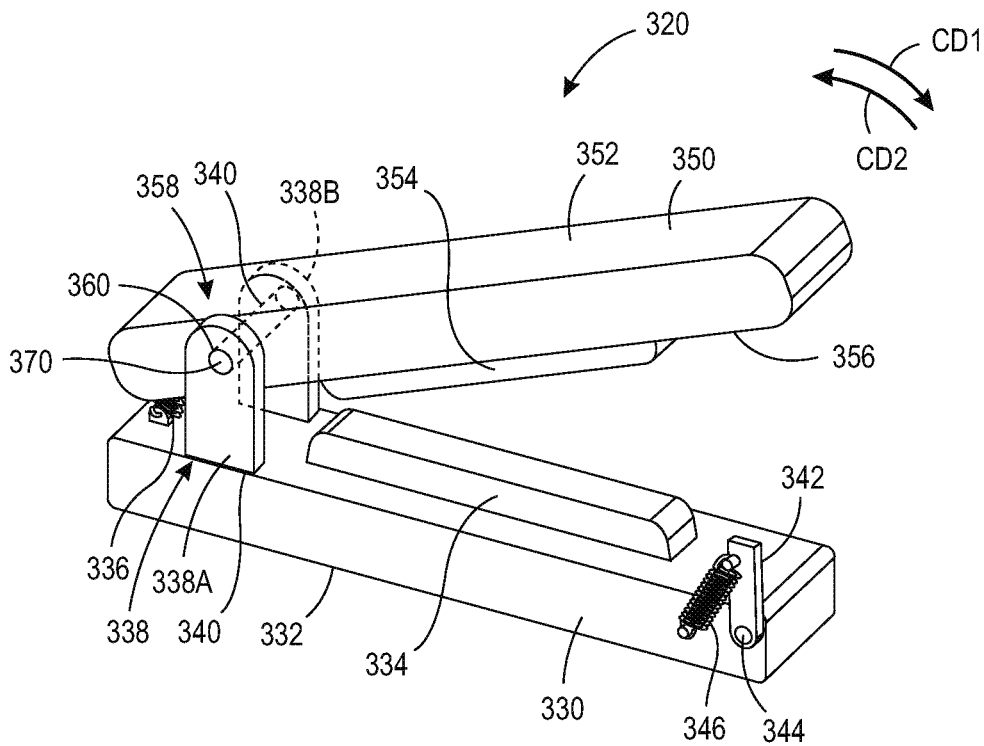


FIG. 5B

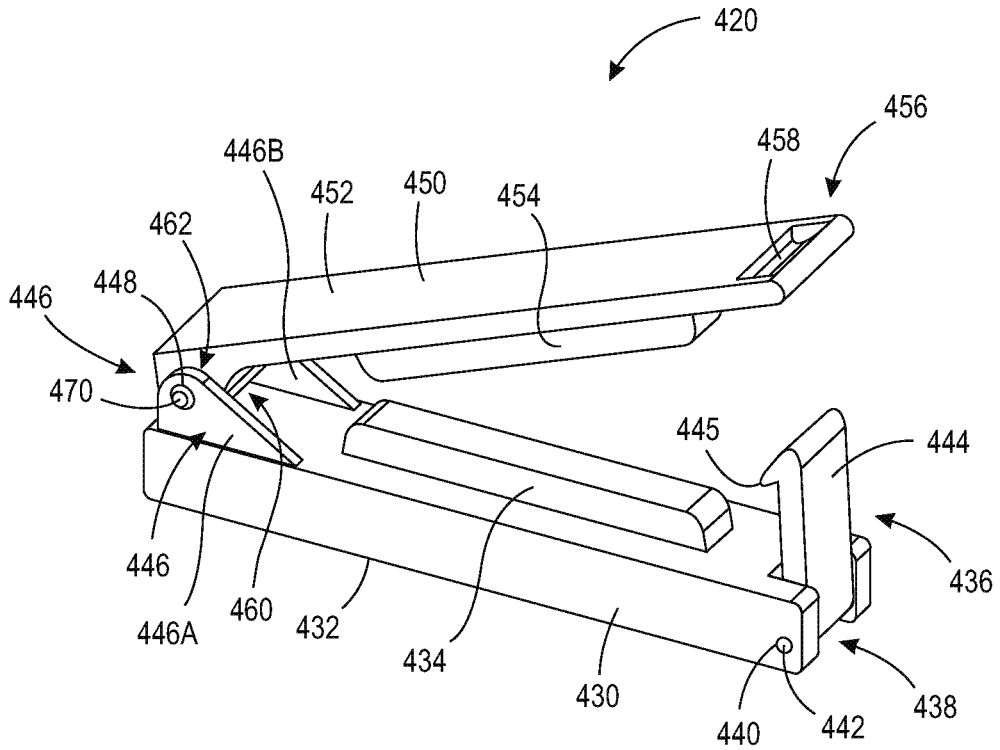


FIG. 6A

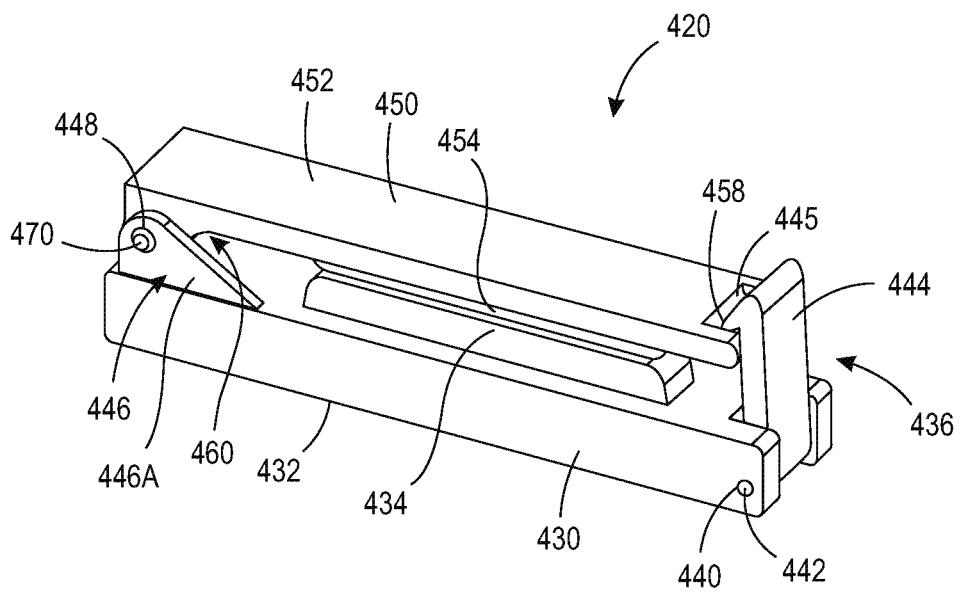


FIG. 6B

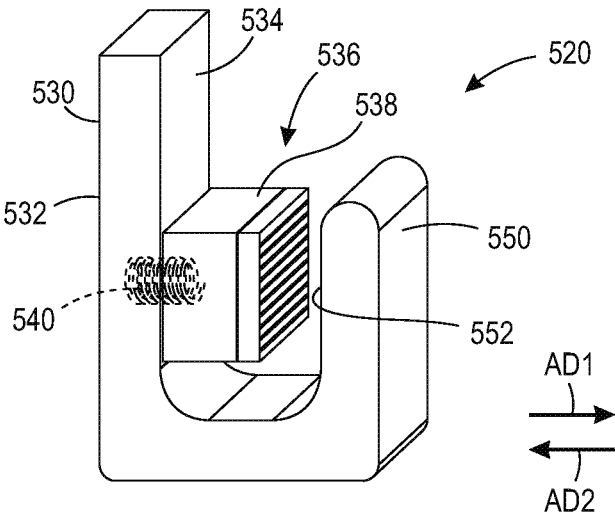


FIG. 7A

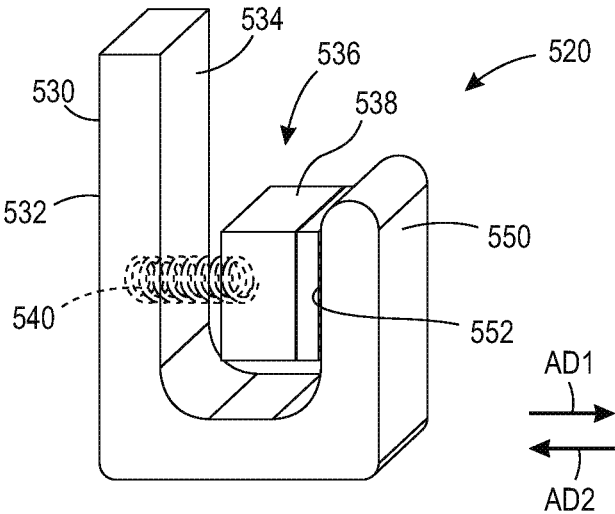


FIG. 7B

**ORGANIZATIONAL CLASP FOR COOLER**

FIELD

The present disclosure relates to bag holding devices for containers, and more particularly, to an organizational clasp for holding bags within a cooler which may contain ice.

BACKGROUND

Standard coolers known in the art are generally box shaped and include a floor, a lateral wall connected to the floor, and a top hingedly connected to the lateral side. There are no organizational features within standard coolers. Often times, a cooler is packed simply by loading in the material which the user wishes to remain cold, and then loading ice thereon. However, once the material is covered with ice, it is difficult to find specific items therein due to lack of visibility. This leads to the user searching through the contents of the cooler with the hand substantially submerged in ice throughout that time.

Thus, there is a long felt need for organizational clasps that can be implemented in a cooler to hold the tops of bags, the bottoms of which are submerged in or arranged substantially proximate to the ice, which can easily be identified so the user can access the contents therein.

SUMMARY

According to aspects illustrated herein, there is provided a clasp, comprising an inferior component, including a first surface, a first pad connected to the first surface, and a first buckle portion connected to the first surface, and a superior component displaceable relative to the inferior component, the superior component including a second surface, a second pad connected to the second surface, and a second buckle portion operatively arranged to engage the first buckle portion and secure the superior component to the inferior component, wherein in a fully closed position, the first pad and the second pad form a clamp.

According to aspects illustrated herein, there is provided a cooler comprising a lateral wall and at least one clasp connected to the lateral wall for securing a bag therein, the at least one clasp, comprising an inferior component, including a first surface connected to the lateral wall, a first pad connected to the first surface, and a first buckle portion connected to the first surface, and a superior component pivotable relative to the inferior component, the superior component including a second surface, a second pad connected to the second surface, and a second buckle portion operatively arranged to engage the first buckle portion and secure the superior component to the inferior component, wherein in a fully closed position, the first pad and the second pad form a clamp for securing the bag.

These and other objects, features, and advantages of the present disclosure will become readily apparent upon a review of the following detailed description of the disclosure, in view of the drawings and appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

Various embodiments are disclosed, by way of example only, with reference to the accompanying schematic drawings in which corresponding reference symbols indicate corresponding parts, in which:

FIG. 1A is a perspective view of a container with a clasp in an opened position;

FIG. 1B is a perspective view of a container with a clasp in an opened position;

FIG. 1C is perspective view of a container with a clasp in a fully closed position;

FIG. 2A is a perspective view of the clasp shown in FIG. 1A in an opened position;

FIG. 2B is a perspective view of the clasp shown in FIG. 2A in a fully closed position;

FIG. 3A is a perspective view of a clasp in an opened position;

FIG. 3B is a perspective view of the clasp shown in FIG. 3A in a fully closed position;

FIG. 4A is a perspective view of a clasp in an opened position;

FIG. 4B is a perspective view of the clasp shown in FIG. 4A in a fully closed position;

FIG. 5A is a perspective view of a clasp in an opened position;

FIG. 5B is a perspective view of the clasp shown in FIG. 5A in a fully closed position;

FIG. 6A is a perspective view of a clasp in an opened position;

FIG. 6B is a perspective view of the clasp shown in FIG. 6A in a fully closed position;

FIG. 7A is a perspective view of a clasp in an opened position; and,

FIG. 7B is a perspective view of the clasp shown in FIG. 7A in a fully closed position.

DETAILED DESCRIPTION

At the outset, it should be appreciated that like drawing numbers on different drawing views identify identical, or functionally similar, structural elements. It is to be understood that the claims are not limited to the disclosed aspects.

Furthermore, it is understood that this disclosure is not limited to the particular methodology, materials and modifications described and as such may, of course, vary. It is also understood that the terminology used herein is for the purpose of describing particular aspects only, and is not intended to limit the scope of the claims.

Unless defined otherwise, all technical and scientific terms used herein have the same meaning as commonly understood to one of ordinary skill in the art to which this disclosure pertains. It should be understood that any methods, devices or materials similar or equivalent to those described herein can be used in the practice or testing of the example embodiments. The assembly of the present disclosure could be driven by hydraulics, electronics, pneumatics, and/or springs.

It should be appreciated that the term “substantially” is synonymous with terms such as “nearly,” “very nearly,” “about,” “approximately,” “around,” “bordering on,” “close to,” “essentially,” “in the neighborhood of,” “in the vicinity of,” etc., and such terms may be used interchangeably as appearing in the specification and claims. It should be appreciated that the term “proximate” is synonymous with terms such as “nearby,” “close,” “adjacent,” “neighboring,” “immediate,” “adjoining,” etc., and such terms may be used interchangeably as appearing in the specification and claims. The term “approximately” is intended to mean values within ten percent of the specified value.

By “non-rotatably connected” elements, we mean that: the elements are connected so that whenever one of the elements rotate, all the elements rotate; and relative rotation between the elements is not possible. Radial and/or axial movement of non-rotatably connected elements with respect

to each other is possible, but not required. By “rotatably connected” elements, we mean that the elements are rotatable with respect to each other.

The term “inferior component” as used in the present disclosure is intended to mean the component of the clasp which is mounted or intended to be mounted to the container or cooler. The term “superior component” as used in the present disclosure is intended to mean the component of the clasp which is rotatable with respect to the mounted inferior component. It should be appreciated, however, that in some embodiments the superior component may be mounted to the container or cooler and the inferior component is rotatable relative to the mounted superior component.

The term “clamp” as used in the present disclosure is intended to mean to hold tightly, or a device designed to bind or constrict or to press two or more parts together so as to hold them firmly, or any of various instruments or appliances having parts brought together for holding or compressing something.

Referring now to the figures, FIG. 1A is a perspective view of container 10 with clasp 20 in an opened position. FIG. 1B is a perspective view of container 10 with clasp 20 in an opened position. Container or cooler 10 generally comprises lateral wall 12, floor 14, edge 16, and one or more clasps connected to lateral wall 12. As shown in FIGS. 1A-C, clasp 20 is connected to lateral wall; however, it should be appreciated that clasps 120, 220, 320, 420, 520, or any other suitable clasp may be used in place of clasp 20. Furthermore, it should be appreciated that although only one clasp is shown connected to lateral wall 12 of container 10, any suitable number of clasps may be used therein (e.g., one or more clasps connected to lateral wall 12 of container 10), and that this disclosure should not be limited to the use of only one clasp. As shown in FIG. 1A, clasp 20 is in an open position to allow a user to insert the top end of bag 2 therein. Clasp 20 is preferably arranged on lateral wall 12 proximate edge 16 such that the top end of bag 2 can be clamped and the bottom end of bag 2 can hang down into or proximate to the ice in container 10. In FIG. 1B the top end of bag 2 is inserted in clasp 20 between superior component 50 and inferior component 30, and superior component 50 is being rotated in circumferential direction CD1 to “close” clasp 2.

FIG. 1C is perspective view of container 10 with clasp 20 in a fully closed position. In FIG. 1C, bag 2 is clamped in clasp 20. Specifically, buckle portion 56 has been secured in buckle portion 36 such that pads 54 and 34 abut against (or are arranged substantially proximate) each other, thereby squeezing bag 2 therebetween. Clasp 20 will be described in greater detail with respect to FIGS. 2A-B. As shown, bag 2 can hang down and rest on top of the ice or submerge at least partially in the ice.

FIG. 2A is a perspective view of clasp 20 in an opened position. FIG. 2B is a perspective view of clasp 20 in a fully closed position. Clasp 20 generally comprises inferior component 30 and superior component 50. Superior component 50 is hingedly connected to inferior component 30.

Inferior component 30 comprises surface 32, pad 34, buckle portion 36, and hinge portion 38. Inferior component 30 is operatively arranged to be connected to lateral wall 12 of container 10 via surface 32. In some embodiment, inferior component 30 is operatively arranged to be connected to lateral wall 12 via double-sided tape, adhesives, screws, rivets, bolts, nails, hook and loop fastener, etc. In some embodiments, inferior component 30 is integrally formed with lateral wall 12 (i.e., molded into container 10 itself). In some embodiments, lateral wall 12 comprises a slot in which inferior component 30 is operatively arranged to engage to

connect clasp 20 to container 10. In such embodiments, clasps 20 are removably connected to container 10. Pad 34 is arranged to clamp bag 2. In some embodiments, pad 34 is an integrated (molded) textured protrusion. In some embodiments, pad 34 comprises silicone, rubber, and/or foam. In some embodiments, pad 34 comprises a molded protrusion having a coating comprising a rubber, silicone, or similar textured material, or any combination thereof, for gripping bag 2. Hinge portion 38 comprises flanges 38A and 38B. Through-bore 40 extends through both flanges 38A and 38B. In some embodiments, buckle portion 36 comprises a parachute buckle.

Superior component 50 comprises surface 52, pad 54, buckle portion 56, and hinge portion 58. Superior component 50 is hingedly connected to inferior component 30. In some embodiments, superior component 50 is pivotally connected to inferior component 30. Pad 54 is arranged to clamp bag 2. In some embodiments, pad 54 is an integrated (molded) textured protrusion. In some embodiments, pad 54 comprises silicone, rubber, and/or foam. In some embodiments, pad 54 comprises a molded protrusion having a coating comprising a rubber, silicone, or similar textured material, or any combination thereof, for gripping bag 2. Hinge portion 58 comprises through-bore 60 (not shown) and is arranged between flanges 38A and 38B. Pin 70 extends through through-bore 40 of flanges 38A and 38B and through-bore 60 (not shown) to form a hinged connection between superior component 50 and inferior component 30. In some embodiments, buckle portion 56 comprises a parachute buckle. Buckle portion 56 is arranged to engage buckle portion 36 to lock superior component 50 with inferior component 30. When in the fully closed or locked position, pad 54 abuts against or is arranged substantially proximate to pad 34, thereby locking a bag therebetween.

FIG. 3A is a perspective view of clasp 120 in an opened position. FIG. 3B is a perspective view of clasp 120 in a fully closed position. Clasp 120 generally comprises inferior component 130 and superior component 150. Superior component 150 is hingedly connected to inferior component 130.

Inferior component 130 comprises surface 132, pad 134, buckle portion 136, and hinge portion 146. Inferior component 130 is operatively arranged to be connected to lateral wall 12 of container 10 via surface 132. In some embodiment, inferior component 130 is operatively arranged to be connected to lateral wall 12 via double-sided tape, adhesives, screws, rivets, bolts, nails, hook and loop fastener, etc. In some embodiments, inferior component 130 is integrally formed with lateral wall 12 (i.e., molded into container 10 itself). In some embodiments, lateral wall 12 comprises a slot in which inferior component 130 is operatively arranged to engage to connect clasp 120 to container 10. In such embodiments, clasps 120 are removably connected to container 10. Pad 134 is arranged to clamp bag 2. In some embodiments, pad 134 is an integrated (molded) textured protrusion. In some embodiments, pad 134 comprises silicone, rubber, and/or foam. In some embodiments, pad 134 comprises a molded protrusion having a coating comprising a rubber, silicone, or similar textured material, or any combination thereof, for gripping bag 2. Hinge portion 146 comprises flanges 146A and 146B. Through-bore 148 extends through both flanges 146A and 146B. Buckle portion 136 comprises slot 138 and tension buckle 144. Tension buckle 144 is connected to inferior component 130 via pin 142 which extends through through-bore 140. In some embodiments, tension buckle 144 is hingedly connected to inferior component 130. In some embodiments, tension

buckle **144** is pivotably connected to inferior component **130**. Tension buckle **144** comprises enlarged portion **145** which is arranged to engage surface **152** and slot **158** of superior component **150**, as will be discussed in greater detail below. Tension buckle **144** comprises an elastic material such that it can be stretched or deformed and return to its original shape.

Superior component **150** comprises surface **152**, pad **154**, buckle portion **156**, and hinge portion **160**. Superior component **150** is hingedly connected to inferior component **130**. In some embodiments, superior component **150** is pivotably connected to inferior component **130**. Pad **154** is arranged to clamp bag **2**. In some embodiments, pad **154** is an integrated (molded) textured protrusion. In some embodiments, pad **154** comprises silicone, rubber, and/or foam. In some embodiments, pad **154** comprises a molded protrusion having a coating comprising a rubber, silicone, or similar textured material, or any combination thereof, for gripping bag **2**. Hinge portion **160** comprises through-bore **162** (not shown) and is arranged between flanges **146A** and **146B**. Pin **170** extends through through-bore **148** of flanges **146A** and **146B** and through-bore **162** (not shown) to form a hinged connection between superior component **150** and inferior component **130**. Buckle portion **156** is operatively arranged to engage buckle portion **136** to lock superior component **150** with inferior component **130**. When in the fully closed or locked position, pad **154** abuts against or is arranged substantially proximate to pad **134**, thereby locking a bag therebetween. Specifically, superior component **150** is displaced in circumferential direction **CD1** until pad **154** abuts against or is arranged substantially proximate to pad **134**. Tension buckle **144** is then rotated in circumferential direction **CD2** toward slot **158**. Tension buckle **144** is stretched or elongated until enlarged portion **145** clears surface **152**, at which point tension buckle **144** is rotated further in circumferential direction **CD2** until tension buckle **144** engages slot **158**. Tension buckle **144** is then released and the elasticity of tension buckle **144** pulls enlarged portion **145** against surface **152** thus clamping superior component **150** to inferior component **130**.

FIG. 4A is a perspective view of clasp **220** in an opened position. FIG. 4B is a perspective view of clasp **220** in a fully closed position. Clasp **220** generally comprises inferior component **230** and superior component **250**. Superior component **250** is hingedly connected to inferior component **230**.

Inferior component **230** comprises surface **232**, pad **234**, buckle portion **236**, and hinge portion **238**. Inferior component **230** is operatively arranged to be connected to lateral wall **12** of container **10** via surface **232**. In some embodiments, inferior component **230** is operatively arranged to be connected to lateral wall **12** via double-sided tape, adhesives, screws, rivets, bolts, nails, hook and loop fastener, etc. In some embodiments, inferior component **230** is integrally formed with lateral wall **12** (i.e., molded into container **10** itself). In some embodiments, lateral wall **12** comprises a slot in which inferior component **230** is operatively arranged to engage to connect clasp **220** to container **10**. In such embodiments, clasps **220** are removably connected to container **10**. Pad **234** is arranged to clamp bag **2**. In some embodiments, pad **234** is an integrated (molded) textured protrusion. In some embodiments, pad **234** comprises silicone, rubber, and/or foam. In some embodiments, pad **234** comprises a molded protrusion having a coating comprising a rubber, silicone, or similar textured material, or any combination thereof, for gripping bag **2**. Hinge portion **238** comprises flanges **238A** and **238B**. Through-bore **240**

extends through both flanges **238A** and **238B**. Buckle portion **236** comprises spring portions **236A** and **236B** which are arranged to engage buckle portion **256**, specifically slot **256A**, of superior component **250**, as will be discussed in greater detail below. Spring portions **236A** and **236B** comprise an elastic material such that they are capable of deforming and returning to their original shape. Each of spring portions **236A** and **236B** comprise a ramp portion, which when engaged by slot **256**, forces spring portions **236A** and **236B** toward each other. The ramp portions may be linear or curvilinear.

Superior component **250** comprises surface **252**, pad **254**, buckle portion **256**, and hinge portion **258**. Superior component **250** is hingedly connected to inferior component **230**. In some embodiments, superior component **250** is pivotably connected to inferior component **230**. Pad **254** is arranged to clamp bag **2**. In some embodiments, pad **254** is an integrated (molded) textured protrusion. In some embodiments, pad **254** comprises silicone, rubber, and/or foam. In some embodiments, pad **254** comprises a molded protrusion having a coating comprising a rubber, silicone, or similar textured material, or any combination thereof, for gripping bag **2**. Hinge portion **258** comprises through-bore **260** (not shown) and is arranged between flanges **238A** and **238B**. Pin **270** extends through through-bore **240** of flanges **238A** and **238B** and through-bore **260** (not shown) to form a hinged connection between superior component **250** and inferior component **230**. Buckle portion **256** comprises slot **256A**. Buckle portion **256** is arranged to engage buckle portion **236** to lock superior component **250** with inferior component **230**. When in the fully closed or locked position, pad **254** abuts against or is arranged substantially proximate to pad **234**, thereby locking a bag therebetween. Specifically, superior component **250** is displaced in circumferential direction **CD1** until pad **254** abuts against or is arranged substantially proximate to pad **234**. As buckle portion **256** engages buckle portion **236**, the edges of slot **256A** engage the ramp portion of spring portions **236A** and **236B** thereby forcing them towards each other. When fully closed, the shoulder surfaces of the ramp portions of spring portions **236A** and **236B** abut against or are arranged substantially proximate surface **252** thereby circumferentially locking superior component **250** with respect to inferior component **230**. To unlock clasp **220**, spring portions **236A** and **236B** are “squeezed” together until the shoulder surfaces of the ramp portions of spring portions **236A** and **236B** clear the edges of slot **256A**, thus enabling superior component **250** to be displaced in circumferential direction **CD2**.

FIG. 5A is a perspective view of clasp **320** in an opened position. FIG. 5B is a perspective view of clasp **320** in a fully closed position. Clasp **320** generally comprises inferior component **330**, superior component **350**, and spring **336**. Superior component **350** is hingedly connected to inferior component **330**.

Inferior component **330** comprises surface **332**, pad **334**, and hinge portion **338**. Inferior component **330** is operatively arranged to be connected to lateral wall **12** of container **10** via surface **332**. In some embodiment, inferior component **330** is operatively arranged to be connected to lateral wall **12** via double-sided tape, adhesives, screws, rivets, bolts, nails, hook and loop fastener, etc. In some embodiments, inferior component **330** is integrally formed with lateral wall **12** (i.e., molded into container **10** itself). In some embodiments, lateral wall **12** comprises a slot in which inferior component **330** is operatively arranged to engage to connect clasp **320** to container **10**. In such embodiments, clasps **320** are removably connected to container **10**. Pad

334 is arranged to clamp bag 2. In some embodiments, pad 334 is an integrated (molded) textured protrusion. In some embodiments, pad 334 comprises silicone, rubber, and/or foam. In some embodiments, pad 334 comprises a molded protrusion having a coating comprising a rubber, silicone, or similar textured material, or any combination thereof, for gripping bag 2. Hinge portion 338 comprises flanges 338A and 338B. Through-bore 340 extends through both flanges 338A and 338B. In some embodiments, clasp 320 further comprises flange 342. Flange 342 is hingedly or pivotably connected to inferior component 330 via pin 344 and spring 346. Flange 342 is operatively arranged to displace in circumferential direction CD2 such that a bag can be forced into clasp 320 in a closed position, or circumferential direction CD1 such that a bag can be forced out of clasp 320 in a closed position. After being displaced, spring 346 returns flange 342 to its original position. It should be appreciated that such a retention flange (i.e., flange 342) may be implemented on any of the clasps described herein.

Superior component 350 comprises surface 352, pad 354, and hinge portion 358. Superior component 350 is hingedly connected to inferior component 330. In some embodiments, superior component 350 is pivotably connected to inferior component 330. Pad 354 is arranged to clamp bag 2. In some embodiments, pad 354 is an integrated (molded) textured protrusion. In some embodiments, pad 354 comprises silicone, rubber, and/or foam. In some embodiments, pad 354 comprises a molded protrusion having a coating comprising a rubber, silicone, or similar textured material, or any combination thereof, for gripping bag 2. Hinge portion 358 comprises through-bore 360 (not shown) and is arranged between flanges 338A and 338B. Pin 370 extends through through-bore 340 of flanges 338A and 338B and through-bore 360 (not shown) to form a hinged connection between superior component 350 and inferior component 330. Spring 336 is arranged between and connected to superior component 350 and inferior component 330. Spring 336 is operatively arranged proximate hinge portions 338 and 358, as shown, to urge superior component 350 in circumferential direction CD1 or toward a closed position. When in the fully closed or locked position, pad 354 abuts against or is arranged substantially proximate to pad 334, thereby locking a bag therebetween. As such, clasp 320 will remain in the fully closed position until a user displaces superior component 350 in circumferential direction CD2. A user may displace superior component 350 in circumferential direction CD2, place the top end of bag 2 between pads 354 and 334, and then release superior component 350 which will “snap” back to the closed position, thereby locking bag 2 therebetween.

FIG. 6A is a perspective view of clasp 420 in an opened position. FIG. 6B is a perspective view of clasp 420 in a fully closed position. Clasp 420 generally comprises inferior component 430 and superior component 450. Superior component 450 is hingedly connected to inferior component 430.

Inferior component 430 comprises surface 432, pad 434, buckle portion 436, and hinge portion 446. Inferior component 430 is operatively arranged to be connected to lateral wall 12 of container 10 via surface 432. In some embodiment, inferior component 430 is operatively arranged to be connected to lateral wall 12 via double-sided tape, adhesives, screws, rivets, bolts, nails, hook and loop fastener, etc. In some embodiments, inferior component 430 is integrally formed with lateral wall 12 (i.e., molded into container 10 itself). In some embodiments, lateral wall 12 comprises a slot in which inferior component 430 is operatively arranged

to engage to connect clasp 420 to container 10. In such embodiments, clasps 420 are removably connected to container 10. Pad 434 is arranged to clamp bag 2. In some embodiments, pad 434 is an integrated (molded) textured protrusion. In some embodiments, pad 434 comprises silicone, rubber, and/or foam. In some embodiments, pad 434 comprises a molded protrusion having a coating comprising a rubber, silicone, or similar textured material, or any combination thereof, for gripping bag 2. Hinge portion 446 comprises flanges 446A and 446B. Through-bore 448 extends through both flanges 446A and 446B. Buckle portion 436 comprises slot 438 and tension hook 444. Tension hook 444 is connected to inferior component 430 via pin 442 which extends through through-bore 440. In some embodiments, tension hook 444 is hingedly connected to inferior component 430. In some embodiments, tension hook 444 is pivotably connected to inferior component 430. Tension hook 444 comprises protrusion 445 which is arranged to engage surface 452 and notch 458 of superior component 450, as will be discussed in greater detail below. In some embodiments, tension hook 444 at least partially comprises an elastic material such that it can be stretched or deformed and return to its original shape.

Superior component 450 comprises surface 452, pad 454, buckle portion 456, and hinge portion 460. Superior component 450 is hingedly connected to inferior component 430. In some embodiments, superior component 450 is pivotably connected to inferior component 430. Pad 454 is arranged to clamp bag 2. In some embodiments, pad 454 is an integrated (molded) textured protrusion. In some embodiments, pad 454 comprises silicone, rubber, and/or foam. In some embodiments, pad 454 comprises a molded protrusion having a coating comprising a rubber, silicone, or similar textured material, or any combination thereof, for gripping bag 2. Hinge portion 460 comprises through-bore 462 (not shown) and is arranged between flanges 446A and 446B. Pin 470 extends through through-bore 448 of flanges 446A and 446B and through-bore 462 (not shown) to form a hinged connection between superior component 450 and inferior component 430. Buckle portion 456 is operatively arranged to engage buckle portion 436 to lock superior component 450 with inferior component 430. When in the fully closed or locked position, pad 454 abuts against or is arranged substantially proximate to pad 434, thereby locking a bag therebetween. Specifically, superior component 450 is displaced in circumferential direction CD1 until pad 454 abuts against or is arranged substantially proximate to pad 434. Tension hook 444 is then rotated in circumferential direction CD2 toward notch 458. Tension hook 444, specifically protrusion 445, engages surface 452 and notch 458. The elasticity of tension hook 444 allows tension hook 444 to displace while engaging surface 452 until protrusion 445 “snaps” into notch 458, thus clamping superior component 450 to inferior component 430.

FIG. 7A is a perspective view of clasp 520 in an opened position. FIG. 7B is a perspective view of clasp 520 in a fully closed position. Clasp 520 generally comprises inferior component 530, superior component 550, and space 536 arranged between inferior component 530 and superior component 550.

Inferior component 530 comprises surface 532, surface 534, pad 538, and spring 540. Inferior component 530 is operatively arranged to be connected to lateral wall 12 of container 10 via surface 532. In some embodiment, inferior component 530 is operatively arranged to be connected to lateral wall 12 via double-sided tape, adhesives, screws, rivets, bolts, nails, hook and loop fastener, etc. In some

embodiments, inferior component 353 is integrally formed with lateral wall 12 (i.e., molded into container 10 itself). In some embodiments, lateral wall 12 comprises a slot in which inferior component 530 is operatively arranged to engage to connect clasp 520 to container 10. In such embodiments, clasps 520 are removably connected to container 10. Pad 538 is arranged to clamp bag 2. In some embodiments, pad 538 is an integrated (molded) textured component. In some embodiments, pad 538 comprises silicone, rubber, and/or foam. In some embodiments, pad 538 comprises a molded component having a coating comprising a rubber, silicone, or similar textured material, or any combination thereof, for gripping bag 2. Pad 538 is connected to surface 532 via spring 540. Spring 540 is arranged to urge pad 538 in axial direction AD1 toward surface 552 of superior component 550, as will be discussed in greater detail below.

Superior component 550 comprises surface 552. Superior component 550 is fixedly secured to inferior component 530. Superior component 550 may further comprise a pad arranged on surface 552 (not shown) to clamp bag 2. In some embodiments, the pad arranged on surface 552 (not shown) is an integrated (molded) textured protrusion. In some embodiments, the pad arranged on surface 552 (not shown) comprises silicone, rubber, and/or foam. In some embodiments, the pad arranged on surface 552 (not shown) comprises a molded protrusion having a coating comprising a rubber, silicone, or similar textured material, or any combination thereof, for gripping bag 2. As previously discussed, spring 540 is arranged between superior component 550 and inferior component 530. Spring 540 is operatively arranged to urge pad 534 in axial direction AD1 toward a closed position as shown in FIG. 7B. When in the fully closed or locked position, pad 538 abuts against or is arranged substantially proximate to surface 552, thereby locking a bag therebetween. As such, clasp 520 will remain in the fully closed position until a user displaces pad 538 in axial direction AD2. A user may displace pad 538 in axial direction AD2, place the top end of bag 2 between pad 538 and surface 552, and then release pad 538 which will “snap” back to the closed position, thereby locking bag 2 therebetween.

It will be appreciated that various aspects of the disclosure above and other features and functions, or alternatives thereof, may be desirably combined into many other different systems or applications. Various presently unforeseen or unanticipated alternatives, modifications, variations, or improvements therein may be subsequently made by those skilled in the art which are also intended to be encompassed by the following claims.

REFERENCE NUMERALS

- 2 Bag
- 10 Container (or cooler)
- 12 Lateral wall
- 14 Floor
- 16 Edge
- 20 Clasp
- 30 Inferior component
- 32 Surface
- 34 Pad
- 36 Buckle portion
- 38 Hinge portion
- 38A Flange
- 38B Flange
- 40 Through-bore
- 50 Superior component
- 52 Surface
- 54 Pad

- 56 Buckle portion
- 58 Hinge portion
- 60 Through-bore
- 70 Pin
- 5 120 Clasp
- 130 Inferior component
- 132 Surface
- 134 Pad
- 136 Buckle portion
- 10 138 Slot
- 140 Through-bore
- 142 Pin
- 144 Tension buckle
- 145 Enlarged portion
- 146 Hinge portion
- 15 146A Flange
- 146B Flange
- 148 Through-bore
- 150 Superior component
- 152 Surface
- 20 154 Pad
- 156 Buckle portion
- 158 Slot
- 160 Hinge portion
- 162 Through-bore
- 25 170 Pin
- 220 Clasp
- 230 Inferior component
- 232 Surface
- 234 Pad
- 30 236 Buckle portion
- 236A Spring portion
- 236B Spring portion
- 238 Hinge portion
- 238A Flange
- 238B Flange
- 35 240 Through-bore
- 250 Superior component
- 252 Surface
- 254 Pad
- 256 Buckle portion
- 40 256A Slot
- 258 Hinge portion
- 260 Through-bore
- 270 Pin
- 320 Clasp
- 45 330 Inferior component
- 332 Surface
- 334 Pad
- 336 Spring
- 338 Hinge portion
- 50 338A Flange
- 338B Flange
- 340 Through-bore
- 342 Flange
- 344 Pin
- 346 Spring
- 55 350 Superior component
- 352 Surface
- 354 Pad
- 356 Surface
- 358 Hinge portion
- 60 360 Through-bore
- 370 Pin
- 420 Clasp
- 430 Inferior component
- 432 Surface
- 65 434 Pad
- 436 Buckle portion
- 438 Slot



- 440 Through-bore
- 442 Pin
- 444 Tension hook
- 445 Protrusion
- 446 Hinge portion
- 446A Flange
- 446B Flange
- 448 Through-bore
- 450 Superior component
- 452 Surface
- 454 Pad
- 456 Buckle portion
- 458 Notch
- 460 Hinge portion
- 462 Through-bore
- 470 Pin
- 520 Clasp
- 530 Inferior component
- 532 Surface
- 534 Surface
- 536 Space
- 538 Pad
- 540 Spring
- 550 Superior component
- 552 Surface
- AD1 Axial direction
- AD2 Axial direction
- CD1 Circumferential direction
- CD2 Circumferential direction

What is claimed is:

1. A clasp for a cooler, comprising:
  - an inferior component, including:
    - a first planar inner surface;
    - a first outer surface;
    - a first completely planar pad connected to the first planar inner surface;
    - at least one flange having a first through-bore; and,
    - a first buckle portion connected to the first planar inner surface; and,
  - a superior component displaceable relative to the inferior component, the superior component including:
    - a second planar inner surface;
    - a second outer surface;
    - a second completely planar pad connected to the second planar inner surface;
    - a hinge portion having a second through-bore; and,
    - a second buckle portion operatively arranged to engage the first buckle portion and secure the superior component to the inferior component;
- wherein:
  - a first pin engages the first and second through-bores to hingedly connect the superior component with the inferior component; and,
  - in a fully closed position, the first completely planar pad and the second completely planar pad form a clamp.
2. The clasp as recited in claim 1, wherein the first buckle portion comprises an elastic tension buckle including:
  - a first end pivotably connected to the inferior component via a pin;
  - a second end having a handle; and,
  - an enlarged portion arranged between the first end and the second end, the enlarged portion being wider than the first end.
3. The clasp as recited in claim 2, wherein the inferior component comprises a slot extending from the first planar

- inner surface to the first outer surface, and the first end of the tension buckle is arranged in the slot.
- 4. The clasp as recited in claim 2, wherein:
  - the superior component comprises a slot extending from the second planar inner surface to the second outer surface;
  - the first end is operatively arranged to engage the slot of the superior component; and,
  - the enlarged portion is operatively arranged to abut against the second outer surface to squeeze the inferior component and the superior component together.
- 5. The clasp as recited in claim 2, wherein in the fully closed position, the enlarged portion abuts against the second outer surface.
- 6. The clasp as recited in claim 1, wherein the first buckle portion comprises:
  - a first spring portion connected to and extending from the first planar inner surface;
  - a second spring portion connected to and extending from the first planar inner surface, the second spring portion being separate from and arranged proximate to the first spring portion.
- 7. The clasp as recited in claim 6, wherein the second buckle portion comprises at least one slot, wherein the first spring portion and the second spring portion are displaceable toward each other to engage the at least one slot.
- 8. The clasp as recited in claim 1, further comprising a spring including a first end connected to the inferior component and a second end connected to the superior component, the spring operatively arranged to urge the clasp toward the fully closed position.
- 9. The clasp as recited in claim 1, wherein the first buckle portion comprises a tension hook operatively arranged to engage the second outer surface to secure the superior component to the inferior component.
- 10. The clasp as recited in claim 9, wherein the tension hook comprises a protrusion operatively arranged to engage a notch on the second outer surface.
- 11. A cooler comprising a lateral wall and at least one clasp connected to the lateral wall for securing a bag therein, the at least one clasp, comprising:
  - an inferior component fixedly secured to the lateral wall, including:
    - a first surface;
    - a first completely planar pad connected to the first surface; and,
    - a first buckle portion connected to the first surface; and,
  - a superior component pivotable relative to the inferior component, the superior component including:
    - a second surface;
    - a third surface parallel to the second surface;
    - a second completely planar pad connected to the second surface; and,
    - a second buckle portion operatively arranged to engage the first buckle portion and secure the superior component to the inferior component;
- wherein in a fully closed position, the first pad and the second pad form a clamp for securing the bag.
- 12. The cooler as recited in claim 11, wherein:
  - the inferior component further comprises at least one flange having a first through-bore;
  - the superior component further comprises a hinge portion having a second through-bore; and,
  - a first pin engages the first and second through-bores to hingedly connect the superior component with the inferior component.

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13. The cooler as recited in claim 11, wherein the first buckle portion comprises a tension buckle pivotably connected to the inferior component, the tension buckle including an enlarged portion.

14. The cooler as recited in claim 13, wherein the enlarged portion is arranged to engage the third surface. 5

15. The cooler as recited in claim 11, wherein:

the first buckle portion comprises:

a first spring portion including a first ramp;

a second spring portion including a second ramp, the first and second ramps being angled toward each other; 10

the second buckle portion comprises a slot extending from the second surface to the third surface; and,

the slot is arranged to engage the first and second ramps and elastically displace the first and second spring portions toward each other. 15

16. The cooler as recited in claim 11, further comprising a spring including a first end connected to the inferior component and a second end connected to the superior component, the spring operatively arranged to urge the clasp toward the fully closed position. 20

17. A cooler, comprising:

a floor;

a lateral wall; and,

a plurality of clasps operatively arranged to secure a bag, 25 wherein each clasp of the plurality of clasps comprises:

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an inferior component fixedly secured to the lateral wall, including:

a first inner surface;

a first completely planar pad connected to the first inner surface; and,

a first buckle portion fixedly secured to the first inner surface; and,

a superior component pivotably connected to the inferior component, the superior component including:

a second inner surface;

a second completely planar pad connected to the second inner surface; and,

a second buckle portion operatively arranged to engage the first buckle portion and secure the superior component to the inferior component;

wherein in a fully closed position, the first pad and the second pad form a clamp for securing the bag.

18. The cooler as recited in claim 17, wherein:

the lateral wall comprises a bottom edge connected to the floor and a top edge; and,

each clasp is arranged parallel with the top edge.

19. The cooler as recited in claim 17, wherein the first buckle portion extends perpendicularly from the first inner surface. 25

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