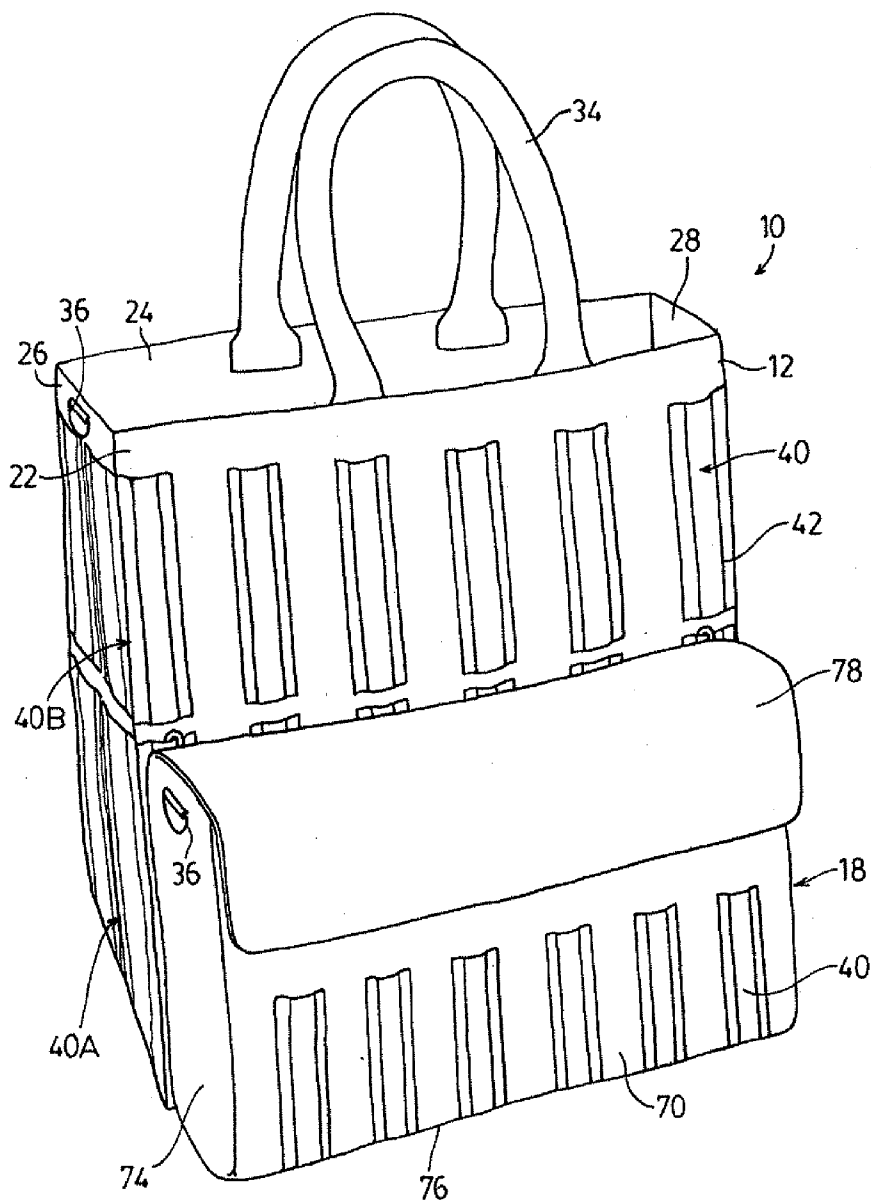




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GYURAN(10) **Pub. No.: US 2010/0294403 A1**(43) **Pub. Date: Nov. 25, 2010**(54) **EXPANDABLE HANDBAG****Publication Classification**(76) Inventor: **Elizabeth GYURAN**, Brampton
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A45C 1/08 (2006.01)
(52) **U.S. Cl.** **150/104; 150/111**(57) **ABSTRACT**Correspondence Address:
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The present invention is directed to an expandable bag system comprising a main bag and a plurality of accessory bags of various sizes which are releasably attachable to the exterior surface of the main bag by a means for releasably attaching the accessory bags to the main bag. The means for releasably attaching the accessory bags to the main bag comprises at least one sleeve arrangement having a pocket attached to a surface of the main bag and at least one spring clip attached to a back surface of the accessory bag, the spring clip being sized to slide within the pocket of the sleeve arrangement.

(21) Appl. No.: **12/468,433**(22) Filed: **May 19, 2009**

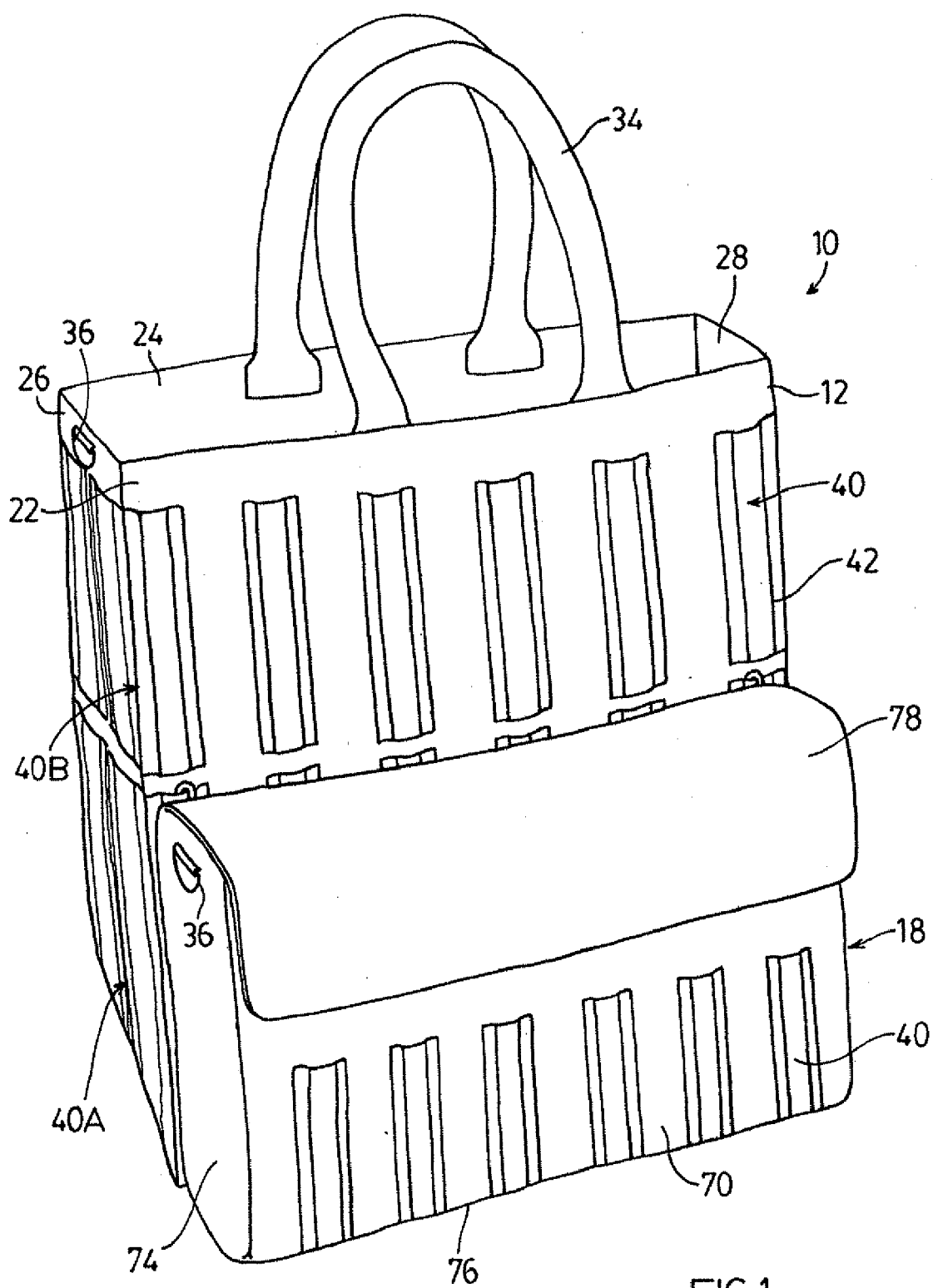


FIG.1

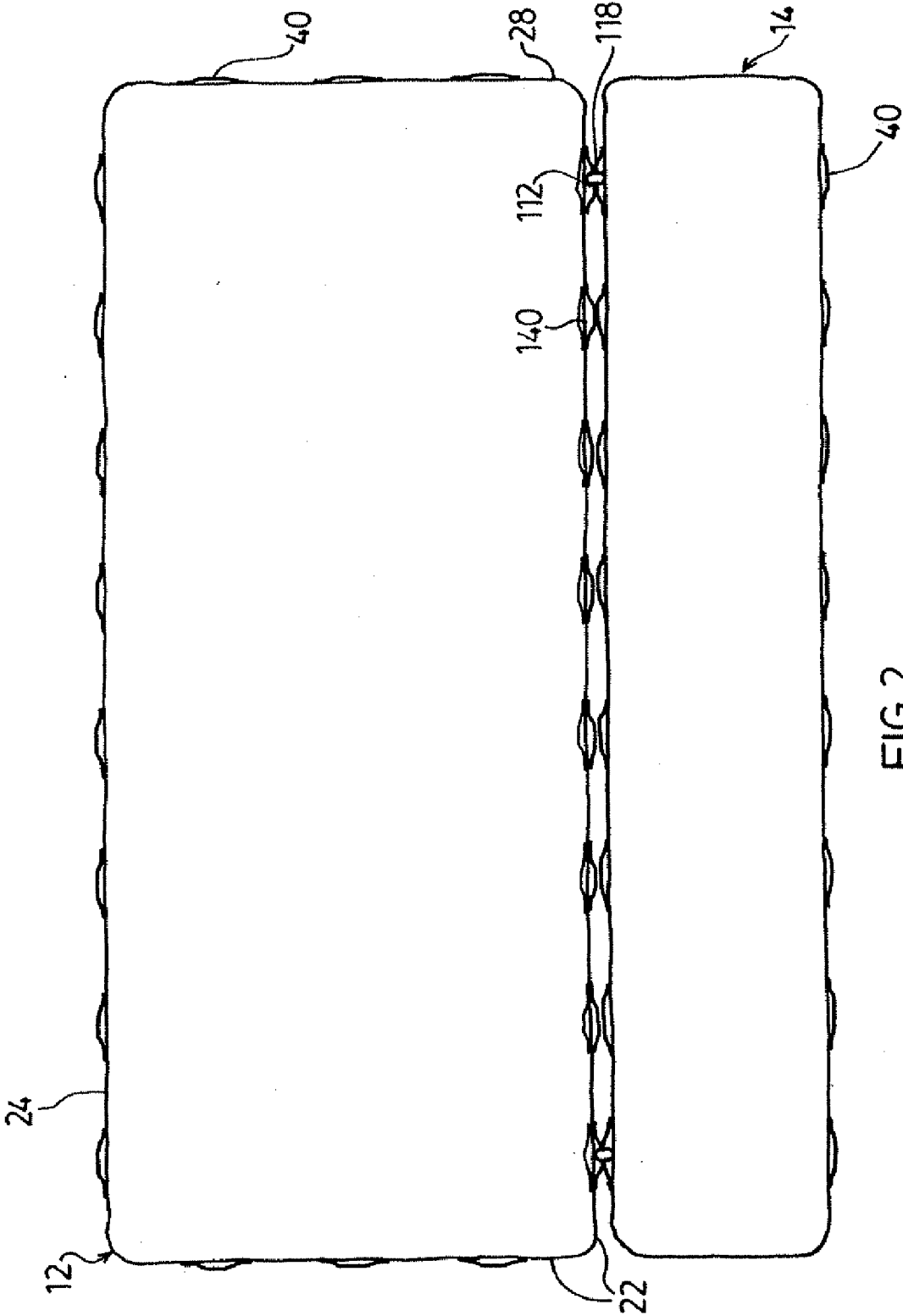


FIG. 2

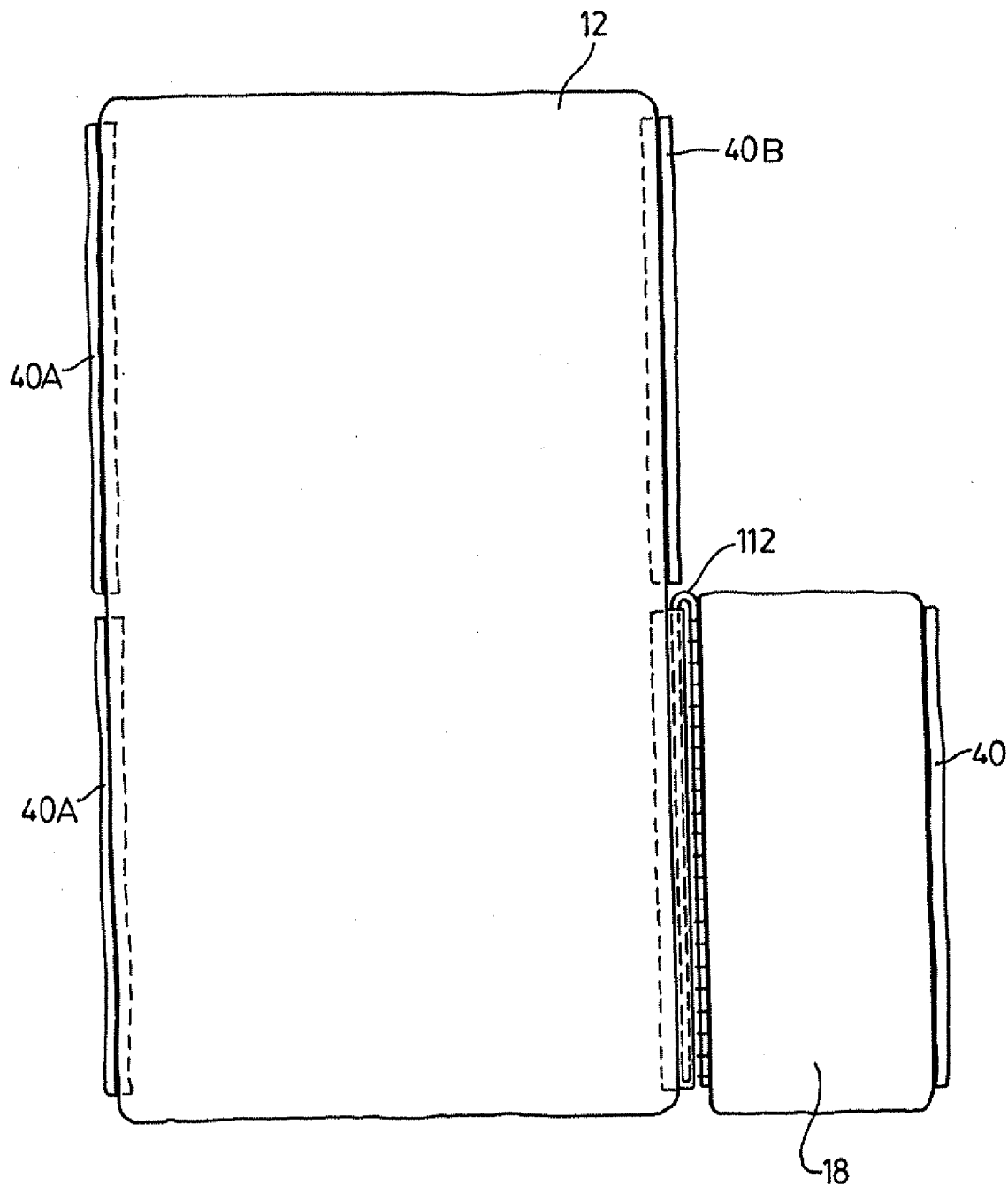
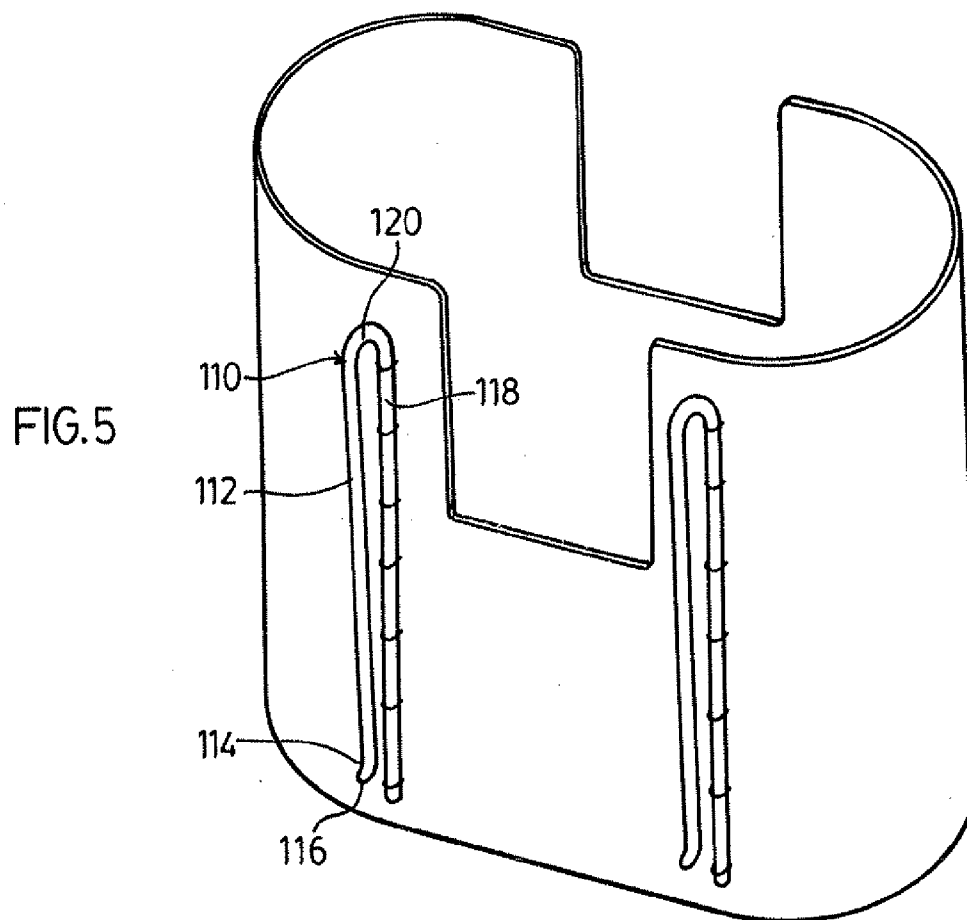
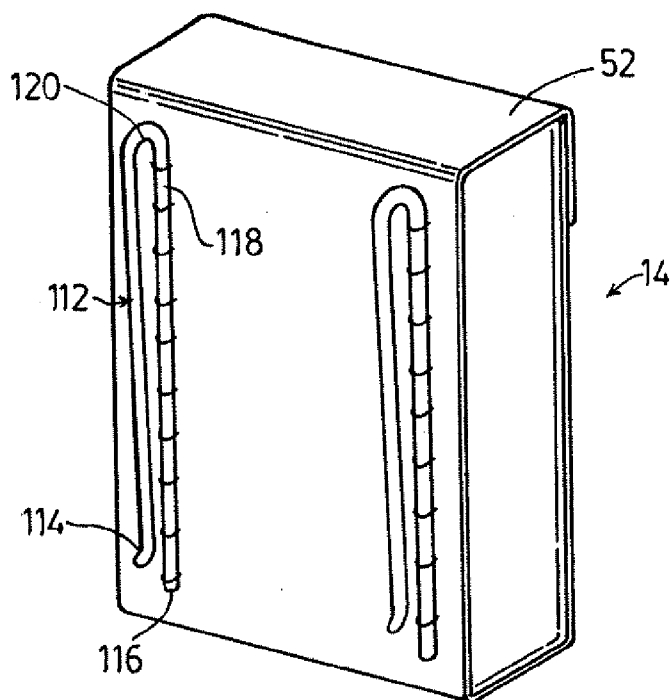


FIG.3



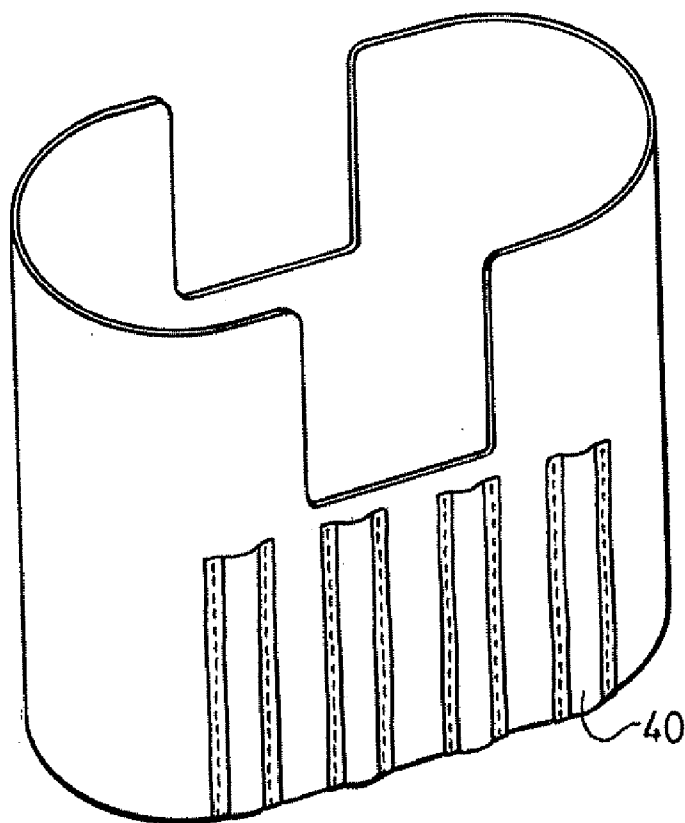


FIG. 6

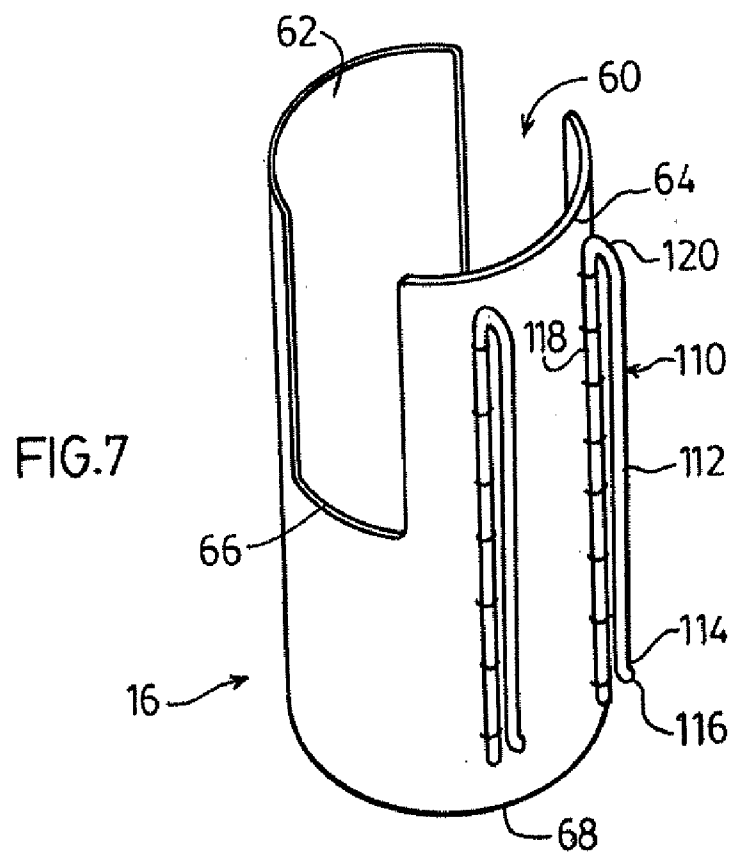
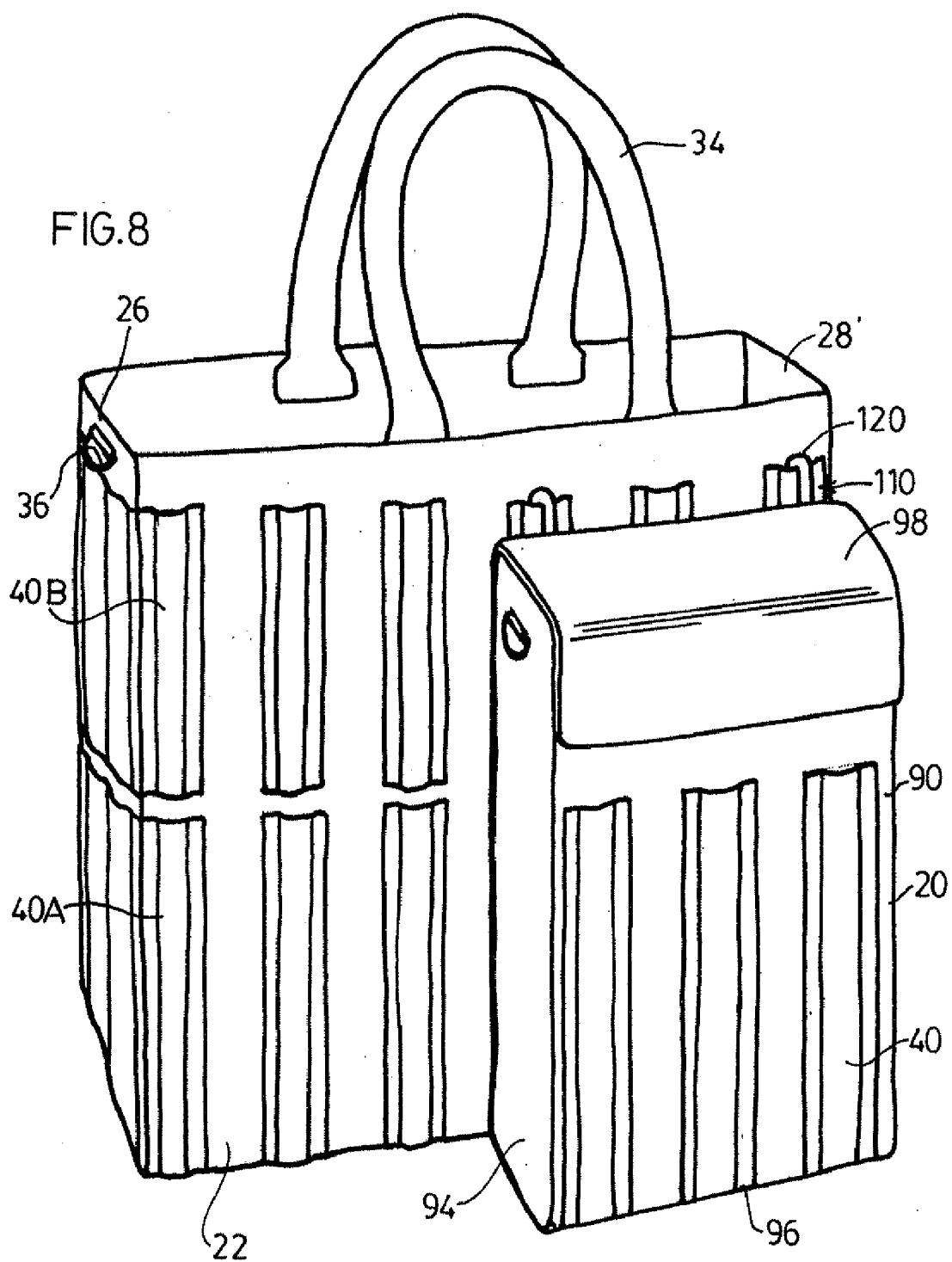


FIG. 7



EXPANDABLE HANDBAG

FIELD OF THE INVENTION

[0001] The present invention is directed to an expandable bag and in particular an expandable handbag having a main bag and a plurality of accessory bags of various sizes which are releasably attachable to the exterior surface of the main bag.

BACKGROUND OF THE INVENTION

[0002] The provision of various kinds of bags with detachable exterior pockets or accessory bags are known in the art. Such bags include handbags, backpacks, diaper bags, etc. Examples of such prior art structures are shown for example in U.S. Pat. Nos. 5,934,527, 6,230,771, 6,446,688 and 7,152,772 among others.

[0003] U.S. Pat. No. 5,934,527 granted Aug. 10, 1999, to Von Neumann, describes a modular backpack having four bags or units connectable to one another by zippers or snaps.

[0004] U.S. Pat. No. 6,230,771, granted May 15, 2001, to Hellenbrand, describes a modular carry all assembly wherein an accessory bag is connectable to a main bag by means of bearing straps on the main bag which pass through and engage a slider band on the back of the accessory bag.

[0005] U.S. Pat. No. 6,446,688, granted Sep. 10, 2002, to Sutton, describes a carry bag with a pouch and magnetic fasteners.

[0006] U.S. Pat. No. 7,152,772, granted Dec. 26, 2006 to Ukitsu et al, describes a diaper bag which includes a small bag which can be releasably attached to the front of the diaper bag by a zipper closure.

[0007] While the prior art does describe detachable exterior pockets or bags, such prior art arrangements do not provide for enhanced flexibility in the provision of different sizes or numbers of exterior pockets or bags. There thus remains a need for an expandable bag which overcomes the disadvantages of the prior art arrangements.

SUMMARY OF THE INVENTION

[0008] The present invention is directed to an expandable bag system comprising a main bag and a plurality of accessory bags of various sizes which are releasably attachable to the exterior surface of the main bag by a means for releasably attaching the accessory bags to the main bag. The means for releasably attaching the accessory bags to the main bag comprises at least one sleeve arrangement having a pocket attached to a surface of the main bag and at least one spring clip attached to a back surface of the accessory bag, the spring clip being sized to slide within the pocket of the sleeve arrangement.

[0009] In an aspect of the invention, more than one row of a plurality of sleeve arrangements are provided on a surface of the main bag.

[0010] In another aspect of the invention, the sleeve arrangements are provided by quilting a cover material onto a surface of the main bag by sewing or other suitable means of attachment to a surface of the main bag, forming a plurality of sleeve arrangements across a surface of the main bag.

[0011] In a further aspect of the invention, the sleeve arrangements are spaced at regular intervals across a surface of the main bag, the spacing between the sleeve arrangements

being between about 4 cm and about 12 cm, more preferably between about 6 cm and about 10 cm, most preferably about 8 cm.

[0012] In yet another aspect of the invention, each of the accessory bags are provided with two spring clips on the back surface adjacent each of the sides to provide two areas of attachment of the accessory bag to the main bag and thus hold the accessory bag tightly against the main bag and prevents side to side movement of the accessory bag.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] Preferred embodiments of the present invention are illustrated in the attached drawings in which,

[0014] FIG. 1 is a perspective view of a preferred embodiment of an expandable bag system of the present invention;

[0015] FIG. 2 is a top plan view in cross section of the expandable bag system of FIG. 1;

[0016] FIG. 3 is a side elevation view in cross section of the expandable bag of FIG. 1;

[0017] FIG. 4 is a rear perspective view of a second accessory bag of the expandable bag system of FIG. 1;

[0018] FIG. 5 is a rear perspective view of a third accessory bag of the expandable bag system of FIG. 1;

[0019] FIG. 6 is a front perspective view of the accessory bag of FIG. 5;

[0020] FIG. 7 is a rear perspective view of a fourth accessory bag of the expandable bag system of FIG. 1; and

[0021] FIG. 8 is a perspective view of a second configuration of the expandable bag system of FIG. 1.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0022] The present invention is directed to an expandable bag generally indicated by the numeral 10 in the figures. Bag 10 comprises a main bag 12 and a plurality of smaller accessory bags 14 to 20. Accessory bags 14 to 20 are provided in a plurality of different sizes to accommodate a plurality of different uses as will be explained further below.

[0023] Main bag 12 may itself be selected from many different types of bags such as backpacks, diaper bags, handbags, etc. Preferably, as illustrated in the figures, main bag 12 is preferably a hand bag having an opposing front face 22 and back face 24, two ends 26 and 28, a bottom 30 and a top 32. Preferably, main bag 12 is also provided with one or more carrying straps 34 which may be permanently attached to the main bag 12. Alternatively, or in addition, a means for releasably attaching a carrying strap to the main bag 12 may be provided, preferably connected to the exterior surface of the ends 26 and 28. For example, the ends 26 of the main bag 12 may be provided with a first part of a releasable attaching means while the end of a carrying strap may be provided with a complementary second part of a releasable attaching means. Examples of such attaching means include snaps, Velcro, clips, etc. As shown in the figures, the first part of the releasable attaching means may be a D ring 36 or it may be a loop or other type of opening. The complementary second part of the releasable attaching means may be a clip which releasably clips onto the D ring 36. Alternatively, the end of the strap may be provided with Velcro or a snap and dome arrangement such that the end of the strap loops through the D ring 36 or other loop arrangement and then releasably fastens back on itself. Other arrangements will be apparent to those of skill in the art.

[0024] Main bag 12 on at least one of the front face 22, back face 24 or ends 26 or 28 is provided with a means for releasably attaching one or more accessory bags 14 to 20. Preferably, the means for releasably attaching one or more accessory bags 14 to 20 is provided on at least two of the front face 22, back face 24 or ends 26 or 28, most preferably on all of these surfaces of the main bag 12. Preferably, as illustrated in the figures, the means for releasably attaching the accessory bags comprise at least one sleeve arrangement 40 attached to a surface of the main bag 12.

[0025] The sleeve arrangement 40 may be provided by quilting a cover material 42 onto a surface of the main bag 12. The cover material 42 is sewn or otherwise attached to a surface of the main bag 12, preferably forming a plurality of sleeve arrangements 40 across a surface of the main bag 12. The plurality of sleeve arrangements 40 may be provided at regular intervals across a surface of the bag or they may be placed in groups having different spacing at different locations on a surface of the main bag 12. Preferably, if the sleeve arrangements 40 are spaced at regular intervals, the spacing between the sleeve arrangements 40 is between about 4 cm and about 12 cm, more preferably between 4 cm and about 10 cm, most preferably about 5 cm. If there are groups of sleeve arrangements having different spacing, the spacing between the sleeve arrangements 40 in each group will preferably be between 4 cm and 12 cm.

[0026] Preferably, as illustrated in the drawings, more than one row of sleeve arrangements 40 are provided on a surface of the main bag 12. For example, a first row 40A of sleeve arrangements 40 can be provided with the sleeves extending substantially to the bottom of the main bag 12. A second row of sleeve arrangements may be provided on top of the first row with the opening of the second row of sleeve arrangements approximately half way down a surface of the main bag 12 and with the pocket of the sleeves extending substantially to the bottom of the main bag 12. In some circumstances more than two rows may be provided. In these situations the sleeve arrangements will lay one on top of each other with the openings generally spaced apart down a surface of the main bag 12. The provision of a more than one row of sleeve arrangements 40 provides for increased flexibility in the placement of the accessory bags 14 to 20 as will be explained further below.

[0027] While the drawings illustrate the sleeve arrangements as being quilted into a surface of the main bag, it will be appreciated by those skilled in the art that the sleeve arrangements may be formed using other means. For example, strips of fabric may be sewn or otherwise attached to a surface of the main bag leaving openings for provide for the sleeve arrangements. A plurality of such strips of fabric may be provided spaced down a surface of the main bag with the openings in the strips aligning to form the sleeve arrangements. Other structures will be apparent to those skilled in the art.

[0028] Accessory bags 14 to 20 are provided in a plurality of sizes and shapes to provide for a variety of functions for the accessory bags. For example, one such accessory bag may be a cell phone holder 14, which may be an open top pouch sized to hold a cell phone or PDA device.

[0029] Alternatively, as illustrated in the drawings, cell phone holder 14 may have a pouch 50 sized to hold the cell phone or PDA, the top of the pouch 50 being provided with a fold over cover 52, the edge of which may releasably attach to the front of the pouch 50 by for example a hook 54 and loop 56 fastener to securely hold the cell phone or PDA within the

pouch 50. The cell phone holder 14, like all of the accessory bags 14 to 20 is provided on the back with a second part of the means for releasably attaching one or more accessory bags to the main bag 12 as will be described further below.

[0030] Another example of an accessory bag is a water bottle bag 16, for holding a water bottle. The water bottle bag 16 has a pouch 60 sized to accept a typical water bottle. Pouch 60 is formed of a front 62, back 64, sides 66 and bottom 68. Preferably, front 62 is lower in height than the sides 66 or back 64 to provide for an opening to allow a user to easily insert and remove a water bottle from the pouch. In an alternative embodiment, the water bottle bag 16 may be sized to hold two water bottles side by side by extending the width of the front 62, back 64 and bottom 68. The water bottle bag 16 may be provided on the front 62 with a sleeve arrangement 40 similar to those of the main bag 12 to allow smaller accessory bags such as the cell phone or PDA accessory bag 14 to be releasably attached thereto. Once again, the water bottle bag 16 is provided on the back 64 with a second part of the means for releasably attaching one or more accessory bags to the main bag 12 as will be described further below.

[0031] Yet another example of an accessory bag is accessory bag 18 illustrated in the drawings. Accessory bag 18 is low in height and has a width at least half the width of the main bag 12. Preferably at least one accessory bag 18 has a width equal to the width of the main bag 12. Accessory bag 18 has a front 70, back 72, sides 74, bottom 76 and top 78. Top 78 is a fold over cover attached to the back 72 and provided with a releasable closing means such as hook 80 and loop 82 fasteners to releasably attach to the front 70 and close the compartment in the interior of accessory bag 18 to protect the contents held within the accessory bag 18. Similar to the water bottle bag 16, accessory bag 18 may be provided on the front 70 or sides 74 with a sleeve arrangement 40 similar to those of the main bag 12 to allow smaller accessory bags such as the cell phone or PDA accessory bag 14 or water bottle accessory bag 16 to be releasably attached thereto. Once again, the accessory bag 18 is provided with a second part of the means for releasably attaching one or more accessory bags to the main bag 12 on the back 78 as will be described further below.

[0032] A further example of an accessory bag is accessory bag 20 illustrated in the figures. Accessory bag 20 is relatively narrow in height and has a height at least half the height of the main bag 12. Preferably at least one accessory bag 20 has a height equal to the height of the main bag 12. Accessory bag 20 has a front 90, back 92, sides 94, bottom 96 and top 98. Top 98 is a fold over cover attached to the back 92 and provided with a releasable closing means such as hook 100 and loop 102 fasteners to releasably attach to the front 90 and close the compartment in the interior of accessory bag 20 to protect the contents held within the accessory bag 20. Similar to the other accessory bags, accessory bag 20 may be provided on the front 90 or sides 94 with a sleeve arrangement 40 similar to those of the main bag 12 to allow smaller accessory bags such as the cell phone or PDA accessory bag 14 or water bottle accessory bag 16 to be releasably attached thereto. Once again, the accessory bag 20 is provided with a second part of the means for releasably attaching one or more accessory bags to the main bag 12 on the back 98 as will be described further below.

[0033] While various arrangements of accessory bags 14 to 20 have been described above, it will be appreciated by those skilled in the art that other arrangements can be easily

designed based upon the desired use of the bags in terms of the contents to be stored therein and other factors.

[0034] As described above, each of the accessory bags **14** to **20** are provided on their back surface with a second part of the means for releasably attaching one or more accessory bags to the main bag **12**. Preferably, as shown in the figures, this second part is a spring clip **110** sized to slide within the pocket of the sleeve arrangement **40**. Spring clip **110** has an elongated exterior engaging portion **112** which extends downwardly from the top of the back of the accessory bag **14** to **20** until it contacts the back surface of the accessory bag at a point **114** just above its lower end **116**. The lower end **116** of the engaging portion **112** flares slightly outwardly of the back of the accessory bag **14** to **20** so that it is spaced slightly away from the back surface of the accessory bag. This allows the lower end **116** of the engaging portion **112** to be easily placed within the pocket of the sleeve arrangement **40** and slid downwardly until it is completely engaged within the sleeve arrangement **40**. Due to the biasing of the spring clip **110**, the accessory bag is securely held on the main bag **12** by the combination of gravity and the pressure of the contact point **114** holding the sleeve arrangement **40** in a mild clamping configuration against the back of the accessory bag **14** to **20**. Alternative arrangements of the lower end of the spring clip may be provided such as for example, provided a bulbous end to the spring clip. Alternatively, the end of the spring clip may be bent inwardly and upwardly to form an end similar to the end of a clip of a ball point pen. Other arrangements will be apparent to those of skill in the art.

[0035] In addition to the exterior engaging portion **112**, spring clip **110** has an interior portion **118** which is connected at its top end to the top of the exterior engaging portion **112** preferably by a bight region **120** which helps provide the biasing properties of the spring clip **110**. Interior portion **118** is attached to the back surface of the accessory bag **14** to **20** by a suitable means. In one embodiment, the back surface of the accessory bag **14** to **20** is provided with a sleeve arrangement **122** sized to hold the interior portion of the spring clip **110**. Alternatively, the interior portion **118** of the spring clip **110** may be directly attached to the back surface of the accessory bag **14** to **20** by a permanent attaching means such as a suitable adhesive or mechanical fastener such as rivets. Other means by which the interior portion **118** may be attached to the back of the accessory bag **14** to **20** will be apparent to those of skill in the art.

[0036] The spring clip **110** is preferably constructed of a suitable material which provides the biasing properties to hold the sleeve arrangement **40** in a mild clamping configuration against the back of the accessory bag **14** to **20**. Preferably, spring clip **110** is constructed of light gauge spring steel or a suitable plastic polymeric material including polyamide such as nylon 6, polyethylene, particularly high density polyethylene, polypropylene, polyvinylchloride, etc. While the selection of the suitable material from which to produce the spring clip **110** will be well known to those of skill in the art, more preferably spring clip **110** is produced from a light gauge spring steel or polyamide, most preferably a light gauge spring steel. Most preferably, when forming the spring clip from spring steel, the edges may be folded over to both provide additional strength as well as to reduce sharp edges on the spring clip.

[0037] It is preferred if each of the accessory bags **14** to **20** are provided with two spring clips on the back surface adjacent each of the sides. In this way, there are two areas of

attachment of the accessory bag to the main bag and this holds the accessory bag tightly against the main bag and prevents side to side movement of the accessory bag.

[0038] The provision of the spring clip **110**, particularly those constructed of light gauge spring steel provides numerous other benefits to the expandable bag of the present invention. As the spring clip is preferably a stiff material the presence of the accessory bags **14** to **20** on the main bag **12** helps to stiffen the sides of the main bag **12**, allowing it to be self supporting and self standing when placed on a surface.

[0039] In order to increase the flexibility of the expandable bag system of the present invention, it is preferred if the sleeve arrangements **40** are of a width to allow two exterior engaging portions **118** of the spring clips **110** to be placed side by side in each of the sleeve arrangements **40**. In this way, two accessory bags **14** to **20** may be attached to the main bag **12** in a side by side arrangement.

[0040] The expandable bag system of the present invention provides numerous advantages over the prior art systems. As the main bag **12** and accessory bags **14** to **20** may be constructed of the same material and in the same color, the attachment of any of the accessory bags **14** to **20** to the main bag gives the appearance of a single and complete bag as compared to some of the prior art systems where it is obvious that the accessory bag is not part of the main bag.

[0041] This appearance of the accessory bag and main bag being a single bag is enhanced by the spring clip arrangement which holds the sleeve arrangement **40** in a mild clamping configuration against the back of the accessory bag **14** to **20** and thus the accessory bag is held tightly against the main bag, giving the appearance that the accessory bag is an attached pocket of the main bag.

[0042] The sleeve arrangement **40** on the main bag **12** particularly as a quilted sleeve arrangement, results in the quilted sleeve arrangement appearing as an aesthetic decoration on the surface of the main bag **12**. Thus if there are no accessory bags attached to the main bags, either in total or in a particular region, it does not appear that the accessory bags are missing and the main does not appear incomplete.

[0043] The use of the releasable attaching means of the present invention, particularly the sleeve and spring clip arrangement allows the accessory bags to be easily and quickly added to or removed from the main bag. This also allows for a large number of possible configurations based upon the number, type and placement of accessory bags attached to the main bag, increasing the customization of the expandable bag system of the present invention. In addition to being attached to the surface of the main bag, any of the accessory bags may also be carried in the interior of the main bag, further increasing customization. In order to provide for increased flexibility as well as maintaining the accessory bags in position when used in the interior of the main bag, it is preferred if sleeve arrangements are also provided in the interior of the main bag so the accessory bags may be held securely in the interior of the main bag by the spring clips.

[0044] In addition to allowing for attachment of the accessory bags, the sleeve arrangement could also be used to attach exterior decorative elements to the exterior of the main bag. The decorative elements such as for example contrasting color panels, rosettes, etc., would be provided with a clip to be inserted into the sleeve arrangement to hold the decorative element on the main bag. These decorative elements could also be attached to accessory bags which have similar sleeve arrangements as described above.

[0045] While the sleeve and spring clip arrangement has been described to hold accessory bags to a main bag, it will be appreciated by those skilled in the art that sleeve arrangements may be provided on other fabric surfaces to allow for attachment of accessory bags and other accessories including decorative elements. Thus for example, sleeve arrangements could be provide on clothing to allow for releasable attachment of for example cell phone or PDA holder to be releasably carried.

[0046] While various preferred embodiments of the present invention have been described herein in detail, it will be appreciated by those of skill in the art that variations may be made thereto without departing from the spirit of the invention or the scope of the appended claims.

I claim:

1. An expandable bag system comprising a main bag and a plurality of accessory bags of various sizes which are releasably attachable to the exterior surface of the main bag by a means for releasably attaching the accessory bags to the main bag comprising at least one sleeve arrangement having a pocket attached to a surface of the main bag and at least one spring clip attached to a back surface of the accessory bag, the spring clip being sized to slide within the pocket of the sleeve arrangement.

2. An expandable bag system according to claim 1 wherein more than one row of a plurality of sleeve arrangements are provided on a surface of the main bag.

3. An expandable bag system according to claim 2 wherein the sleeve arrangements are provided by quilting a cover material onto a surface of the main bag by sewing or other suitable means of attachment to a surface of the main bag, forming a plurality of sleeve arrangements across a surface of the main bag.

4. An expandable bag system according to claim 3 wherein the sleeve arrangements are spaced at regular intervals across a surface of the main bag, the spacing between the sleeve arrangements is between about 4 cm and about 12 cm.

5. An expandable bag system according to claim 4 wherein the spacing between the sleeve arrangements is between about 6 cm and about 10 cm.

6. An expandable bag system according to claim 5 wherein the spacing between the sleeve arrangements is about 8 cm.

7. An expandable bag system according to claim 1 wherein each spring clip comprises an elongated exterior engaging portion extending downwardly from the top of a back surface of the accessory bag until it contacts the back surface of the accessory bag at a point just above lower end of the exterior engaging portion, the lower end of the exterior engaging portion flaring slightly outwardly of the back surface of the accessory bag so that it is spaced slightly away from the back surface of the accessory bag to allows the lower end of the engaging portion to be easily placed within the pocket of the sleeve arrangement and slid downwardly until it is completely engaged within the sleeve arrangement.

8. An expandable bag system according to claim 7 wherein each spring clip has an interior portion which is connected at its top end to the top of the exterior engaging portion by a bight region which helps provide the biasing properties of the spring clip, interior portion being attached to the back surface of the accessory bag by a suitable means.

9. An expandable bag system according to claim 8 wherein each spring clip is constructed of a suitable material which provides the biasing properties to hold the sleeve arrangement in a mild clamping configuration against the back of the accessory bag.

10. An expandable bag system according to claim 9 wherein each spring clip is constructed of a light gauge spring steel.

11. An expandable bag system according to claim 10 wherein each of the accessory bags are provided with two spring clips on a back surface adjacent each side to provide two areas of attachment of the accessory bag to the main bag and thus hold the accessory bag tightly against the main bag and prevent side to side movement of the accessory bag.

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