

(19)



(11)

EP 4 570 121 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
18.06.2025 Bulletin 2025/25

(51) International Patent Classification (IPC):
A45F 5/02 ^(2006.01) **A45F 5/00** ^(2006.01)

(21) Application number: **24219198.9**

(52) Cooperative Patent Classification (CPC):
**A45F 5/02; A45F 5/021; A45F 5/1516; A45F 5/155;
A45F 5/1575; A45F 5/1583**

(22) Date of filing: **11.12.2024**

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL
NO PL PT RO RS SE SI SK SM TR**
Designated Extension States:
BA
Designated Validation States:
GE KH MA MD TN

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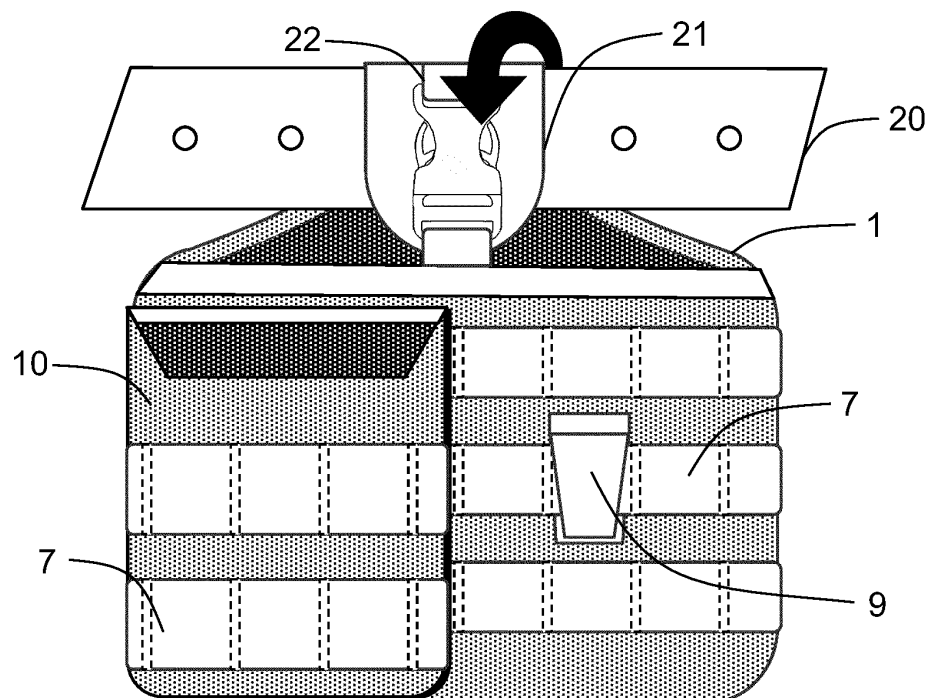
(30) Priority: **12.12.2023 DK PA202330392**

(54) A MODULAR CADDY FOR CARRYING WINDOW CLEANING ACCESSORIES

(57) A modular caddy for carrying window cleaning accessories comprising a main bag (1) and at least one modular unit (10) attachable to the main bag. The main bag (1) has a back panel (2) and a cover sheet (3), with securing means (6) arranged on the back panel (2) for releasably securing the main bag (1) to a garment. Strips (7) of webbing are arranged on the outer surface and

fixed at regular intervals to form a series of gaps (8). Attachment means (9) are dimensioned to correspond to said gaps (8) and configured for releasably attaching modular units (10) to the strips (7) of webbing.

The modular units (10) also comprise strips (7) of webbing for attaching to the main bag (1) and for mounting further modular units (10) thereon.

**FIG. 2**

Description

TECHNICAL FIELD

[0001] The disclosure relates to the field of body-worn harnesses, holsters, belts or other garments for carrying items, and more particularly to devices for carrying window cleaning accessories on the body.

BACKGROUND

[0002] The task of window cleaning or washing, particularly on high-rise commercial buildings, can present challenges and potential dangers, necessitating skill, expertise, and specialized equipment. Among the essential tools is typically one or more rubber-bladed wiping devices, commonly referred to as squeegees, which come in various sizes for different purposes. It is not uncommon for window cleaners to carry multiple squeegees.

[0003] When working on elevated platforms, it is common for workers to carry a full load of items to avoid the time-consuming process of descending to retrieve any overlooked tools. To enhance their efficiency, window cleaning personnel often carry a range of readily accessible items, including, but not limited to, one or more squeegees, handled mops, sponges, scrapers, steel wool, solvent applicators, buckets, hoses, soap containers, and wiping rags. Additionally, larger squeegees and extension poles, which can occupy limited space on the elevated platform, contribute to the bulkiness of the equipment.

[0004] To address the need for organizing and facilitating easy access to the numerous items utilized by window cleaning personnel, there have been proposals for various harnesses, caddies, holsters, specialized work clothing, and other item carriers.

[0005] US10842252B1 describes such a caddy for carrying window cleaning accessories such as squeegees. The caddy can hang from the waistbelt of a user and can include a lower reservoir portion hingedly connected to an upper sleeve portion by a hinge. A releasable lock allows the reservoir to disengage from the sleeve, swing about the hinge and drain the liquid contents of the reservoir.

[0006] However, many of these carriers are bulky, expensive, lack versatility in accommodating different tools, and fail to securely hold items while allowing for convenient and swift removal.

[0007] Therefore, there is a clear necessity for a body-worn window cleaning caddy that effectively addresses one or more of the aforementioned deficiencies.

SUMMARY

[0008] It is an object of the disclosure to provide an improved caddy that is sufficiently versatile for carrying cleaning supplies of various types and sizes, while still

being simple and easy to carry as a wearable item.

[0009] This goal is achieved by a modular caddy with an attachment system that allows quick mounting of various modular carrier units to a main bag, and which also allows the modular units to be attached to each other.

[0010] According to a first aspect, there is provided a modular caddy for carrying window cleaning accessories, the caddy including a main bag including a back panel and a cover sheet permanently attached to the back panel on its periphery to form a main receptacle with an opening. Securing means are arranged on the back panel for releasably securing the main bag to a garment, such as a tool belt. At least one strip of webbing is arranged on the outer surface of the cover sheet and fixed to the outer surface at regular intervals to form a series of gaps. At least one attachment means is provided, dimensioned to correspond to the gaps and configured for releasably attaching to the strip of webbing. Further provided is one or more modular units attachable to the main bag at the strip of webbing using the at least one attachment means.

[0011] Such a modular caddy can conveniently carry a number of wet or soaking window cleaning items such as squeegees on a user's belt thanks to the releasable securing means and the modular units attachable to the main bag. The caddy can be made from substantially rigid, durable fabric sheet material, and thus the entire caddy can be machine washed.

[0012] In a possible implementation form of the first aspect, the modular unit also includes at least one strip of webbing arranged on its outer surface. In some embodiments, the attachment means are configured for attaching the modular unit to the main bag by interconnecting their respective strips of webbing. In some embodiments, the attachment means are also configured for attaching further modular units to the modular unit by interconnecting their respective strips of webbing.

[0013] In some embodiments, the at least one strip of webbing may be arranged to form a Pouch Attachment Ladder System (PALS).

[0014] In some embodiments, the attachment means may include a clip having two hinged plates that can be releasably joined together, preferably via a snap fit arrangement that may be released by release buttons. In some embodiments the clips may be made of metal or heavy-duty plastic.

[0015] In a possible implementation form of the first aspect, the at least one modular unit may include an extension unit shaped and sized substantially the same as the main bag.

[0016] In a possible implementation form of the first aspect, the at least one modular unit includes a pocket unit with a receptacle dimensioned for holding miscellaneous items, such as a mobile phone, cleaning cloth, business card, or scraper. In some embodiments, the height of the pocket unit substantially corresponds to the height of the main bag and its maximum width corre-

sponds to half the width of the main bag. In an embodiment the receptacle of the pocket unit includes an inner aluminum foil lining to preserve steel-wool patches that may be placed inside the receptacle from corroding.

[0017] In a possible implementation form of the first aspect, the at least one modular unit includes a bottle holder unit having a receptacle with a tunnel-shaped cross-section dimensioned to hold a cylindrical object such as a squeegee bottle. In some embodiments, the height of the bottle holder unit may extend beyond the height of the main bag and its maximum width may correspond to half the width of the main bag.

[0018] In a possible implementation form of the first aspect, the at least one modular unit may include a tube unit with an elongated shape and a circular cross-section, dimensioned for holding narrow elongated items such as a squeegee channel. In some embodiments, the height of the tube unit substantially corresponds to the height of the main bag and its maximum width corresponds to about a quarter of the width of the main bag.

[0019] In some embodiments, at least one of the main receptacle or a receptacle of a modular unit may include a waterproof inner lining.

[0020] In some embodiments, the exterior of at least one of the main bag or the modular unit may be made of polyurethane coated nylon fabric, and the interior of at least one of the main bag or the modular unit may be made of vinyl.

[0021] In a possible implementation form of the first aspect, the securing means include a strap for securing the caddy to a tool belt of a person using a quick release mechanism, such as a buckle made of plastic qualified for use on military load bearing equipment. In an embodiment, the strap and quick release mechanism are arranged on a tab extending from the back panel and designed for being looped around the tool belt for secure attachment, wherein the tab is driven under the belt from below and then over the belt and down to lock the buckle.

[0022] In some embodiments, the edge bindings of the main bag and/or the modular units are made of polyester.

[0023] In some embodiments, the strips of webbing are made of heavy-duty polyamid.

[0024] In a possible embodiment the main bag is arranged with a pocket unit and a bottle holder unit attached adjacently, with a further tube unit attached to the pocket unit.

[0025] In another possible embodiment two pocket units are attached adjacently to the main bag, with optionally a tube unit attached to either of the pocket units.

[0026] These and other aspects will be apparent from the embodiment(s) described below.

BRIEF DESCRIPTION OF THE DRAWINGS

[0027] In the following detailed portion of the present disclosure, the aspects, embodiments and implementations will be explained in more detail with reference to the example embodiments shown in the drawings, in which:

Fig. 1 shows a front view of a main bag of a modular caddy for carrying window cleaning accessories according to an embodiment of the disclosure.

Fig. 2 shows a front view of a modular caddy with an attached modular unit according to an embodiment of the disclosure.

Fig. 3 shows a front view of possible modular units to be attached to the modular caddy according to an embodiment of the disclosure.

Fig. 4 shows a top view of an attachment clip for attaching modular units to the main bag of the modular caddy according to an embodiment of the disclosure.

Fig. 5 shows a front view of a modular caddy with multiple modular units according to an embodiment of the disclosure.

Fig. 6 shows a front view of a modular caddy with multiple attached modular units according to another embodiment of the disclosure.

DETAILED DESCRIPTION

[0028] Fig. 1 illustrates a modular caddy for carrying window cleaning accessories according to an embodiment of the disclosure.

[0029] The caddy comprises a main bag 1 with a back panel 2 and a cover sheet 3 permanently attached to the back panel 2 at all but one of its sides to form a main receptacle 4 with an opening 5 towards the top. The main receptacle 4 may comprise a waterproof inner lining for holding wet cleaning items.

[0030] For a user to be able to wear the caddy, securing means 6 are arranged on the back panel 2 for releasably securing the main bag 1 to a garment item, for example on a tool belt 20 wearable around the waist of a worker. In the illustrated embodiment the securing means 6 comprises a flexible strap 22 or hook with a quick release mechanism, such as a buckle made of plastic qualified for use on military load bearing equipment. The securing means 6 comprising the strap 22 and the quick release mechanism are arranged on a tab 21 extending from the back panel 2 and designed for being looped around the tool belt 20 for secure attachment, wherein the tab 21 is driven under the belt 20 from below and then over the belt 20 and down to lock in the buckle.

[0031] At least one strip 7 of webbing is arranged on the outer surface of the cover sheet 3 and fixed to the outer surface at regular intervals to form a series of gaps 8. In the illustrated embodiment, these gaps are the same size in all the strips 7 of webbing, however strips 7 with gaps 8 of various sizes can also be arranged on the main bag 1.

[0032] The strips 7 of webbing can be made of heavy-duty polyamid.

[0033] The fixing of the strips 7 to the outer surface of the main bag 1 can be achieved by stitching or sewing, or alternatively by gluing.

[0034] In the illustrated embodiments, multiple strips 7 are arranged and fixed to the main bag 1 according to a Pouch Attachment Ladder System (PALS) grid. The pattern for PALS grids of webbing is based on 25 mm (1 in) wide webbing with 38 mm (1.5 in) spacing between each sewing point.

[0035] This arrangement of multiple PALS strips 7 corresponds to the MOLLE (Modular Lightweight Load-carrying Equipment) system. The term MOLLE is technically only used to describe the specific system manufactured by Specialty Defense Systems but is also casually used interchangeably to describe generically all load bearing systems and subsystems that utilize the woven PALS webbing for modular pouch attachment. Derivatives based on the MOLLE attachment method (such as the Tactical Tailor MALICE clip system) have also been developed. Any system that utilizes modular attachment methods and is usable with general issue MOLLE components is often considered "MOLLE-compatible" or is called a "MOLLE" system and is used often by manufacturers of outdoor equipment.

[0036] Further provide with the modular caddy is at least one attachment means 9 dimensioned to correspond to the gaps 8 and configured for releasably attaching to the strip 7 of webbing. The attachment means 9 can be MOLLE attachment clip dimensioned to fit into the gaps 8 of a MOLLE system.

[0037] Fig. 2 shows a front view of a modular caddy with a modular unit 10 attached to the main bag 1 according to an embodiment of the disclosure. Such modular units 10 are attachable to the main bag 1 at the strip 7 of webbing using at least one attachment means 9.

[0038] As shown in Fig. 2, the modular units 10, just like the main bag 1, may also comprise strips 7 of webbing arranged on its outer surface. The attachment means 9 can be configured for attaching the modular unit 10 to the main bag 1 by interconnecting the respective strips 7 of webbing.

[0039] Fig. 3 shows a front view of possible modular units 10 to be attached to the main bag 1 of the modular caddy according to different embodiments of the disclosure.

[0040] The modular units 10 may comprise any or all of the following described units suitable to be attached to the main bag 1.

[0041] An extension unit 11 shaped and sized substantially the same as the main bag can be provided to double storage capacity of the caddy.

[0042] A pocket unit 12 can also be provided with a receptacle dimensioned for holding miscellaneous items, such as a mobile phone, cleaning cloth, business card, or scraper. The height of the pocket unit 12 may substantially correspond to the height of the main bag 1 and its maximum width may correspond to half the width of the main bag 1.

[0043] In an embodiment the receptacle of the pocket unit 12 comprises an inner aluminum foil lining to preserve steel-wool patches that are placed inside the receptacle from corroding.

[0044] A bottle holder unit 13 can also be provided having a receptacle with a tunnel-shaped cross-section dimensioned to hold a cylindrical object such as a squeegee bottle. The height of the bottle holder unit 13 may extend beyond the height of the main bag 1 so that the bottle holder unit 13 can hang lower than the main bag 1 when attached to a belt of a user, and its maximum width may correspond to half the width of the main bag 1.

[0045] The bottle holder unit 13 is preferably dimensioned to hold a 500-650 ml squeegee bottle with soap.

[0046] A tube unit 14 can also be provided with an elongated shape and a circular cross-section, dimensioned for holding narrow elongated items such as a squeegee channel. The height of the tube unit 14 may substantially correspond to the height of the main bag 1 and its maximum width may correspond to about a quarter of the width of the main bag 1.

[0047] The receptacle of any or all of the above modular units 10 may comprise a waterproof inner lining.

[0048] Fig. 4 shows a top view of an embodiment where the attachment means 9 used for attaching modular units 10 to the main bag 1 of the modular caddy are clips 15 having two hinged plates 16, 17 that can be releasably joined together. The joining is preferably via a snap fit arrangement 18 that is released by pressing on release buttons 19 arranged on the sides of the clip 15. The clips 15 can be made of metal or heavy-duty plastic.

[0049] As these clips 15 are very secure one such clip 15 is sufficient to mount smaller modular units 10 such as the pocket unit 12 or the tube unit 14. Two clips 15 may be used for larger modular units 10 such as the bottle holder unit 13 or the extension unit 11. Using three clips on a larger modular unit 10 such as the extension unit 11 may be advantageous for stopping the sides flapping around.

[0050] Fig. 5 shows a front view of a modular caddy with multiple modular units 10 according to an embodiment of the disclosure. In this embodiment two pocket units 12 are attached adjacently to the main bag 1, wherein the main bag can hold a window cleaning wet handheld item such as a squeegee, and the pocket units 12 can each hold smaller items like a sponge or a scraper.

[0051] Fig. 6 shows a front view of a modular caddy with multiple attached modular units 10 according to another embodiment of the disclosure. In this embodiment the main bag 1 is arranged with a pocket unit 12 and a bottle holder unit 13 attached adjacently, with a further tube unit 14 attached to the pocket unit 12.

[0052] The exterior of the main bag 1 and/or the modular units 10 in any of the above embodiments may be made of polyurethane coated nylon fabric, such as Cordura 1000 denier which has a very high tear strength, is waterproof and resistant to sunfading. This gives the main bag 1 and/or the modular units 10 much higher tear strengths and resistance to sunfading than regular ny-

lons.

[0053] The exterior can further have a protective finish such as DWR (Durable Water Repellant) finish.

[0054] The interior of the main bag 1 and/or the modular units 10 in any of the above embodiments may be made of vinyl, such as Protect Cover 705 from Serge Ferrari, which is the membrane of reference on the protection market, due to being easy to weld and available in a wide range of colours.

[0055] The edge bindings of the main bag 1 and/or the modular units 10 that form the receptacles in any of the above embodiments may be made of polyester.

[0056] The various aspects and implementations have been described in conjunction with various embodiments herein. However, other variations to the disclosed embodiments can be understood and effected by those skilled in the art in practicing the claimed subject-matter, from a study of the drawings, the disclosure, and the appended claims. In the claims, the word "comprising" does not exclude other elements or steps, and the indefinite article "a" or "an" does not exclude a plurality. The mere fact that certain measures are recited in mutually different dependent claims does not indicate that a combination of these measures cannot be used to advantage.

[0057] The reference signs used in the claims shall not be construed as limiting the scope. Unless otherwise indicated, the drawings are intended to be read (e.g. arrangement of parts, proportion, degree, etc.) together with the specification, and are to be considered a portion of the entire written description of this disclosure.

[0058] The term "substantially" is used in this specification because manufacturing imprecision and inaccuracies can lead to non-symmetry and other inexactitudes in the shape, dimensioning and orientation of various structures. Further, use of "substantially" in connection with certain geometrical shapes and orientations, such as "parallel" and "perpendicular", can be given as a guide to generally describe the function of various structures, and to allow for slight departures from exact mathematical geometrical shapes and orientations, while providing adequately similar function. Those skilled in the art will readily appreciate the degree to which a departure can be made from the mathematically exact geometrical references.

Claims

1. A modular caddy for carrying window cleaning accessories, the caddy comprising:

a main bag (1) comprising a back panel (2) and a cover sheet (3) permanently attached to the back panel (2) on its periphery to form a main receptacle (4) with an opening (5),
securing means (6) arranged on the back panel (2) for releasably securing the main bag (1) to a garment;

characterized in

at least one strip (7) of webbing arranged on the outer surface of said cover sheet (3) and fixed to said outer surface at regular intervals to form a series of gaps (8);

at least one attachment means (9) dimensioned to correspond to said gaps (8) and configured for releasably attaching to said strip (7) of webbing; and

at least one modular unit (10) attachable to said main bag (1) at said strip (7) of webbing using said at least one attachment means (9).

2. The modular caddy of claim 1, wherein said at least one modular unit (10) comprises at least one strip (7) of webbing arranged on its outer surface, and wherein said attachment means (9) are configured for attaching said modular unit (10) to said main bag (1) and for attaching further modular units (10) to said modular unit (10) by interconnecting said respective strips (7) of webbing.
3. The modular caddy of any preceding claim, wherein said at least one strip (7) of webbing is arranged to form a Pouch Attachment Ladder System, PALS.
4. The modular caddy of any preceding claim, wherein the attachment means (9) comprises a clip (15) having two hinged plates (16, 17) that can be releasably joined together, preferably via a snap fit arrangement (18) that is released by release buttons (19).
5. The modular caddy of any preceding claim, wherein the at least one modular unit (10) comprises an extension unit (11) shaped and sized substantially the same as the main bag.
6. The modular caddy of any preceding claim, wherein the at least one modular unit (10) comprises a pocket unit (12) with a receptacle dimensioned for holding miscellaneous items, such as a mobile phone, cleaning cloth, business card, or scraper; wherein the height of said pocket unit (12) substantially corresponds to the height of the main bag (1) and its maximum width corresponds to half the width of the main bag (1).
7. The modular caddy of any preceding claim, wherein the at least one modular unit (10) comprises a bottle holder unit (13) having a receptacle with a tunnel-shaped cross-section dimensioned to hold a cylindrical object such as a squeegee bottle, wherein the height of said bottle holder unit (13) may extend beyond the height of the main bag (1) and its maximum width corresponds to half the width of the main bag (1).

8. The modular caddy of any preceding claim, wherein the at least one modular unit (10) comprises a tube unit (14) with an elongated shape and a circular cross-section, dimensioned for holding narrow elongated items such as a squeegee channel, wherein the height of said tube unit (14) substantially corresponds to the height of the main bag (1) and its maximum width corresponds to about a quarter of the width of the main bag (1). 5 10
9. The modular caddy of any preceding claim, wherein at least one of said main receptacle (4) or a receptacle of a modular unit (10) comprises a waterproof inner lining. 15
10. The modular caddy of any preceding claim, wherein the exterior of at least one of said main bag (1) or said modular unit (10) is made of polyurethane coated nylon fabric, and the interior of at least one of the main bag (1) or said modular unit (10) is made of vinyl. 20

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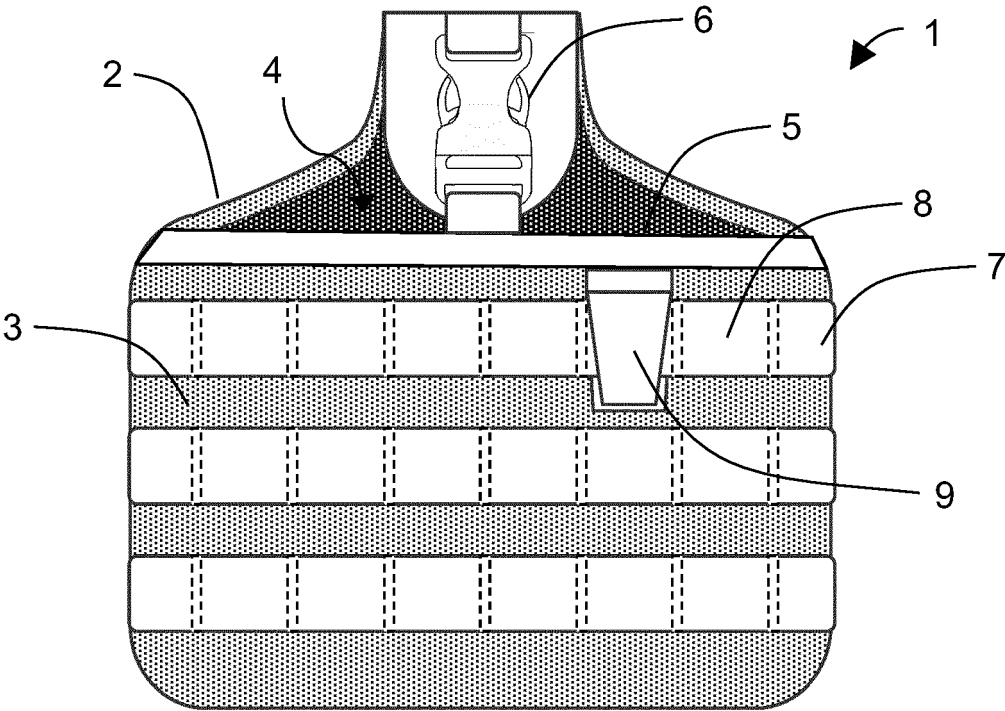


FIG. 1

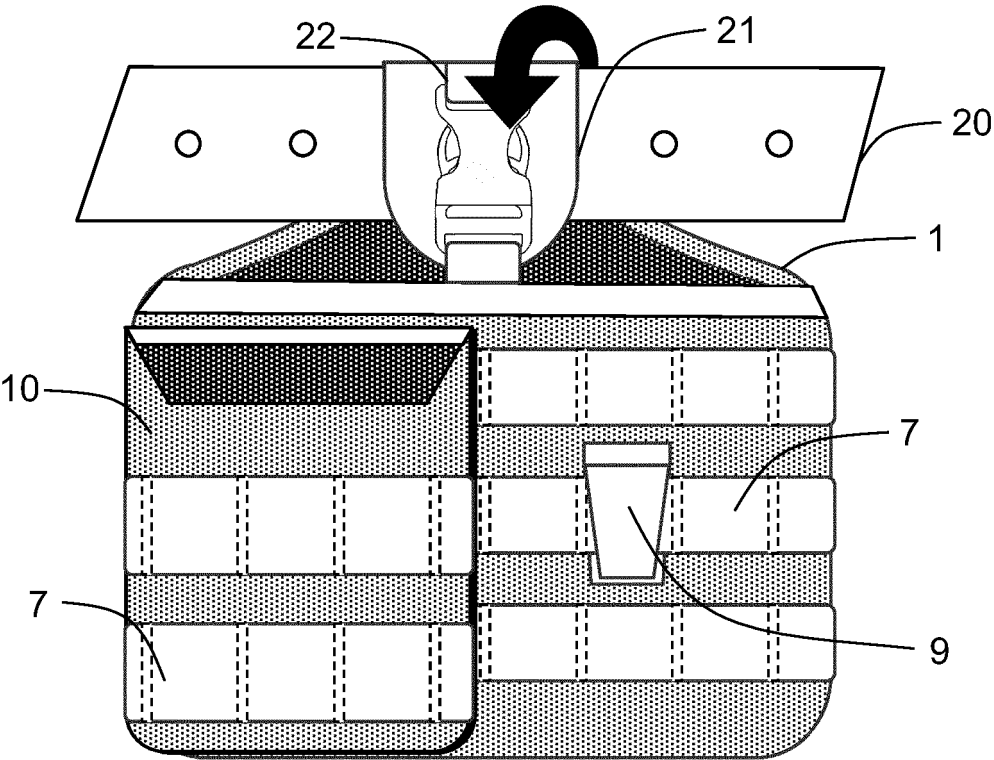


FIG. 2

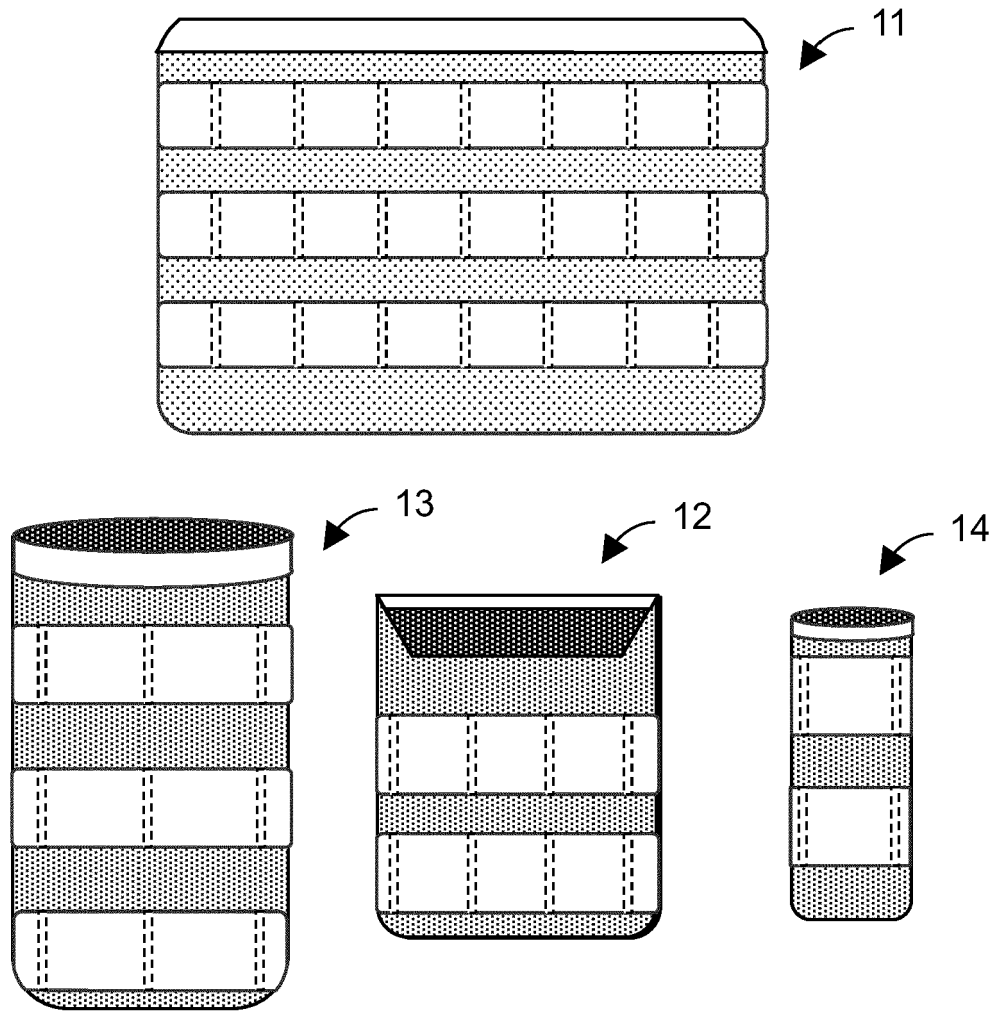


FIG. 3

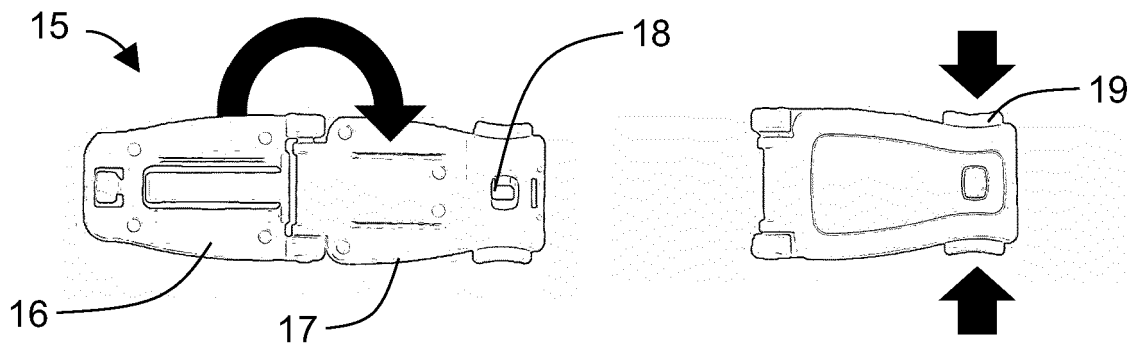


FIG. 4

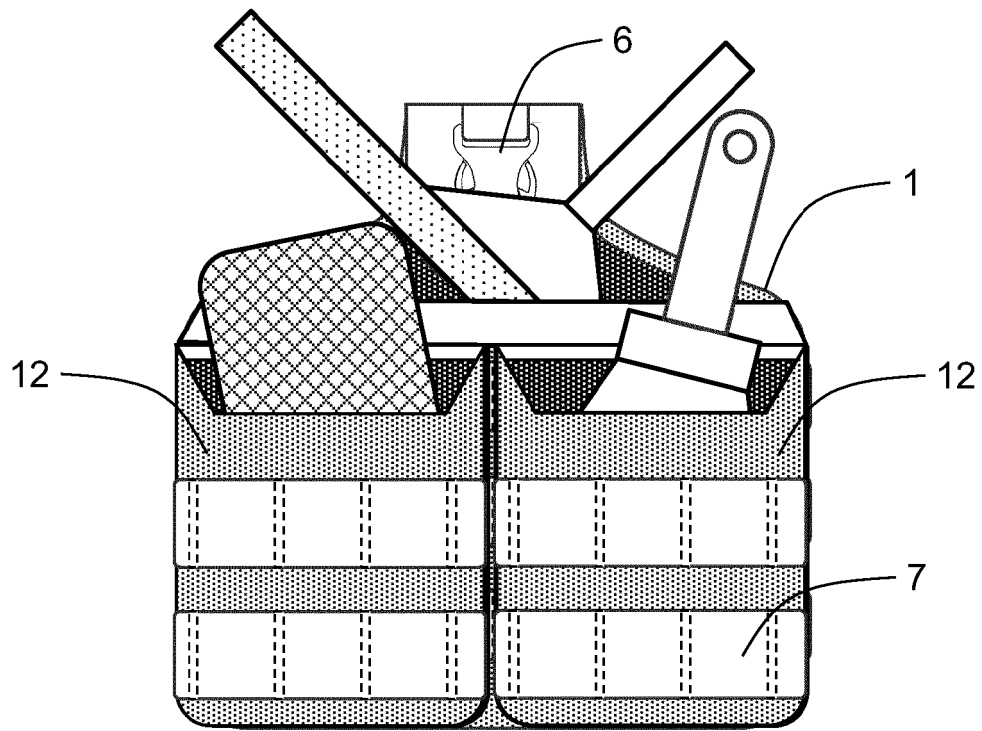


FIG. 5

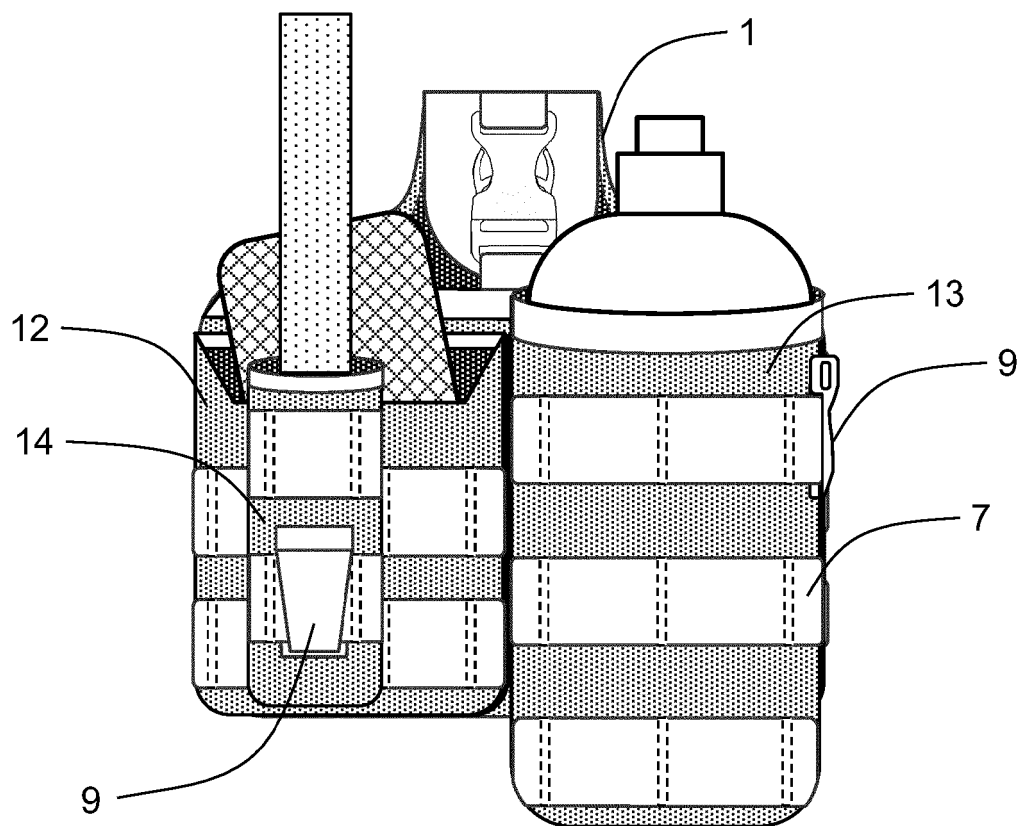


FIG. 6



EUROPEAN SEARCH REPORT

Application Number

EP 24 21 9198

DOCUMENTS CONSIDERED TO BE RELEVANT

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Place of search		Date of completion of the search	Examiner
The Hague		22 April 2025	Nicolás, Carlos
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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