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(54) **STACKABLE CONTAINER APPARATUS AND METHODS**

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B65D 21/02 (2006.01)

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CPC **B65D 21/0223** (2013.01); **B65D 21/0222** (2013.01)

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IPC B65D 21/036, 21/032, 21/02, 21/00
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

879,455	A	2/1908	Frost	
2,695,115	A	11/1954	Roop	
2,753,077	A *	7/1956	Greco	206/504
2,822,952	A *	2/1958	Scott	206/504
2,849,151	A	8/1958	Heil	
3,103,278	A	9/1963	Kuzma et al.	

(Continued)

FOREIGN PATENT DOCUMENTS

JP 05254542 A * 10/1993

OTHER PUBLICATIONS

Thermodyne [Mehrwegcontainer, Industriecontainer,], www.thermodyne.de/systembehaelter.php, Sep. 17, 2013.

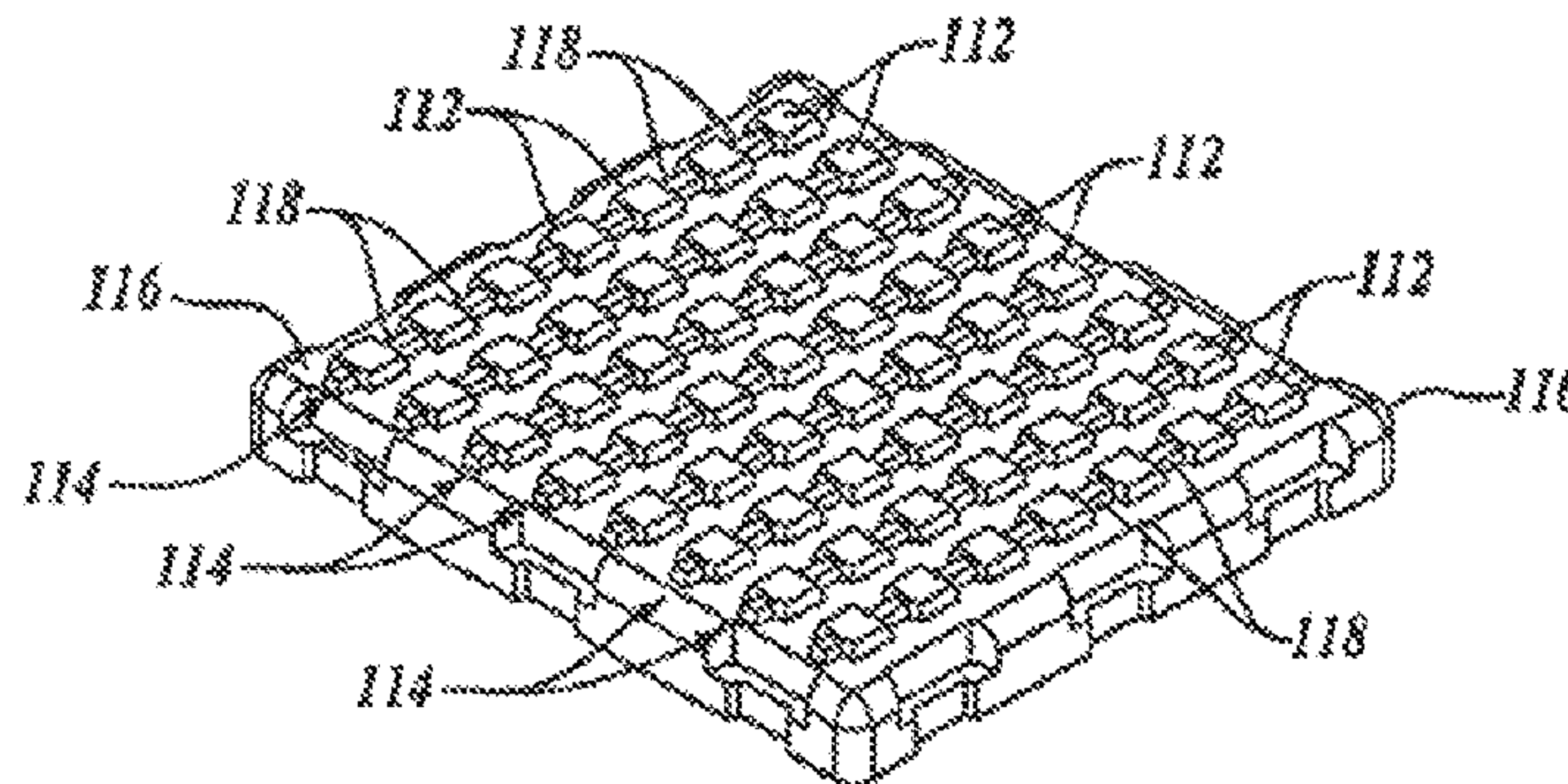
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(57) **ABSTRACT**

A stackable container assembly includes a lid portion having first raised members projecting outwardly from an upper surface, at least some of the first raised members cooperatively forming first receiving areas, and a base portion coupleable to the lid portion and forming a containment space. The base portion includes second raised members projecting outwardly from a lower surface, at least some of the second raised members cooperatively forming second receiving areas being adapted to fittingly receive first raised members of a like container assembly positioned below the lower surface. And, the first receiving areas are adapted to fittingly receive second raised members of another like container assembly positioned above the upper surface.

20 Claims, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

3,117,692	A	1/1964	Carpenter et al.	5,203,494	A	4/1993	Blomfield
3,383,009	A	5/1968	Weikert	5,392,945	A	2/1995	Syrek
3,391,824	A	7/1968	Wiseman	D361,715	S	8/1995	Hauptert
3,419,184	A	12/1968	Asenbauer	5,454,477	A	10/1995	Bornhorst et al.
3,481,502	A	12/1969	Slayman	5,566,824	A	10/1996	Tack et al.
3,524,415	A	8/1970	Heiman et al.	5,641,090	A	6/1997	Kowalski et al.
3,616,943	A	11/1971	Brink	5,718,350	A	2/1998	Williams
3,754,645	A	8/1973	Kilroy	5,769,230	A	6/1998	Koefeld
3,758,396	A	9/1973	Kilroy	5,779,051	A	7/1998	Boutin
3,759,416	A	9/1973	Constantine	D420,396	S	2/2000	Vieslet D21/690
3,968,879	A	7/1976	Lucas, Sr. et al.	6,021,916	A	2/2000	Stolzman
4,287,997	A	9/1981	Rolfe et al.	6,085,467	A	7/2000	Packrall et al.
4,373,633	A *	2/1983	Lutz, Sr. 206/508	6,186,345	B1	2/2001	Robertson
4,413,737	A	11/1983	Wind	6,237,758	B1	5/2001	Hsu
4,655,360	A	4/1987	Juhanson	D446,017	S	8/2001	Koefeld
4,671,411	A	6/1987	Rehrig et al.	6,308,858	B1	10/2001	Koefeld
4,765,252	A	8/1988	Shuert	6,371,364	B1	4/2002	Maillot et al.
4,832,200	A	5/1989	Deaton et al.	6,457,599	B1	10/2002	Apps et al.
4,848,605	A	7/1989	Wise	6,585,090	B2	7/2003	Harvey
5,042,674	A *	8/1991	Ramsay et al. 220/4.24	6,662,950	B1	12/2003	Cleaver
D333,094	S	2/1993	Zutler	D500,924	S	1/2005	Martin et al.
D333,978	S *	3/1993	Zutler D9/424	7,163,122	B2	1/2007	Elder et al.
				2004/0178208	A1	9/2004	Leba et al.
				2006/0254947	A1	11/2006	Rogers

* cited by examiner

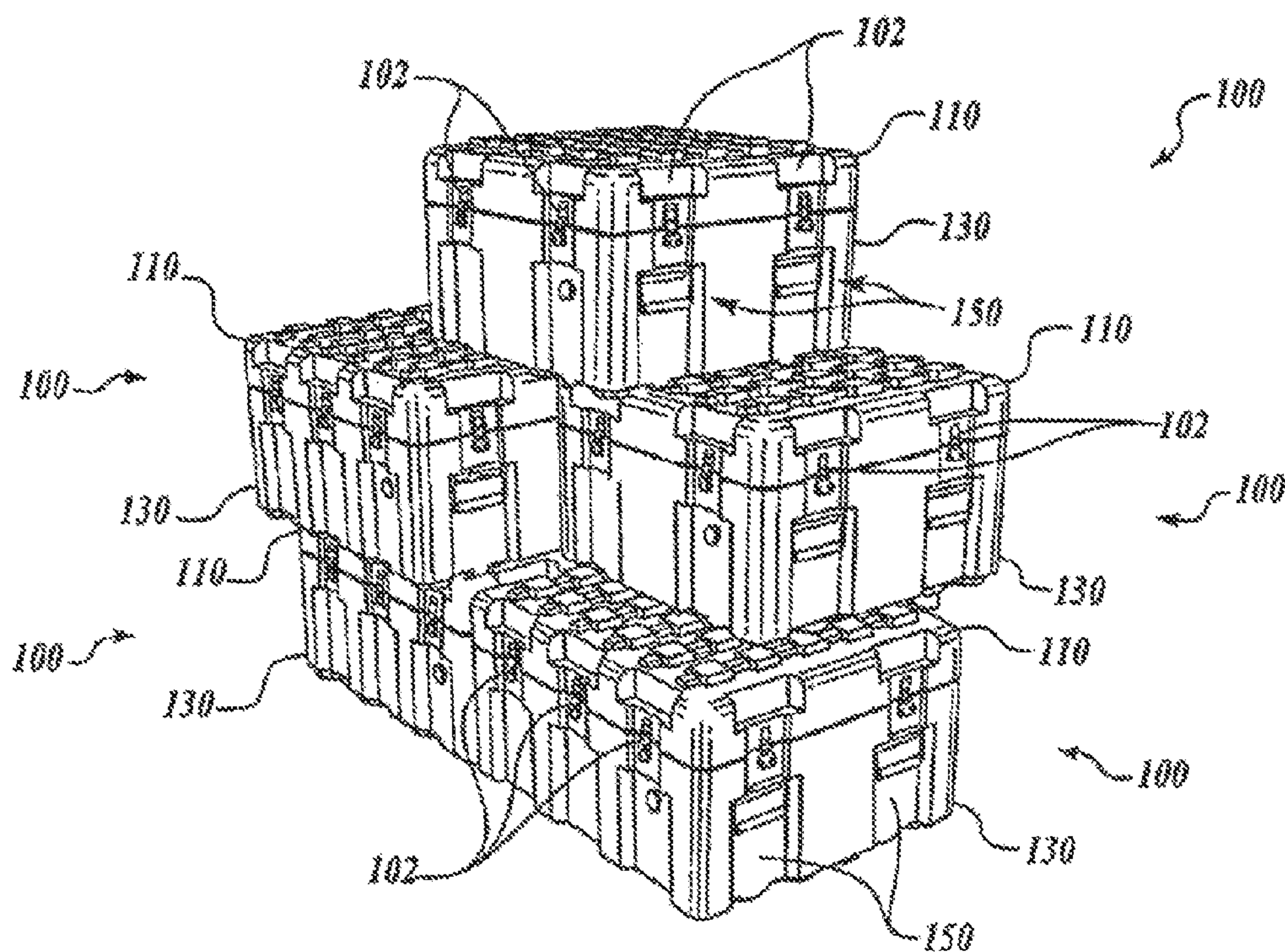


FIG. 1

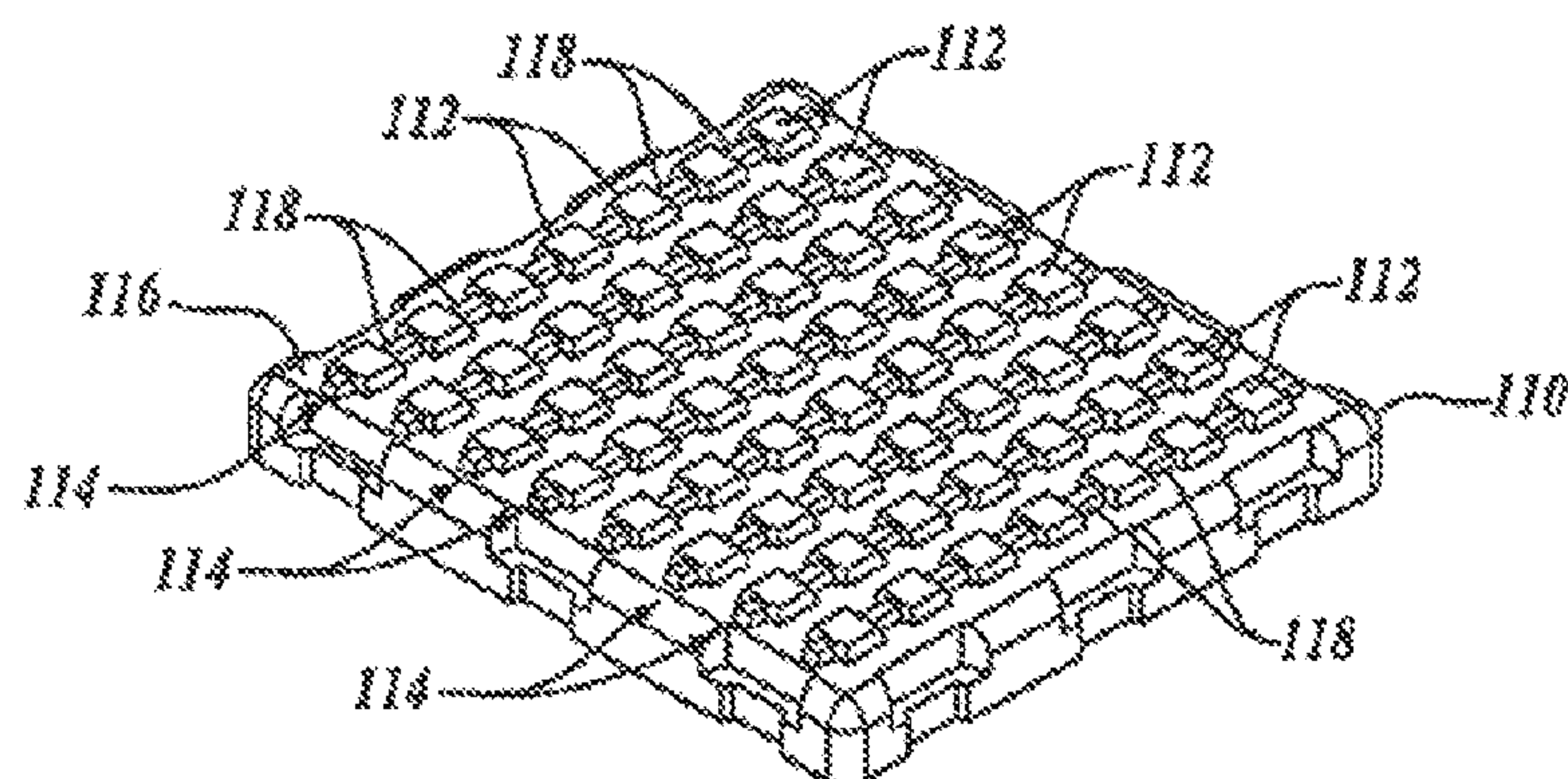


FIG. 2

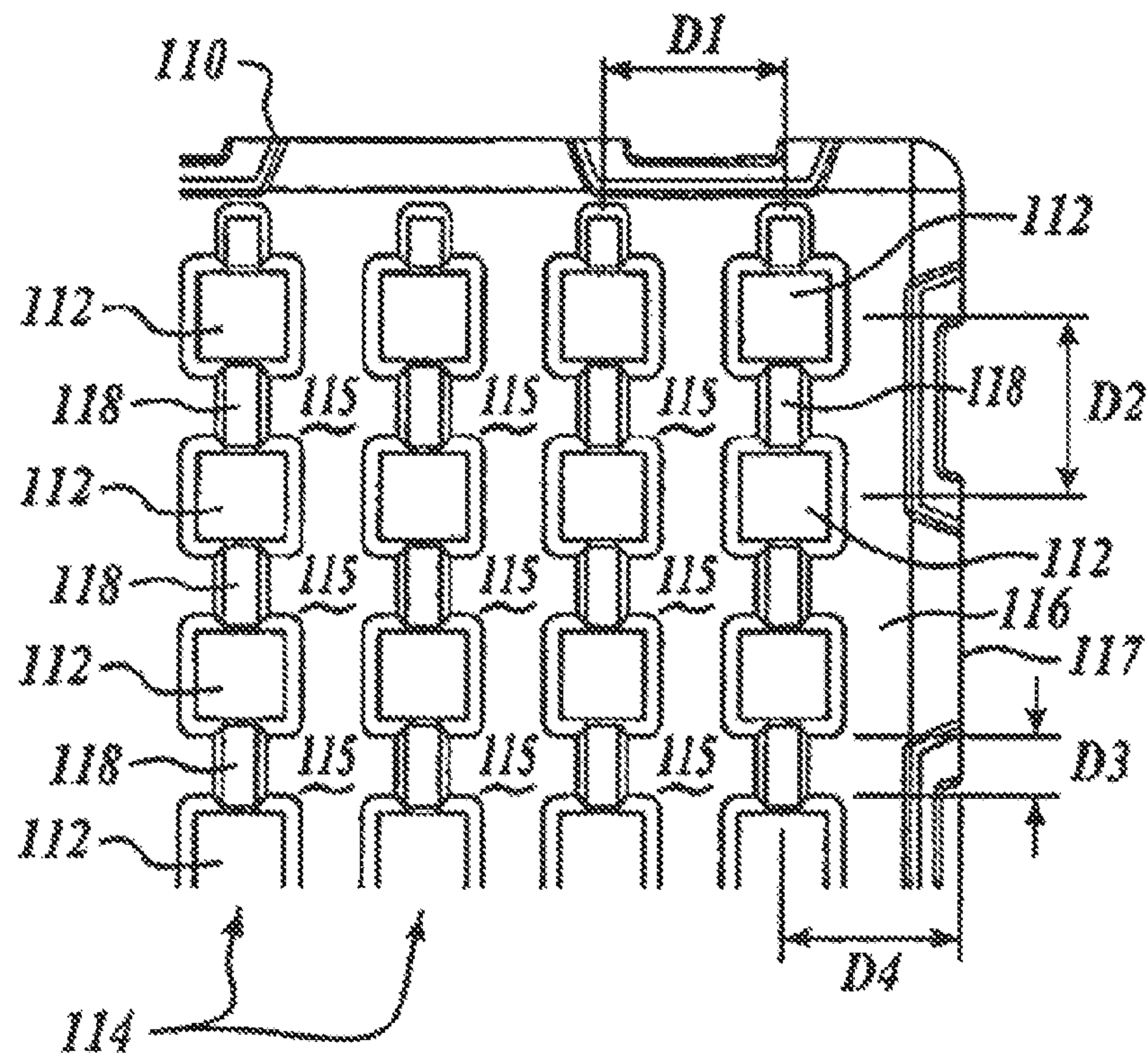


FIG. 3

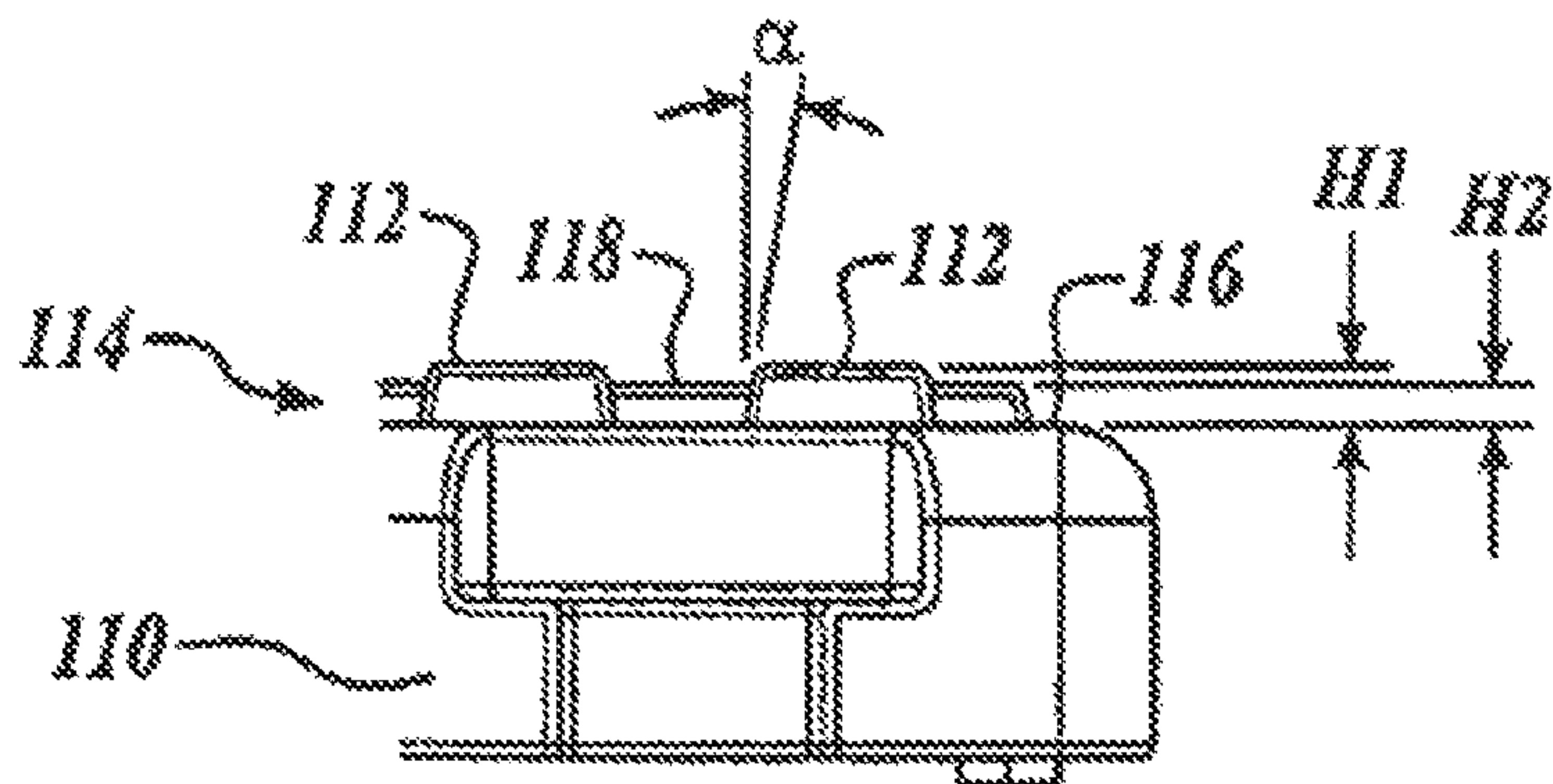


FIG. 4

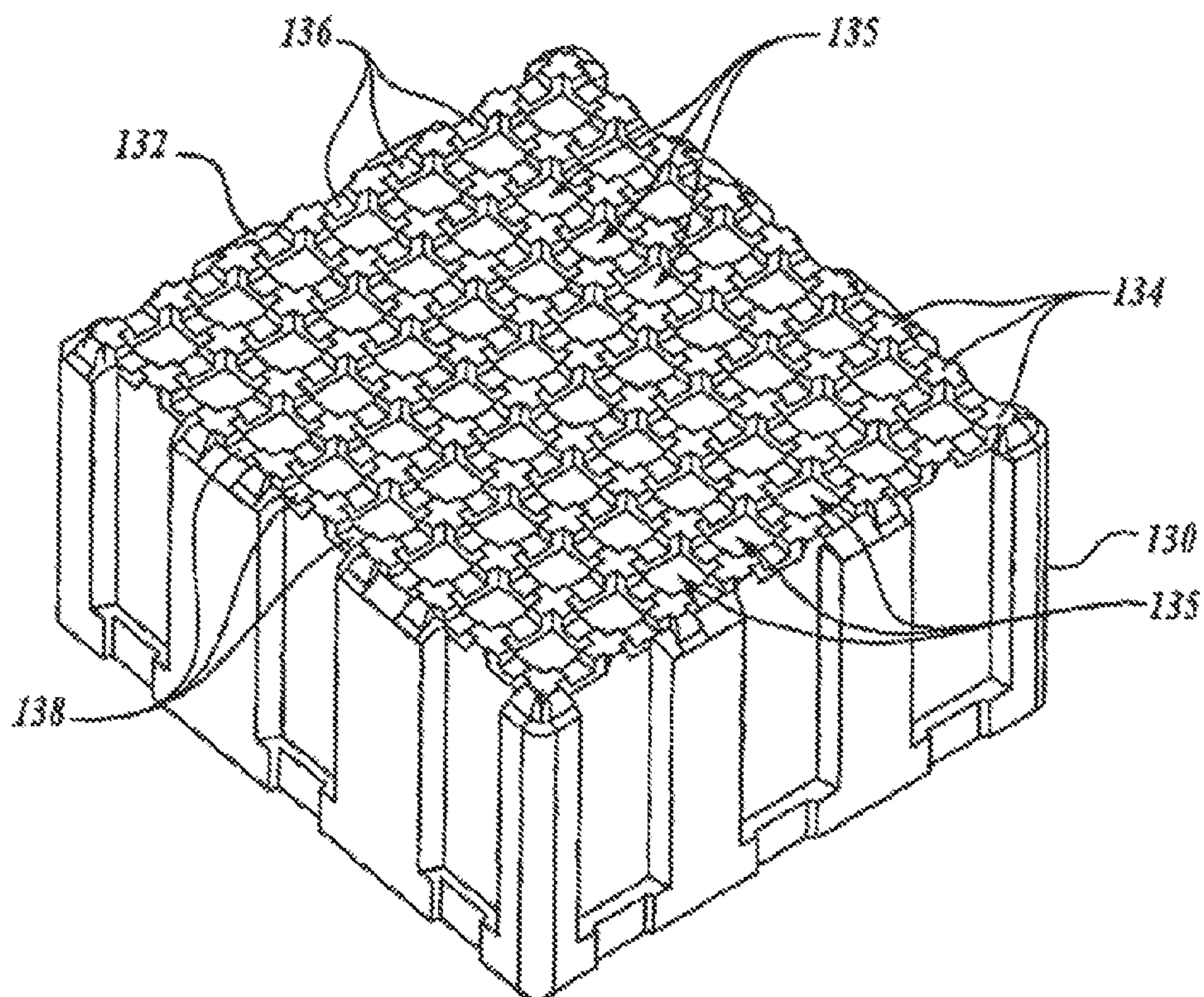


FIG. 5

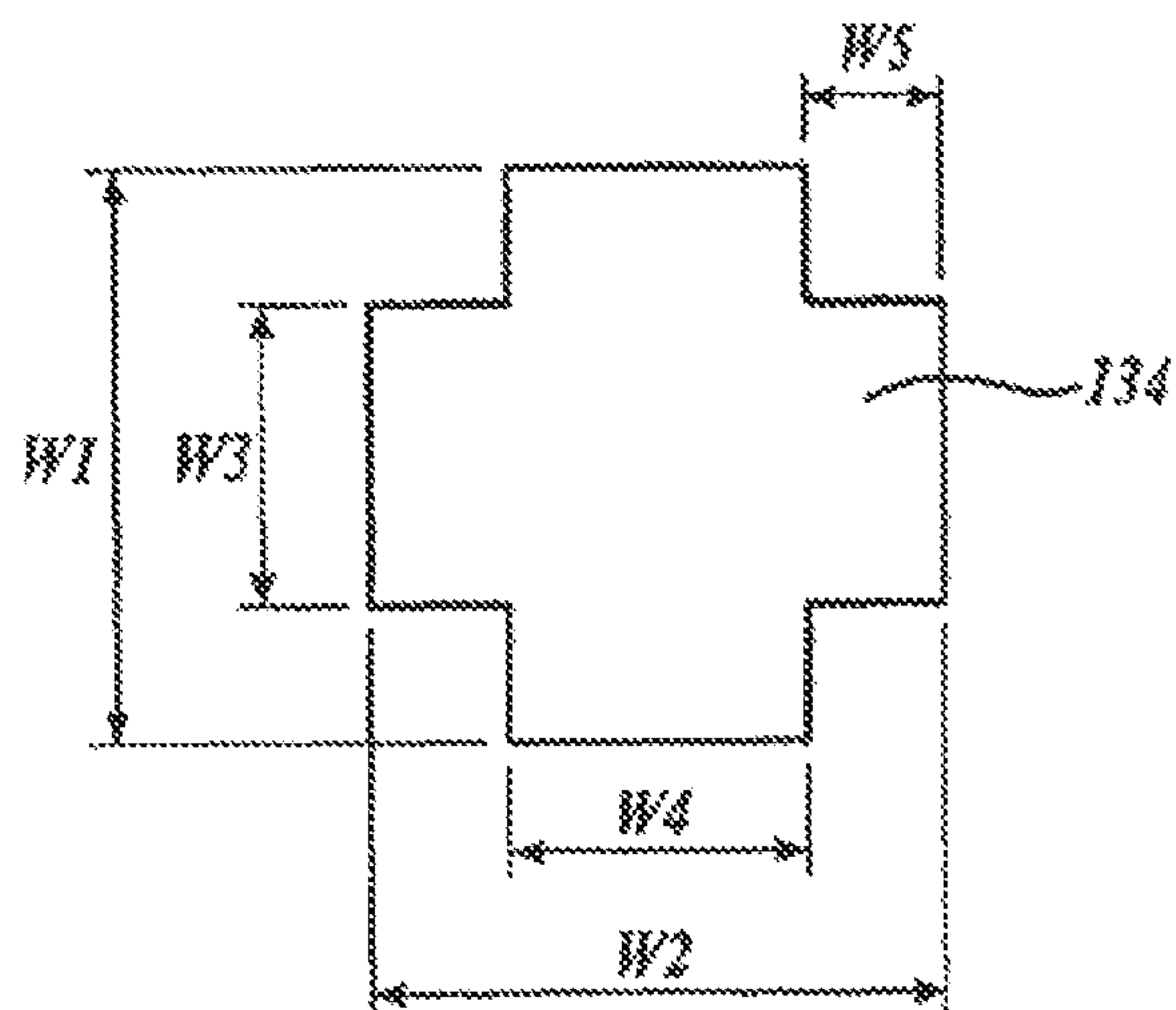


FIG. 6

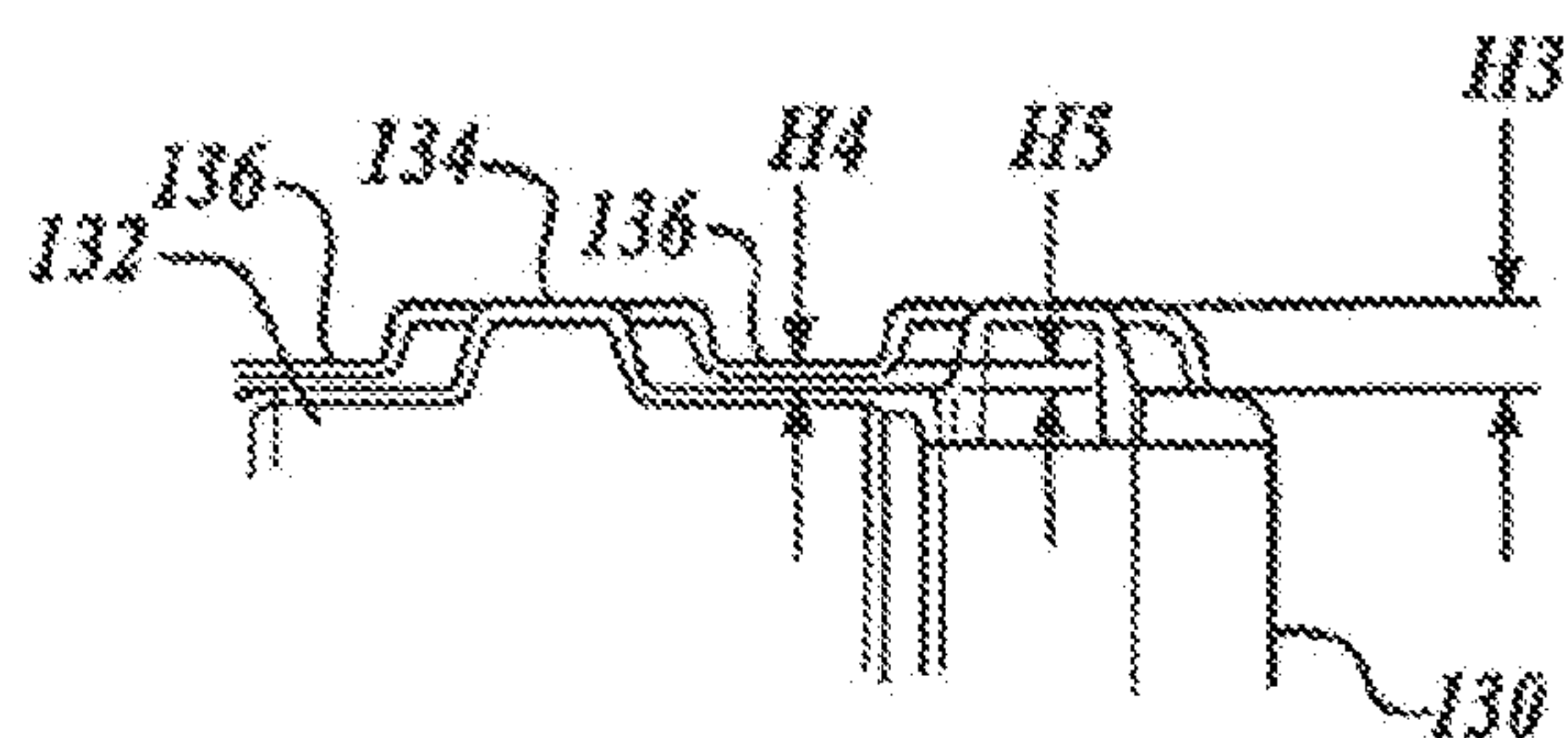


FIG. 7

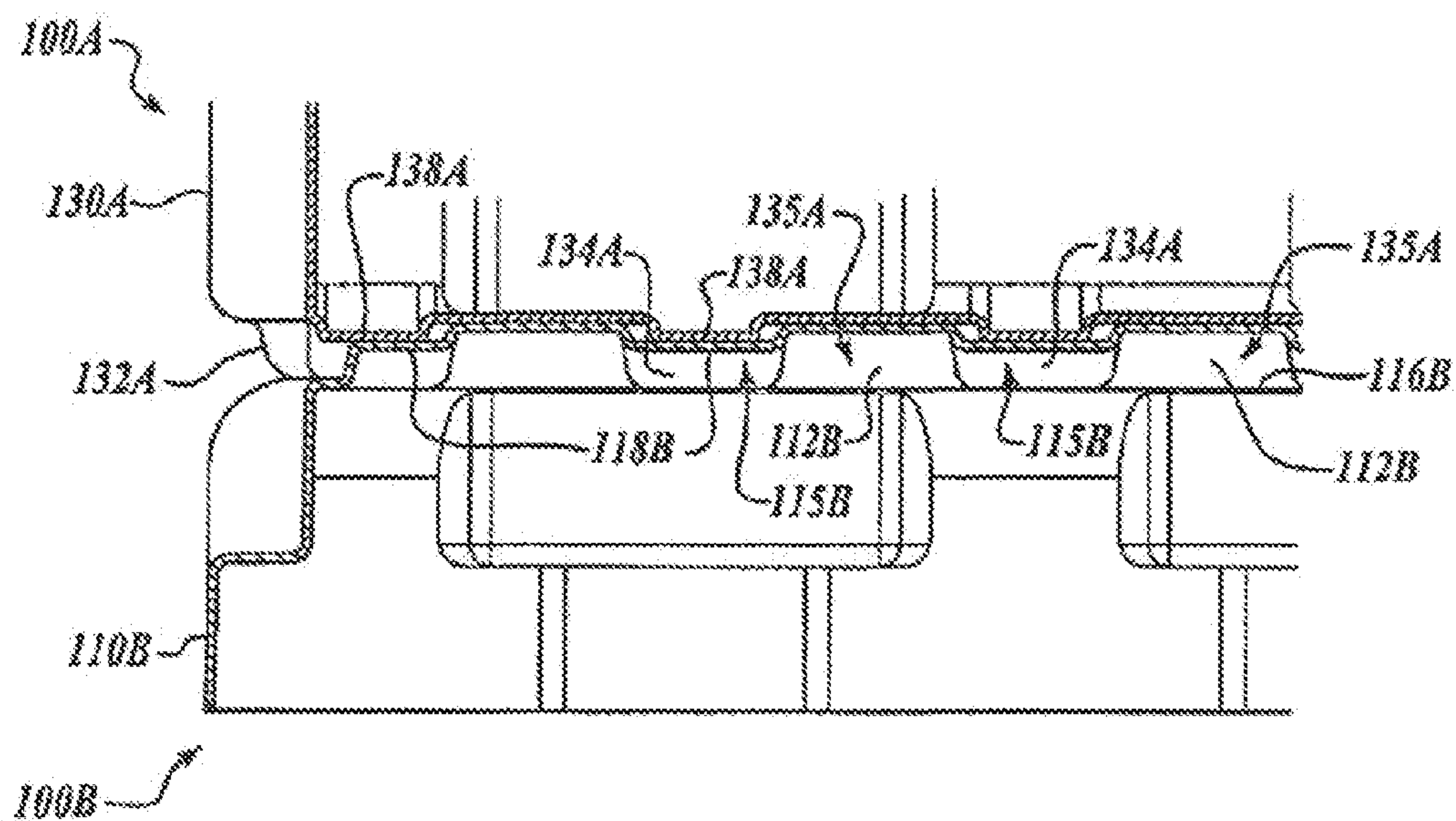
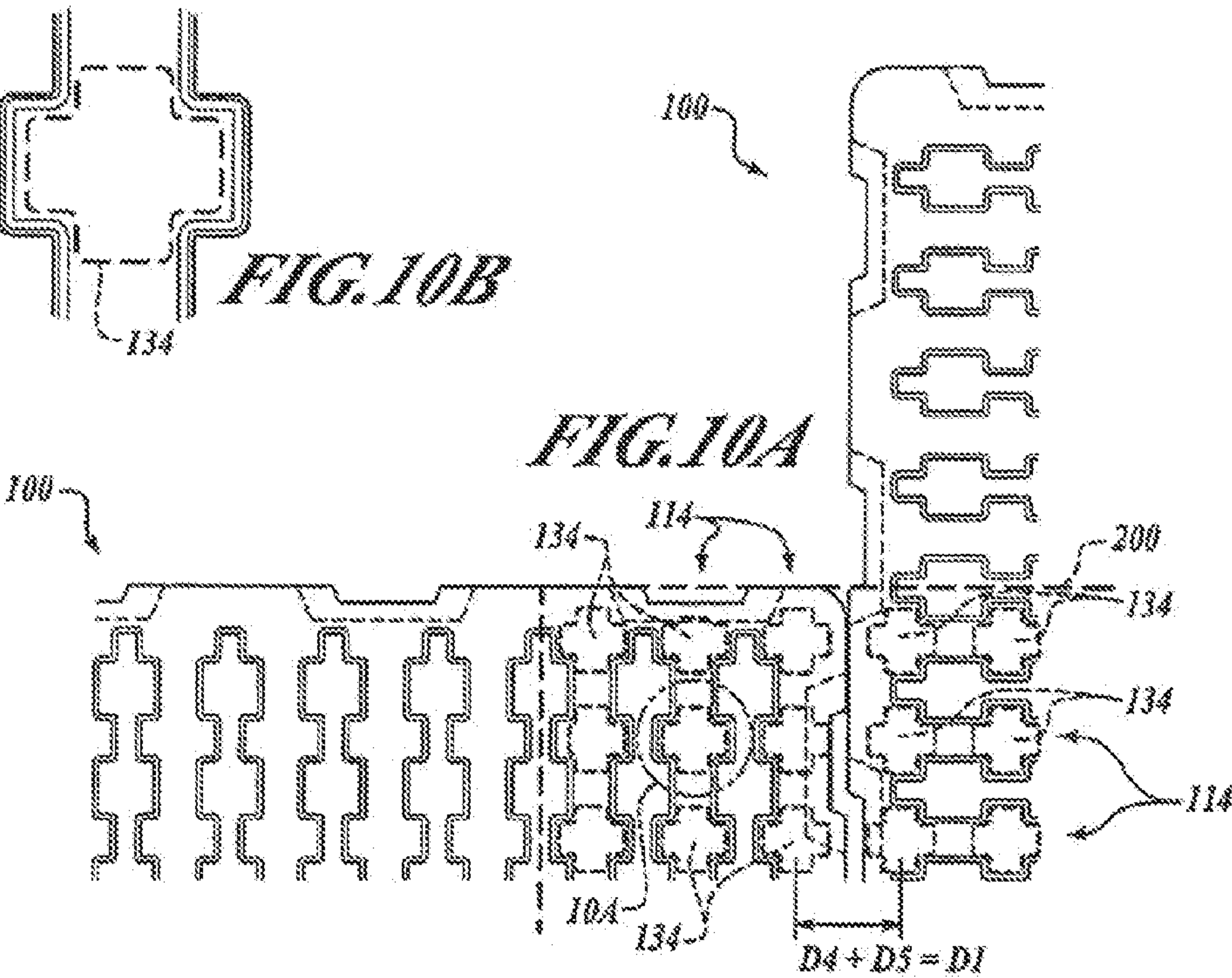
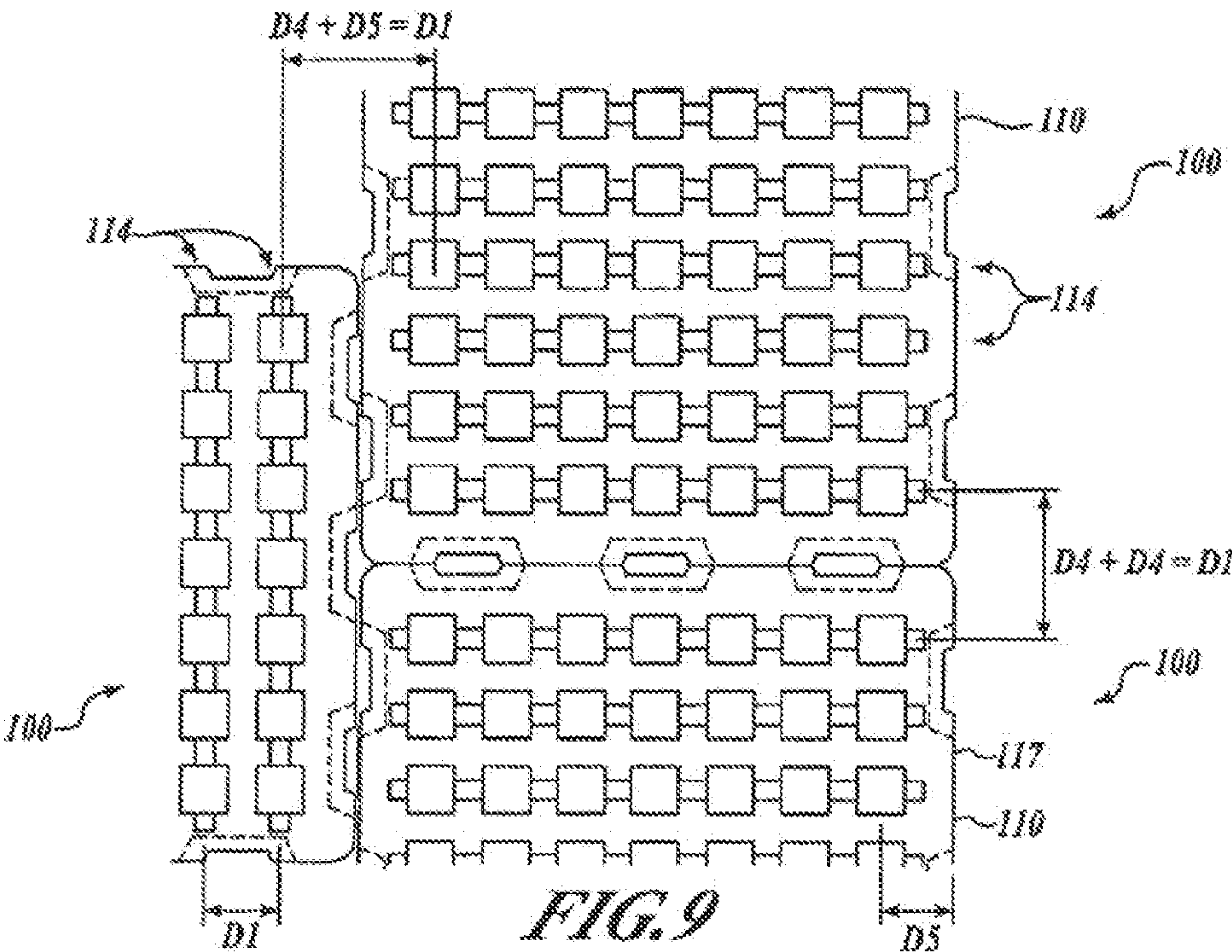


FIG. 8



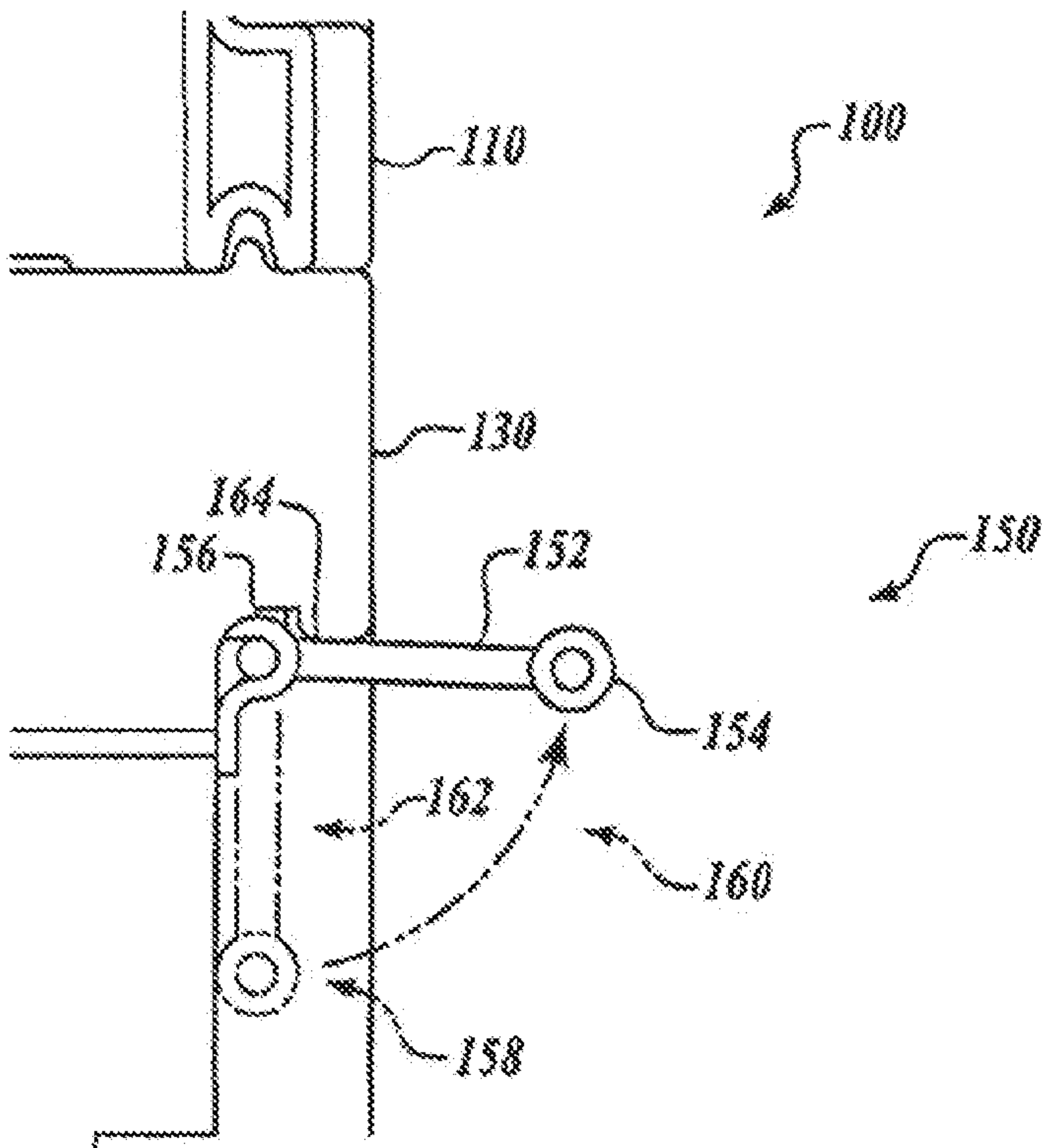


FIG. 11

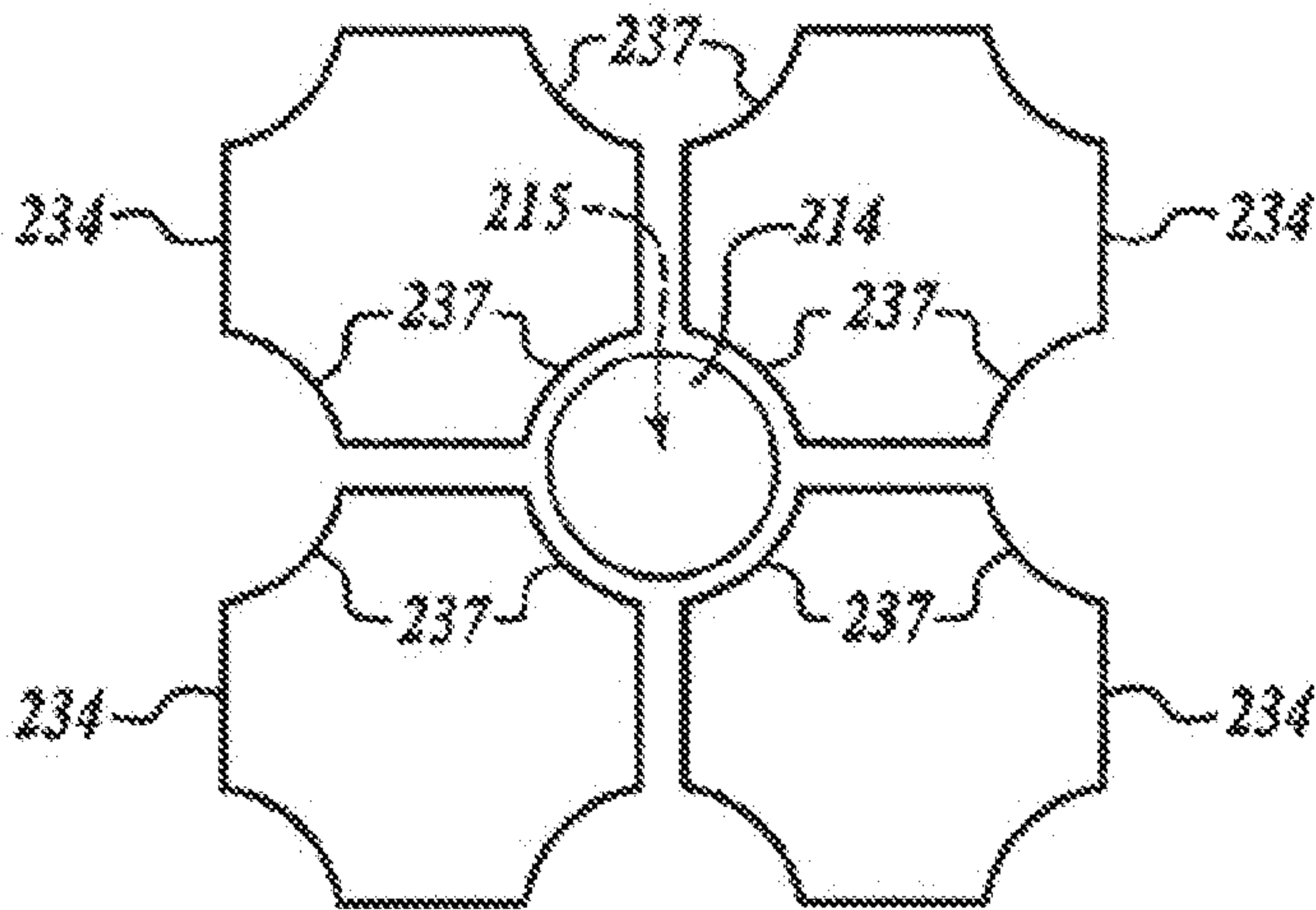


FIG. 12

STACKABLE CONTAINER APPARATUS AND METHODS

Matter enclosed in heavy brackets [] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates the additions made by reissue; a claim printed with strikethrough indicates that the claim was canceled, disclaimed, or held invalid by a prior post-patent action or proceeding.

PRIORITY CLAIM

This application is a [divisional of pending U.S. patent application entitled "STACKABLE CONTAINER APPARATUS AND METHODS", and assigned] *continuation reissue of reissue application Ser. No. 12/966,775 filed on Dec. 13, 2010, and is a reissue of U.S. Pat. No. 7,740,138 issued Jun. 22, 2010 which claims benefit to U.S. Ser. No. 11/128,923, filed on May 12, 2005.*

FIELD OF THE INVENTION

This invention relates to containers for storing and transporting products, such as electronics equipment, and more specifically, to stackable container apparatus and methods.

BACKGROUND OF THE INVENTION

A wide variety of products are stored and transported in containers. It is often desirable to stack the containers during storage and transport to effectively utilize the available space within the storage facility or the transport vehicle. A variety of containers are known which provide some capability to be stacked, including the various containers disclosed, for example, in U.S. Pat. No. 6,457,599 B1 issued to Apps et al., U.S. Pat. No. 6,237,758 B1 issued to Hsu, U.S. Pat. No. 6,186,345 B1 issued to Robertson, U.S. Pat. No. 6,085,467 issued to Packrall et al., U.S. Pat. No. 5,769,230 issued to Koefeld, U.S. Pat. No. 5,203,494 issued to Blomfield, and U.S. Pat. No. 4,655,360 issued to Juhanson. Although desirable results have been achieved using such prior art containers, there is room for improvement.

SUMMARY OF THE INVENTION

The present invention is directed to stackable container apparatus and methods. Embodiments of apparatus and methods in accordance with the present invention may advantageously provide an improved capability to stack a plurality of containers in a secure, non-sliding manner, and may substantially improve a user's ability to store products, and may also reduce or eliminate the need for specially-crafted foam inserts, in comparison with prior art containers.

In one embodiment, a container assembly in accordance with the invention includes a lid portion and a base portion coupleable to the lid portion and forming a containment space. The lid portion has an upper surface and includes a plurality of first raised members projecting outwardly from the upper surface, at least some of the first raised members cooperatively forming a plurality of first receiving areas. Similarly, the base portion has a lower surface and includes a plurality of second raised members projecting outwardly from the lower surface, at least some of the second raised members cooperatively forming a plurality of second receiving areas. The second receiving areas are adapted to fittingly receive a second plurality of first raised members of a like

container assembly positioned below the lower surface, and the first receiving areas are adapted to fittingly receive a second plurality of the second raised members of another like container assembly positioned above the upper surface.

BRIEF DESCRIPTION OF THE DRAWINGS

Preferred and alternate embodiments of the invention are described in detail below with reference to the following drawings.

FIG. 1 is an isometric view of a plurality of stackable containers in accordance with an embodiment of the invention;

FIG. 2 is an isometric view of a lid portion of a stackable container of FIG. 1 in accordance with an embodiment of the invention;

FIG. 3 is an enlarged, partial top elevational view of the lid portion of FIG. 2;

FIG. 4 is an enlarged, partial side elevational view of the lid portion of FIG. 2;

FIG. 5 is an isometric view of a base portion of the stackable container of FIG. 1 in an inverted position in accordance with an embodiment of the invention;

FIG. 6 is an enlarged, top elevational view of a stacking cleat of the base portion of FIG. 5;

FIG. 7 is an enlarged, side elevational view of the stacking cleat of FIG. 5;

FIG. 8 is an enlarged side elevational view of an upper stackable container engaged with a lower stackable container in accordance with an embodiment of the invention;

FIG. 9 is a top elevational view of a plurality of stackable containers of FIG. 1;

FIG. 10A is an enlarged top elevational view of an upper stackable container engaged with the plurality of lower stackable containers in accordance with a further embodiment of the invention;

FIG. 10B is a close-up view of a raised cleat from FIG. 10A;

FIG. 11 is an enlarged, side elevational view of a handle assembly of a stackable container in accordance with yet another embodiment of the invention; and

FIG. 12 is a top elevational view of a first raised member received into an approximately circular receiving area formed by a plurality of second raised members in accordance with an alternate embodiment of the invention.

DETAILED DESCRIPTION

The present invention relates to stackable container apparatus and methods. Many specific details of certain embodiments of the invention are set forth in the following description and in FIGS. 1-12 to provide a thorough understanding of such embodiments. The present invention may have additional embodiments, or may be practiced without one or more of the details described for any particular described embodiment.

FIG. 1 is an isometric view of a plurality of stackable containers 100 in accordance with an embodiment of the invention. In this embodiment, each stackable container 100 includes a lid portion 110 that is removably coupled to a base portion 130 by a plurality of latches 102. The base portion 130 includes a plurality of handle assemblies 150 to facilitate lifting and transport of the container 100.

In one particular embodiment, the stackable containers 100 are formed of rotomolded polyethylene. In alternate embodiments, other suitable materials may be used. In another embodiment, the containers 100 may be hermetically seal-

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able and shock resistant, and may be suitable for the transport of sensitive electronic equipment from a supplier to an end user. In a further embodiment, the stackable containers **100** are sized and adapted for use in conjunction with the United States military's most common air transport pallet, the 463L, and standard cargo netting.

FIG. 2 is an isometric view of the lid portion **110** of the stackable container **100** of FIG. 1. In this embodiment, the lid portion **110** includes an upper surface **116** having a plurality of raised rows **114**. Each raised row **114** includes a plurality of raised bosses **112** connected by a plurality of raised ribs **118**. The raised rows **114** improve the structural rigidity of the lid portion **110**, and provide a capability to stack a plurality of the containers **100**, as described more fully below.

FIGS. 3 and 4 are top and side elevational views, respectively, of the lid portion **110** of FIG. 2. As shown in FIG. 3, the raised rows **114** are separated by a first distance **D1**, and the centers of the raised bosses **112** are separated by a second distance **D2**. The raised bosses **112** and the raised ribs **118** are sized such that the edges of successive raised bosses **112** are separated by a third distance **D3** along each of the raised rows **114**. The raised rows **114** are adapted such that a plurality of first receiving areas **115** are formed between adjacent raised rows **114**. As further shown in FIG. 3, an outermost raised row **114** is separated from an outermost edge **117** of the lid portion **110** by a fourth distance **D4**. Also, as shown in FIG. 4, the raised bosses **112** have a first height **H1**, the raised ribs **118** have a second height **H2**, and the edges of the raised bosses **112** and the raised ribs **118** are oriented at a draft angle α with respect to an axis that is vertical to the upper surface **116**.

In one particular embodiment, each of the raised bosses **112** has an approximately square shape measuring 2.5 inches by 2.5 inches when viewed from above (FIG. 3), and each of the raised ribs **118** has an approximately rectangular shape when viewed from above. In one particular embodiment, the first height **H1** is 0.75 inches, the second height **H2** is 0.5 inches, and the draft angle α is 10 degrees. Furthermore, in a particular embodiment, each of the raised rows **114** is separated by a first distance **D1** of 4.2 inches, the raised bosses **112** are separated by a second distance **D2** of 4.2 inches, and the fourth distance **D4** is approximately equal of the first distance **D1** (e.g. 2.1 inches). Of course, in alternate embodiments, the raised bosses **112** and the raised ribs **118** may have different shapes and dimensions, and the raised rows **114** may have different distances **D1**, **D2**, **D3**, and **D4**, from the particular embodiment shown in FIGS. 2-4.

FIG. 5 is an isometric view of the base portion **130** of one of the stackable containers **100** of FIG. 1 in an inverted position. In this embodiment, the base portion **130** includes a lower surface **132** having a plurality of raised cleats **134** formed thereon. A plurality of first ridges **136** extend along a first (or lateral) direction between adjacent cleats **134**, and a plurality of second ridges **138** extend along a second (or longitudinal) direction between adjacent cleats **134**. The raised cleats **134**, the first ridges **136**, and the second ridges **138** cooperatively form a plurality of second receiving areas **135** distributed across the lower surface **132** of the base portion **130**.

FIGS. 6 and 7 are top and side elevational views, respectively, of one of the stacking cleats **134** of the base portion **130** of FIG. 5. In this embodiment, the stacking cleat **134** has a "cross" or "plus sign" shape (i.e. "+") when viewed from above (FIG. 6). As shown in FIG. 6, the stacking cleat **134** has a primary longitudinal dimension **W1**, a primary lateral dimension **W2**, a secondary longitudinal dimension **W3**, a secondary lateral dimension **W4**, and an arm length **W5**. Also, as shown in FIG. 7, the stacking cleat **134** projects outwardly

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from the lower surface **132** by a third height **H3**, the lateral ridges **136** project outwardly by a fourth height **H4**, and the longitudinal ridges **138** project outwardly by a fifth height **H5**. Generally, the stacking cleats **134** are distributed over the lower surface **132** of the bottom portion **130** and are adapted to engage with the receiving portions **115** of the lid portion **110** of an adjacent container **100**, as described more fully below.

In one embodiment, as shown in FIG. 6, the primary longitudinal dimension **W1** is equal to the primary lateral dimension **W2**, and the secondary longitudinal dimension **W3** is equal to the secondary lateral dimension **W4**. More specifically, in one particular embodiment, **W1**=**W2**=2.85 inches, **W3**=**W4**=1.45 inches, and **W5**=0.70 inches. Furthermore, in one particular embodiment, the stacking cleats **134** project outwardly from the lower surface **132** by the third height **H3** of approximately 0.75 inches, and the lateral and longitudinal ridges **136**, **138** project outwardly from the lower surface **132** by 0.25 inches (i.e. **H4**=**H5**=0.25 inches).

FIG. 8 is an enlarged side elevational view of an upper stackable container **100A** engaged with a lower stackable container **100B** in accordance with an embodiment of the invention. As shown in FIG. 8, the base portion **130A** of the upper stackable container **100A** is engaged with the lid portion **110B** of the lower stackable container **100B**. More specifically, the raised cleats **134A** of the base portion **130A** are engaged into the first receiving areas **115B** of the lid portion **110B**, and the raised bosses **112B** of the lid portion **110B** are engaged into the second receiving areas **135A** of the base portion **130A**.

In one particular embodiment, the raised cleats **134A** and the raised bosses **112B** are sized and adapted so that the raised bosses **112B** engage against the lower surface **132A** of the lower portion **130A** of the upper container **100A**, and the raised cleats **134A** engage against the upper surface **116B** of the lid portion **110B** of the lower container **100B**. The contact between the raised bosses **112B** and the lower surface **132A**, and the contact between the raised cleats **134A** and the upper surface **116B**, may advantageously improve the load carrying capabilities of the containers **100A**, **100B**, and may reduce or prevent deformation of the lid and base portions **110B**, **130A** under heavy loads, elevated temperatures, or other operating conditions.

Similarly, in a further embodiment, at least one of the first and second ridges **136A**, **138A** of the lower portion **130A** of the upper container **100A** are sized and adapted to engage with the ribs **118B** of the lid portion **110B** of the lower container **100B**. Again, this contact between the ridges **136A**, **138A**, and the ribs **118B** may improve the load carrying capabilities of the containers **100A**, **100B**, and may reduce or prevent deformation of the lid and base portions **110B**, **130A**.

Embodiments of the present invention may provide significant advantages over prior art stackable containers. Because the raised cleats **134A** of the base portion **130A** are engaged into the first receiving areas **115B** of the lid portion **110B**, and the raised bosses **112B** of the lid portion **110B** are engaged into the second receiving areas **135A** of the base portion **130A**, the upper container **100A** may be securely engaged with the lower container **100B** in the stacked position (FIG. 8), thereby preventing slipping and sliding of the upper container **100A** relative to the lower container **100B** in the lateral and longitudinal directions.

Furthermore, because the second receiving areas **135A** of the base portion **130A** are formed over the lower surface **132A** by the cooperation of the raised cleats **134A** (and the first and second ridges **136A**, **138A**) rather than by forming indentations or recesses in the lower surface **132A**, an inside

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surface (not shown) of the base portion 130A (opposite from the lower surface 130A) may remain relatively smooth and even. The resulting relatively smooth inner surface may substantially improve a user's ability to store products in the container 100A, and may advantageously reduce or eliminate the need for specially-crafted foam cushions having relief cuts, indentations, or other means of accommodating the protrusions or irregularities that exist on the inner surfaces of at least some prior art containers. Similarly, because the first receiving areas 115B of the lid portion 110B are formed over the upper surface 116B by the cooperation of the raised bosses 112B (and the raised ribs 118B), an inner surface (not shown) of the lid portion 110B (opposite from the upper surface 116B) also remains relatively smooth and even, which may also substantially improve a user's ability to store products in the container 100B.

Embodiments of the present invention may also provide improved interlocking features between successive layers of stackable containers 100. For example, FIG. 9 is a top elevational view of a plurality of stackable containers 100 in a first (or lower) level in accordance with an embodiment of the present invention. As described above with reference to FIG. 3, each of the raised rows 114 is separated by the first distance D1, and the outermost raised row 114 is separated from the outer edge 117 of the lid portion 110 by the fourth distance D4. In one embodiment, the fourth distance D4 may be approximately equal to the first distance D1. Similarly, the last raised boss 112 of each raised row 114 may be separated from the outer edge 117 by a fifth distance D5, and the fifth distance D5 may also be approximately equal to the first distance D1. Therefore, in the embodiment shown in FIG. 9, $D4 + D4 = 2D1$, and $D4 + D5 = 2D1$.

FIG. 10A is a partial top elevational view of an upper stackable container 200 engaged with the plurality of lower stackable containers 100 of FIG. 9. FIG. 10B is a close-up view of one of the raised cleats from FIG. 10A. In this embodiment, the upper stackable container 200 spans across a plurality of lower stackable containers 100, with the raised cleats 134 of the base portion 130 engaged in to the first receiving areas 115 on a plurality of lid portions 110 of lower stackable containers 100. Because the fourth distance D4 (the distance from the outermost raised row 114 to the outer edge 117) and the fifth distance D5 (the distance from the last raised boss 112 to the outer edge 117) are both equal to the first distance D1 (the distance between successive raised rows 114), the upper stackable container 200 may span between two lower containers 100 even though the raised rows 114 of the two lower containers 100 are not aligned, but rather, are oriented at 90° angles. Similarly, because the fourth distance D4 is approximately equal to the first distance D1, the upper stackable container 200 may span between two lower containers 100 when the raised rows 114 of the two adjacent lower containers 100 are aligned (running in approximately parallel directions). Thus, embodiments of the present invention may provide enhanced, interlocking, stacking capability between successive levels of stackable containers 100, 200.

FIG. 11 is an enlarged, side elevational view of the handle assembly 150 of the stackable container 100 of FIG. 1 in accordance with yet another embodiment of the invention. In this embodiment, the handle assembly 150 includes a support arm 152 coupled to a handle member 154. The support arm 152 is pivotably coupled to the base portion 130 by a hinge 156 located within a recess 158 in the base portion 130. In operation, the support arm 152 and the handle member 154 are swingably (or pivotably) movable between a deployed (or lifting) position 160, and a stowed (or non-lifting) position 162. As shown in FIG. 11, in the deployed position 160, the

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support arm 152 rotates outwardly within the hinge 156 until the support arm 152 engages with a support surface 164 of the base portion 130.

In operation, a user may lift upwardly on the handle member 154 until the support arm 152 engages with the support surface 164 in the deployed position 160. If the user provides further lifting force on the handle member 154, the support arm 152 is prevented from further up for rotation by the support surface 164. After the container 100 is lifted and moved to a desired position, the support arm 152 may be rotated downwardly into the stowed position 162. In the stowed position 162, the support arm 152 and handle member 154 are contained within the recess 158.

Embodiments of the present invention may provide further advantages in comparison with the prior art. For example, in the deployed position 160, because the support arm 152 is prevented from further rotation upwardly by the support surface 164, the user may exert a lifting force on the handle member 154 without causing the handle member 154 to pinch the user's hand against an outer surface of the base portion 130. Similarly, in the stowed position 162, because the support arm 152 and handle member 154 may be disposed within the recess 158 in the base portion 130, the support arm 152 and handle member 154 may be at least partially protected from damage, and may allow a tighter packing between adjacent containers 100.

Alternate embodiments of the present invention may be conceived, and it will be appreciated that the invention is not limited to the particular embodiments described above and shown in FIGS. 1-11. For example, greater or fewer numbers of raised bosses and stacking cleats may be provided on the upper and lower surfaces of the container from that shown in the accompanying figures. Similarly, the raised bosses and stacking cleats may be distributed over the upper and lower surfaces in different patterns and the particular embodiments described above and shown in the company figures. In addition, as described above, the shapes of the raised bosses and stacking cleats may be varied from those particular embodiments described above. For example, in one alternate embodiment, the shapes of the raised bosses 114 and the stacking cleats 134 may be reversed from the embodiments shown in FIGS. 1-11, such that the raised bosses have a "cross" or "plus sign" shape, and the stacking cleats have a "square" shape.

In a further embodiment, as shown in FIG. 12, a first raised member 214 may be approximately circular in shape, and may be fittingly received into an approximately circular receiving area 215 forward by a plurality of second raised members 234, each of the second raised members 234 having one or more contoured edges 237 that cooperatively form the circular receiving area 215. The first raised members 214 may be formed on the upper surface of the lid portion 110, in the second raised members 234 may be formed on the lower surface of the base portion 130, or vice versa. Of course, a variety of other shapes of first and second raised members may be conceived that provide the desired interlocking capability of the base portion of the upper container and the lid portion of the lower container, including, for example, triangular shapes, diamond shapes, polygonal shapes, and even non-polygonal or irregular shapes.

While preferred and alternate embodiments of the invention have been illustrated and described, as noted above, many changes can be made without departing from the spirit and scope of the invention. Accordingly, the scope of the invention is not limited by the disclosure of these preferred and alternate embodiments. Instead, the invention should be determined entirely by reference to the claims that follow.

What is claimed is:

1. A method for stacking containers, comprising:

obtaining at least a first container and a second container,
each having a lid portion and a base portion, each lid
portion having a plurality of first raised members each
projecting outwardly from a lid surface and arranged
substantially in a first desired direction, each lid portion
further including a plurality of first ribs projecting out-
wardly from the lid surface, each of the plurality of first
ribs extending substantially continuously between adja-
cently located first raised members and oriented along
the first desired direction, at least some of the first raised
members and first ribs cooperatively forming a plurality
of first receiving areas, wherein the plurality of first
raised members project outwardly by an amount that is
greater than the outward projection of the plurality of
first ribs relative to the lid surface, each base portion
having a plurality of second raised members each pro-
jecting outwardly from a base surface and arranged sub-
stantially in a second desired direction, each base por-
tion further including a plurality of second ribs
projecting outwardly from the base surface, each of the
plurality of second ribs extending substantially continu-
ously between adjacently located second raised mem-
bers and oriented along the second desired direction, at
least some of the second raised members and second ribs
cooperatively forming a plurality of second receiving
areas, wherein the plurality of second raised members
project outwardly by an amount that is greater than the
outward projection of the plurality of second ribs rela-
tive to the base surface; and

stacking the first and second containers relative to each
other such that at least some of the raised members of
one of the containers are received by corresponding
receiving areas of the other container.

2. The method of claim 1, wherein obtaining the first and
second containers includes obtaining the lid portions wherein
the plurality of first raised members are square-shaped raised
members and further includes obtaining the base portions
wherein the plurality of second raised members are plus-sign-
shaped raised members.

3. The method of claim 1, wherein stacking the first and
second containers includes laterally offsetting the lid portion
of the one of the containers relative to the base portion of the
other container.

4. The method of claim 1, wherein stacking the first and
second containers includes contacting the first raised mem-
bers with the base surface of one of the containers and con-
tacting the second raised members with the lid surface of the
other container.

5. A system comprising:

a first container assembly including a first upper portion
having a plurality of upper stacking features, each upper
stacking feature includes first raised members and a
plurality of first ribs projecting outwardly from a surface
of the upper portion, each of the plurality of first ribs
extending substantially continuously between adja-
cently located first raised members, each of the first
raised members and first ribs projecting outwardly from
an upper stacking surface, each first raised member
having at least one of a width that exceeds a correspond-
ing width of each first rib and a height that exceeds a
corresponding height of each first rib; and

a second container assembly including a second upper
portion that includes second upper stacking features
substantially identical to the first upper stacking fea-
tures and including a plurality of second raised mem-

bers and a plurality of second ribs, each of the plurality
of second ribs extending substantially continuously
between adjacently located second raised members;
wherein the first container assembly further includes a first
base positioned below the upper portion and having a
containment volume, the first base having a plurality of
base stacking features arranged to engagingly cooper-
ate with the second container assembly, wherein the
second upper portion is positionable beneath the first
base,

wherein the base stacking features include a plurality of
base first members arranged in an array and positioned
such that each base first member is inserted between
adjacent second upper stacking features having each
base first member inserted between adjacent pairs of
second raised members of each of the adjacent second
upper stacking features.

6. The system of claim 5, wherein the base first members
continuously adjoined to base second members, each of the
base first and base second members projecting outwardly
from a base stacking surface, each base first member of the set
having a width that exceeds a corresponding width of each
base second member of the set.

7. The system of claim 5, wherein a height of the first raised
members exceeds a height of the first rib relative to the upper
stacking surface.

8. The system of claim 5, wherein a linear distance between
the first raised members of adjacent upper stacking features is
less than a corresponding linear distance between first ribs of
adjacent upper stacking features.

9. The system of claim 5, wherein the upper stacking fea-
tures of at least the first upper portion are disposed in at least
two rows on the upper stacking surface, a first centerline of a
first row being separated from a second centerline of a second
row by a desired distance.

10. The system of claim 5, further comprising a plurality of
second raised members projecting from a base stacking sur-
face.

11. The system of claim 5, wherein the upper stacking
feature of the first upper portion are oriented substantially
parallel relative to an edge of the first upper portion.

12. A system comprising:

a first container assembly including a first upper portion
having a plurality of upper stacking features, each upper
stacking feature includes first raised members and a
plurality of first ribs projecting outwardly from a surface
of the upper portion, each of the plurality of first ribs
extending substantially continuously between adja-
cently located first raised members, each of the first
raised members and first ribs projecting outwardly from
an upper stacking surface, each first raised member
having a width that exceeds a corresponding width of
each first rib; and

a second container assembly including a second upper
portion that includes upper stacking features substan-
tially identical to the first upper stacking features and
including a plurality of second raised members and a
plurality of second ribs, each of the plurality of second
ribs extending substantially continuously between adja-
cently located second raised members;

wherein the first container assembly further includes a first
base, the first base and the first upper portion defining a
containment volume, the first base having a plurality of
base stacking features arranged in an array such that
each base stacking feature is positionable at least one of
between adjacent second upper stacking features and
between adjacent second raised members of the adja-

cent second upper stacking features, wherein the second upper portion is positionable beneath the first base.

13. A system comprising:

a first container assembly including a stacking portion having a plurality of stacking features, each stacking feature including raised members and a plurality of ribs projecting outwardly from a surface of the stacking portion, each of the plurality of ribs extending substantially continuously between adjacently located raised members, each of the raised members and ribs projecting outwardly from a stacking surface, each raised member having at least one of a width that exceeds a corresponding width of each rib and a height that exceeds a corresponding height of each rib,

wherein the first container assembly further includes an opposing portion, the opposing portion and stacking portion defining a containment volume, the opposing portion having a plurality of opposing features arranged to engagingly cooperate with the stacking features of a stacking portion of a second container assembly when the stacking portion of the second container assembly is positioned beneath at least a part of the opposing portion, the stacking features of the second container assembly being identical to the stacking features of the first container assembly and the opposing features of the first container being arranged in a two-dimensional array such that each opposing feature is positionable inserted between a pair of raised members of a first stacking feature of the second container on one side of the each opposing feature and inserted between a pair of raised members of a second stacking feature of the second container on an opposite side of the each opposing feature.

14. A system comprising:

a first container assembly including a first portion having a plurality of first portion stacking features, each first portion stacking feature includes first raised members and a plurality of first ribs projecting outwardly from a first portion stacking surface of the first portion, each of the plurality of first ribs extending substantially continuously between adjacently located first raised members, each of the first raised members and first ribs projecting outwardly from the first portion stacking surface, each first raised member having at least one of a width that exceeds a corresponding width of each first rib and protruding outwardly from the first portion stacking surface by a height that exceeds a corresponding height of each first rib; and

a second container assembly including a second portion that includes second portion stacking features substantially identical to the first portion stacking features and including a plurality of second raised members and a plurality of second ribs, each of the plurality of second ribs extending substantially continuously between adjacently located second raised members,

wherein the first container assembly further includes a first opposing portion positioned opposite the first portion, the first portion and first opposing portion defining a containment volume, the first opposing portion having a plurality of opposing portion stacking features arranged to engagingly cooperate with the second container assembly, wherein the second portion is positionable in contact with the first opposing portion, the opposing portion stacking features arranged in an array such that each opposing portion stacking feature is positionable at least one of between adjacent second portion stacking features and between adjacent second raised members of the adjacent second portion stacking features.

15. The system of claim 14, wherein each opposing stacking feature includes repetitive sets of opposing portion first members continuously adjoined to opposing portion second members, each of the opposing portion first members and opposing portion second members projecting outwardly from an opposing portion stacking surface, each opposing portion first member of the set having a width that exceeds a corresponding width of each opposing portion second member of the set.

16. The system of claim 14, wherein a height of the first raised member exceeds a height of the first ribs relative to the upper stacking surface.

17. The system of claim 14, wherein a linear distance between the first raised members of adjacent upper stacking features is less than a corresponding linear distance between first ribs of adjacent first portion stacking features.

18. The system of claim 14, wherein the first portion stacking features of the first portion are disposed in at least two rows on the first portion stacking surface, a first centerline of a first row being separated from a second centerline of a second row by a desired distance.

19. The system of claim 14, wherein the opposing portion stacking features includes a plurality of second raised members projecting from the opposing portion stacking surface.

20. The system of claim 14, wherein the first portion stacking feature of the first portion is oriented substantially parallel relative to an edge of the first portion.

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