US011459161B2

(12) **United States Patent**
Seichei

(10) **Patent No.: US 11,459,161 B2**
(45) **Date of Patent: Oct. 4, 2022**

(54) **BUILDING BLOCK CONTAINER**

(71) Applicant: **Edward Seichei**, Citrus Heights, CA (US)

(72) Inventor: **Edward Seichei**, Citrus Heights, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 540 days.

(21) Appl. No.: **16/565,751**

(22) Filed: **Sep. 10, 2019**

(65) **Prior Publication Data**

US 2020/0087050 A1 Mar. 19, 2020

Related U.S. Application Data

(60) Provisional application No. 62/731,628, filed on Sep. 14, 2018.

(51) **Int. Cl.**
B65D 81/36 (2006.01)
B65D 21/02 (2006.01)

(52) **U.S. Cl.**
CPC ***B65D 81/361*** (2013.01); ***B65D 21/0204*** (2013.01)

(58) **Field of Classification Search**
CPC .. B65D 21/0204; B65D 81/36; B65D 81/361; B65D 21/02; B65D 21/0209; B65D 21/023; B65D 21/0231; E04B 2/02; E04B 2/18
See application file for complete search history.

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Primary Examiner — Don M Anderson
(74) *Attorney, Agent, or Firm* — Craig A. Simmermon

(57) **ABSTRACT**

Building block container is a modular hollow building block that may be used to build a wall, shelter, structure, building, greenhouse, water filtration device, emergency shelter, pipeline, flood blockade, floodwall, dock, or raft. Building block container has a special design so that they are reversibly attachable to each other without fasteners. Building block container may also be used as a container to hold any type of liquid or solid contents. A plurality of building block container may be shipped to a disaster area, third world location, or anywhere with people in need, while filled with water or food, where the water or food may be consumed by those in need and then the empty building blocks may be used to build a wall, shelter, structure, building, etc. One or more building block containers may also be used as a water filtration device to filter unclean water into drinkable water.

8 Claims, 52 Drawing Sheets

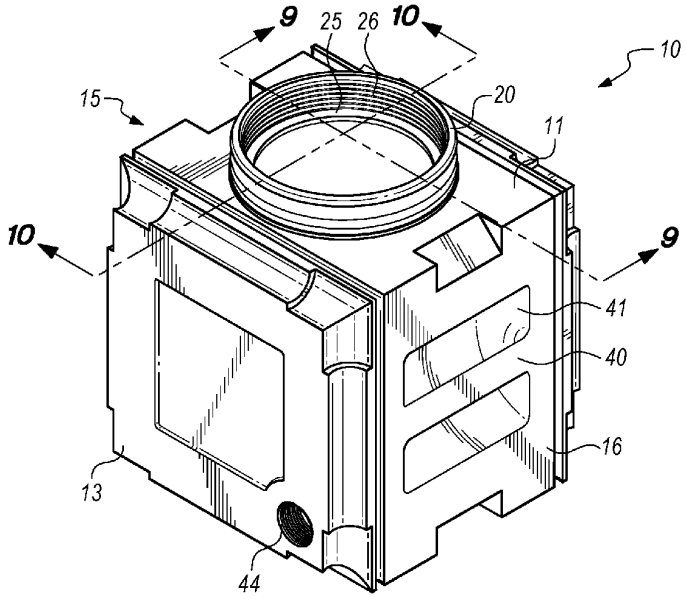

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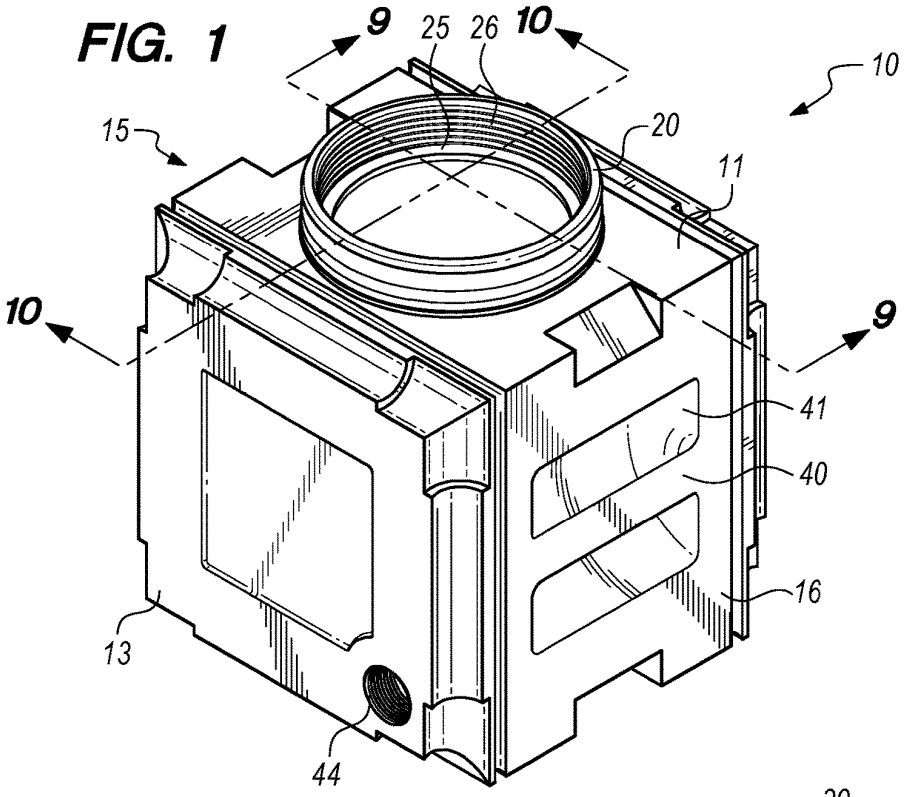
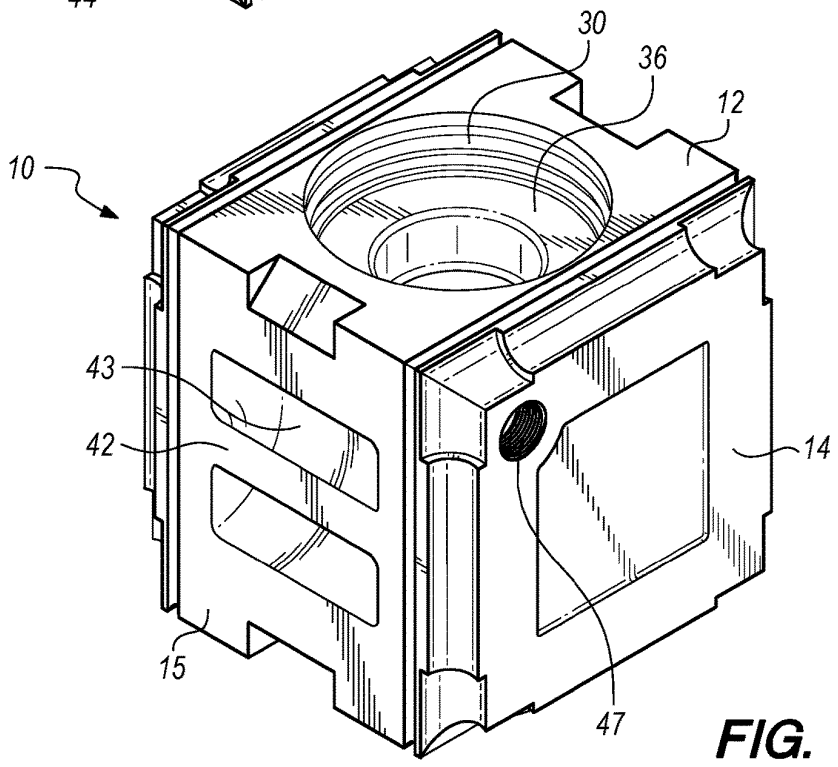
FIG. 1





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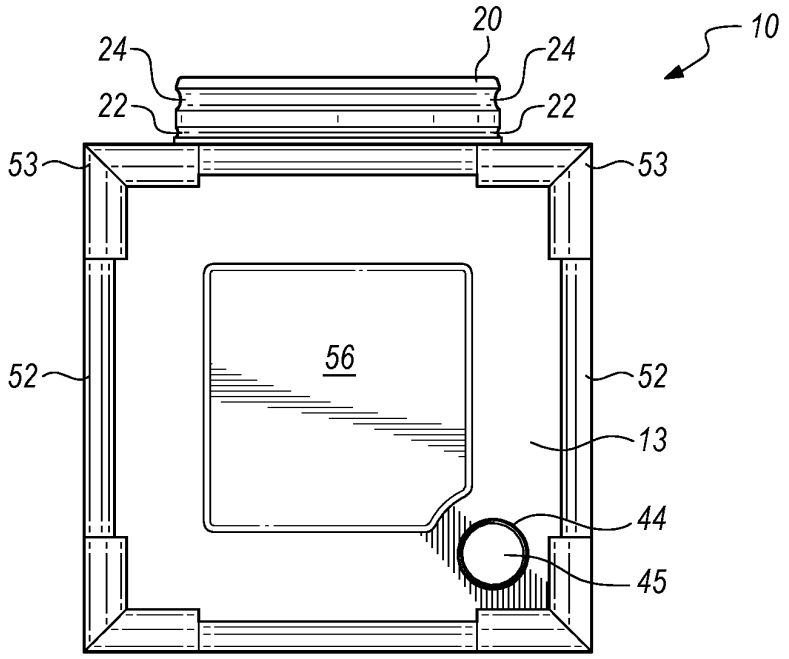
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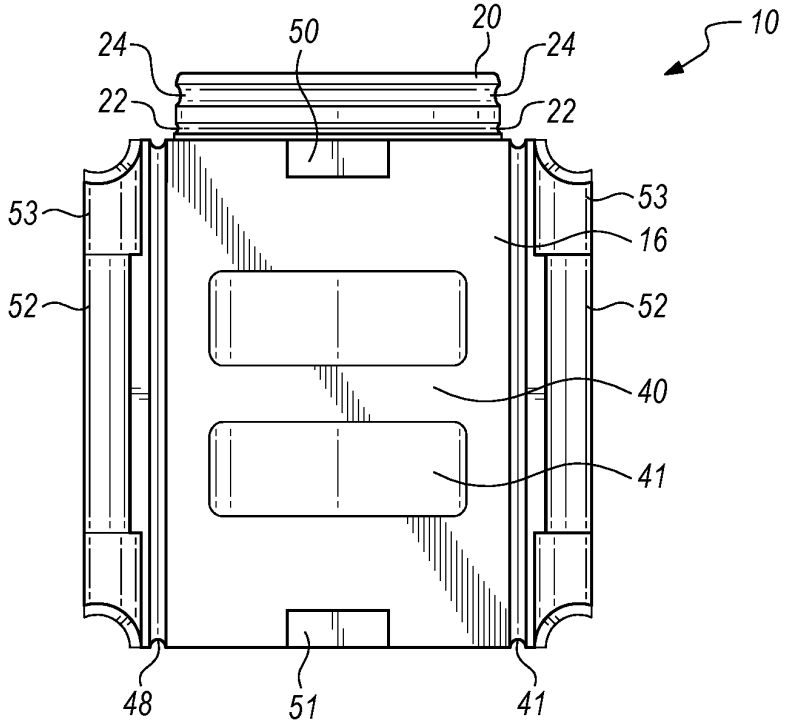
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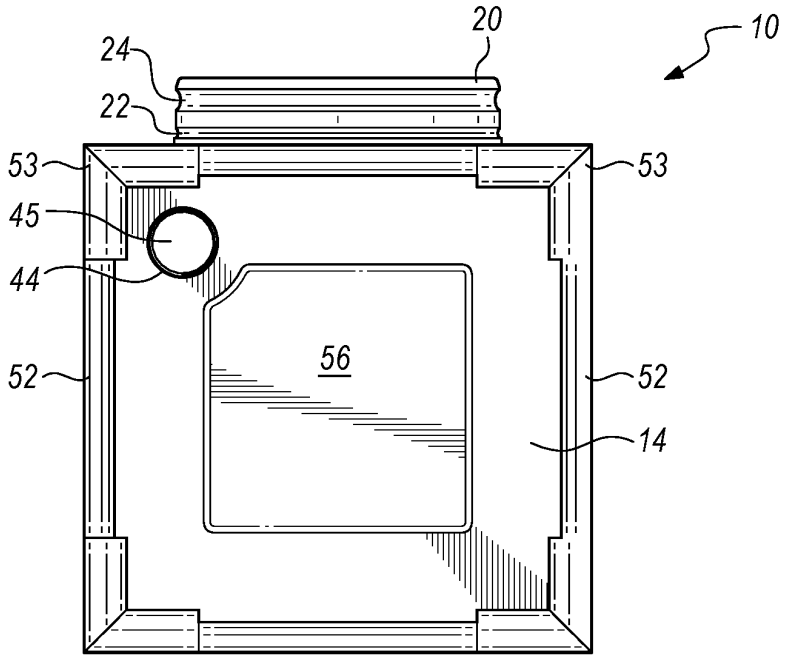
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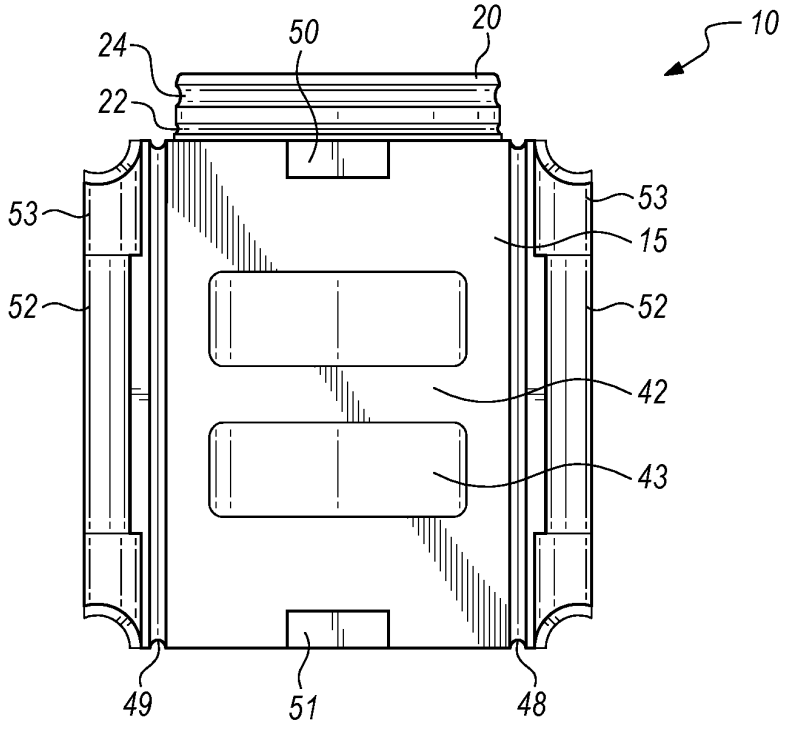
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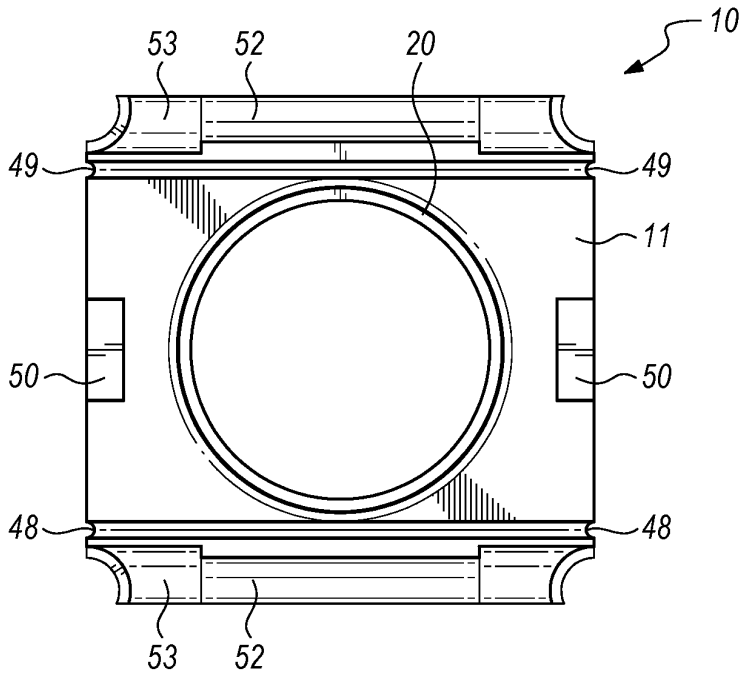
FIG. 6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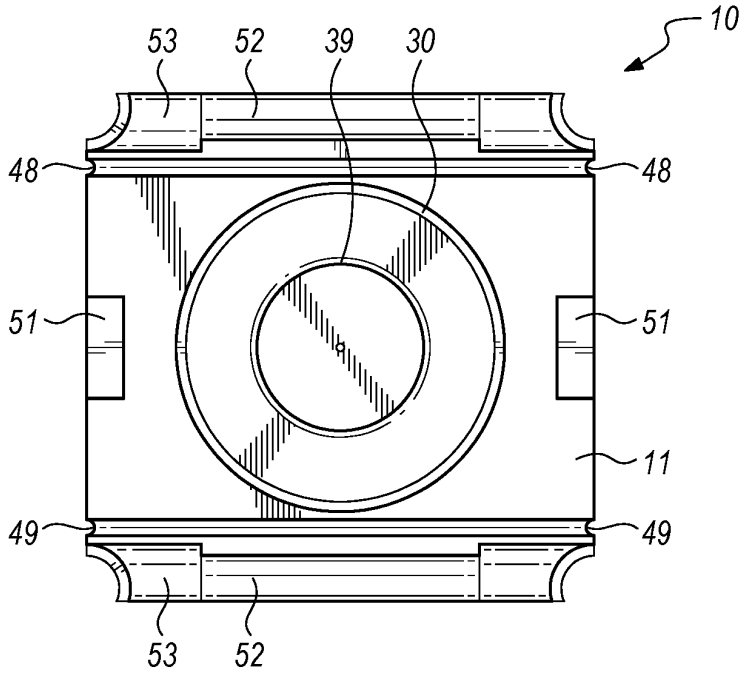
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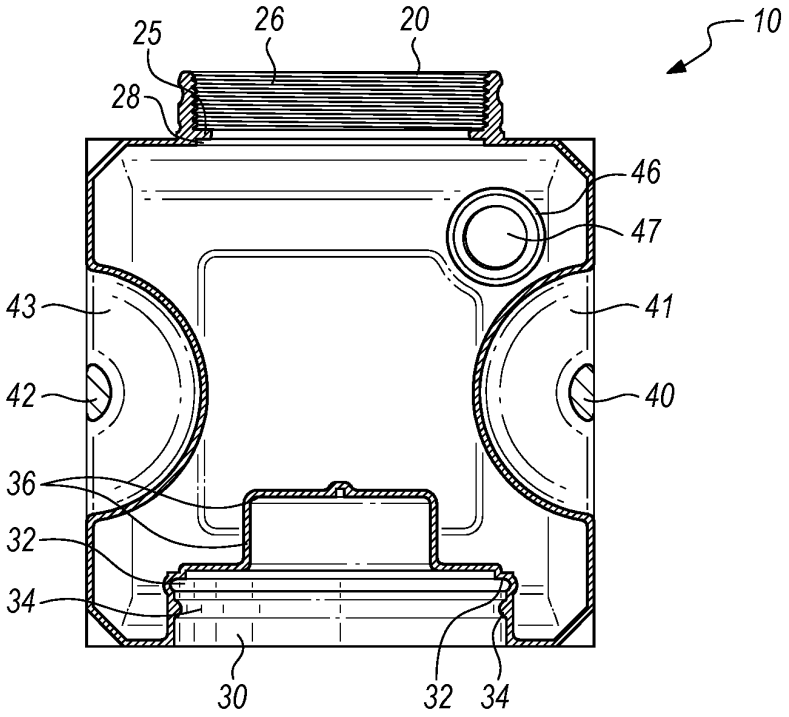
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FIG. 9

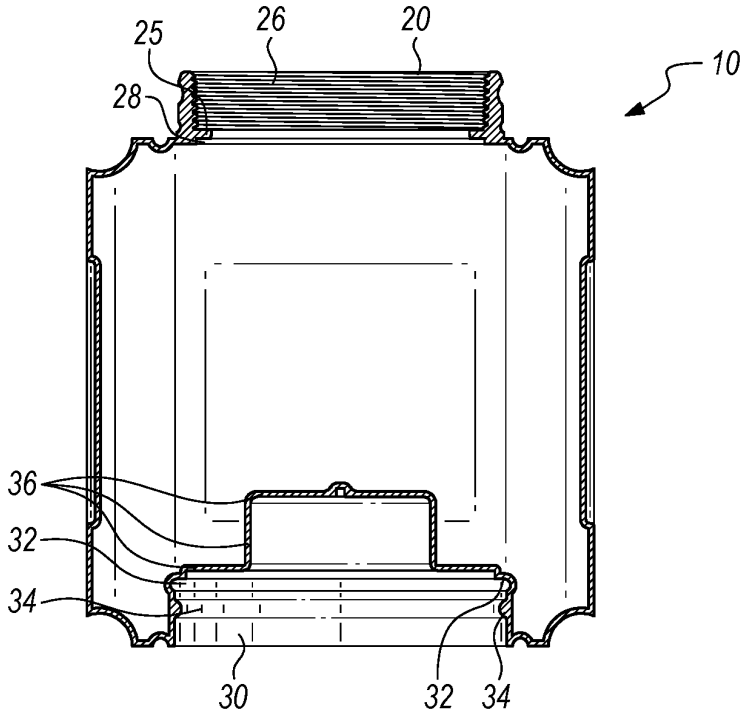
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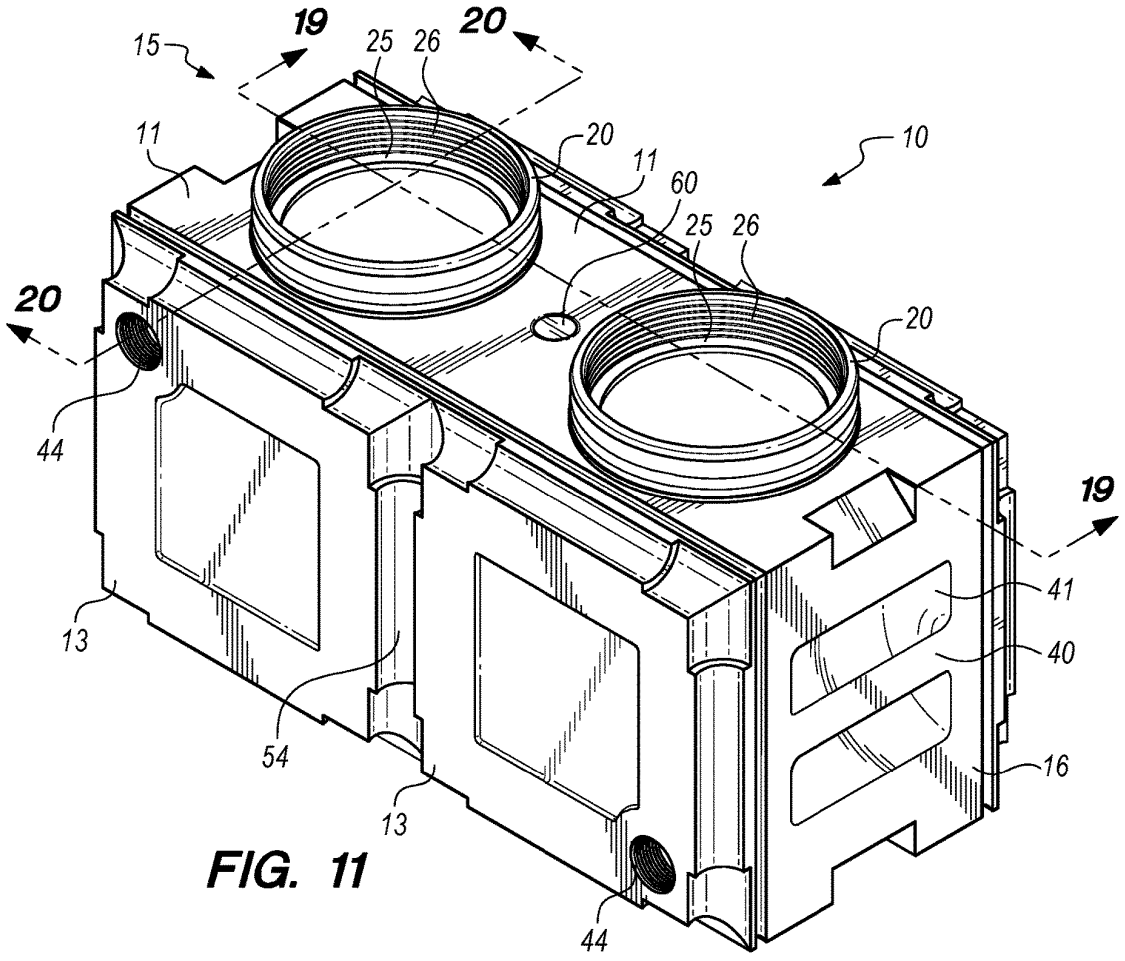
FIG. 10



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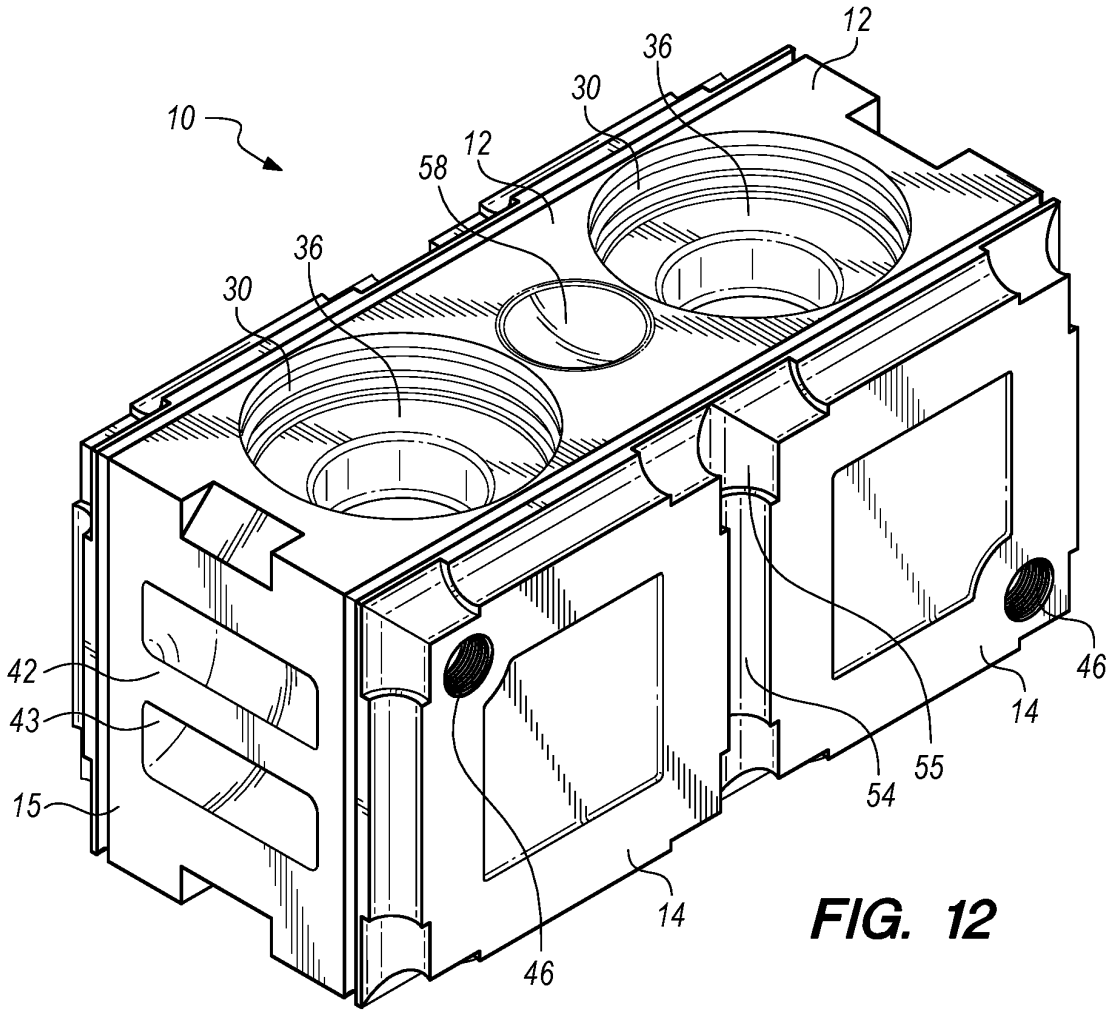

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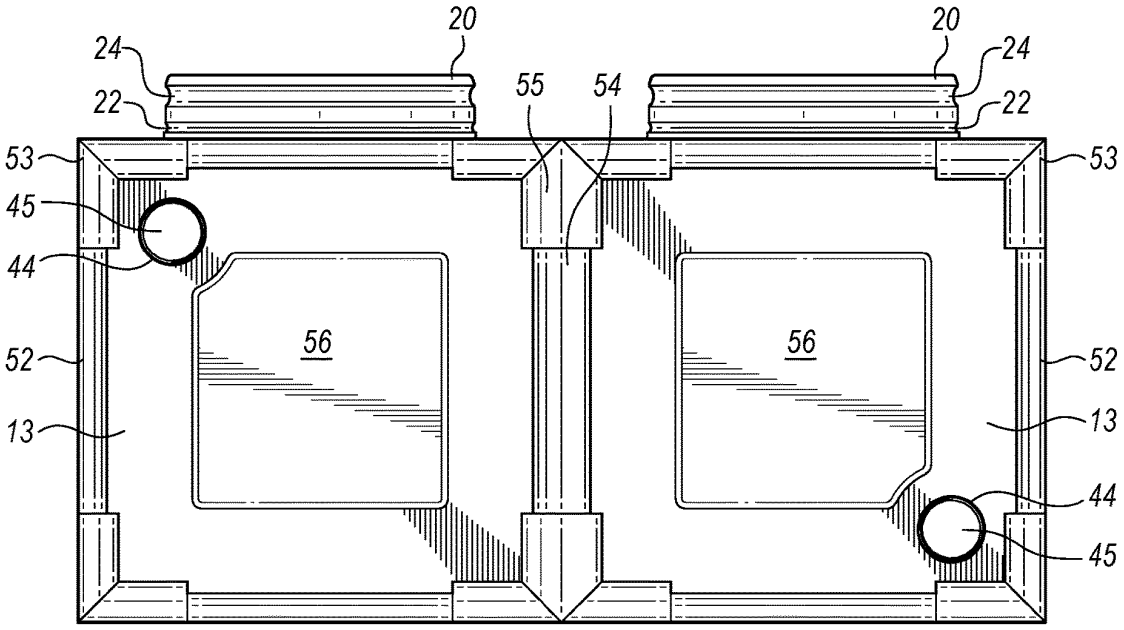
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FIG. 13

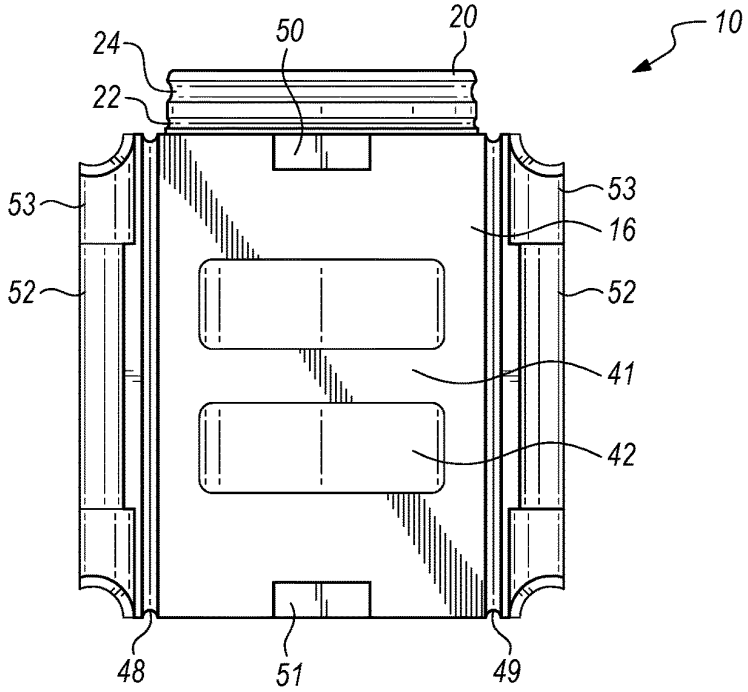
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FIG. 14

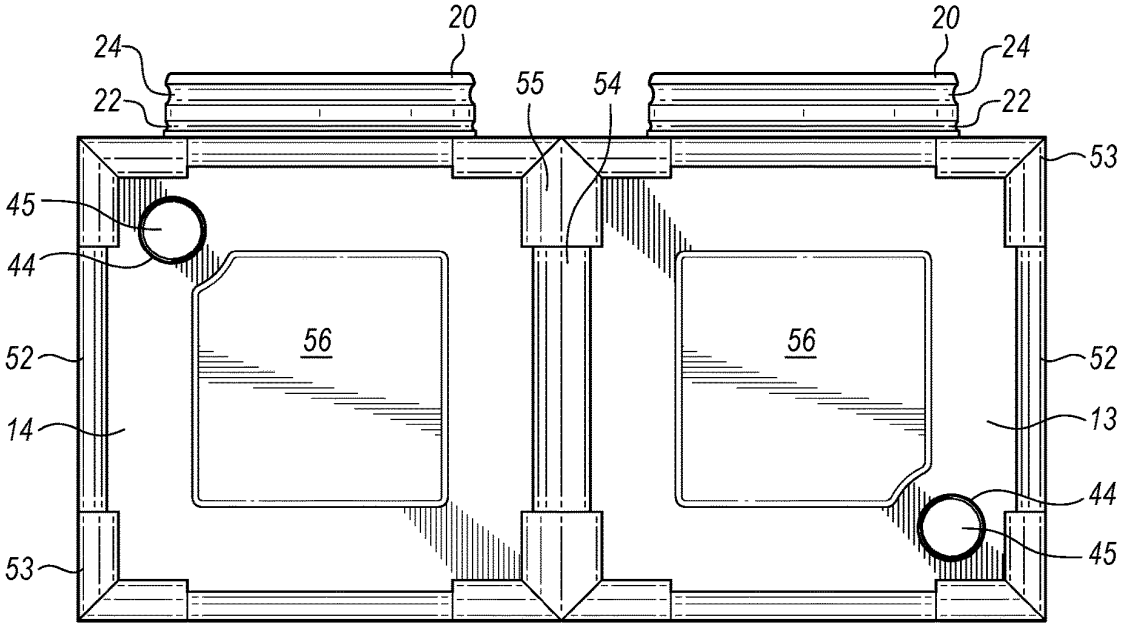
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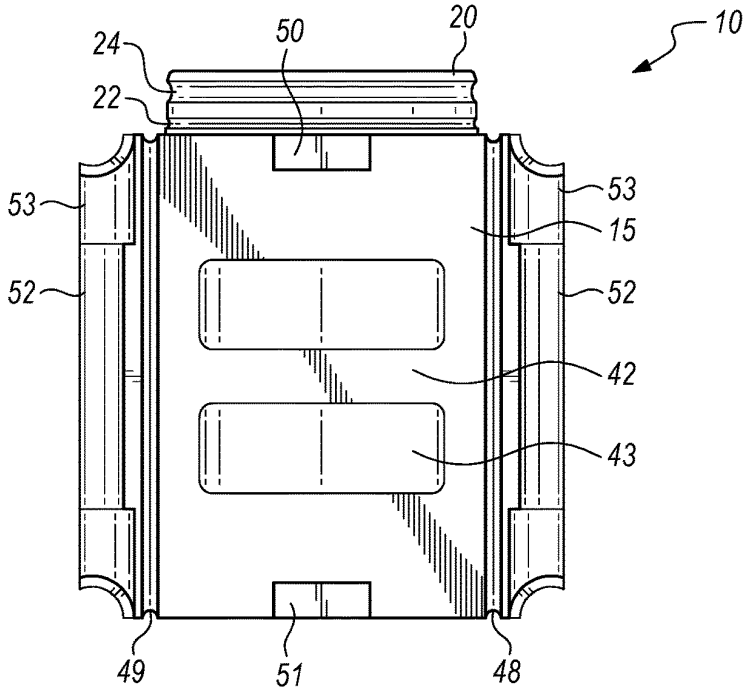
FIG. 15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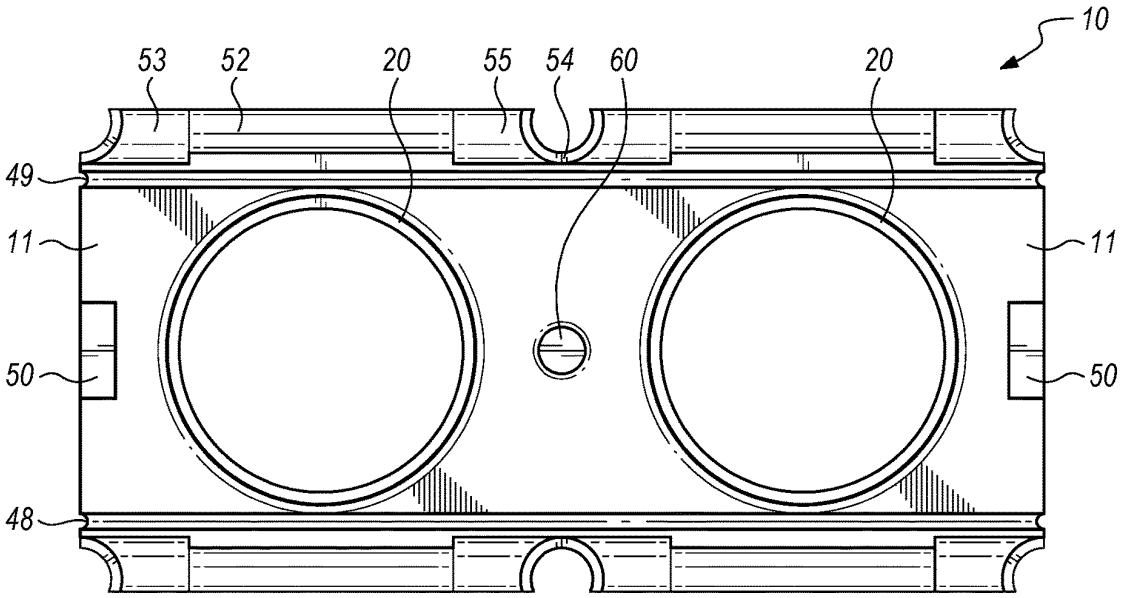
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FIG. 17

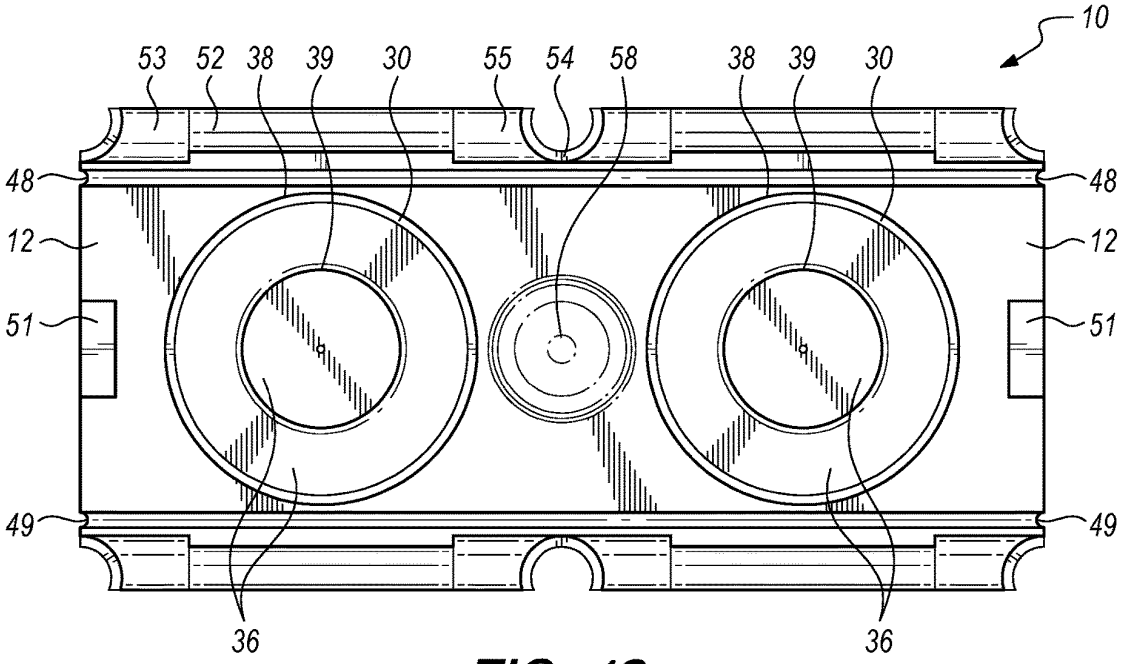
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FIG. 18

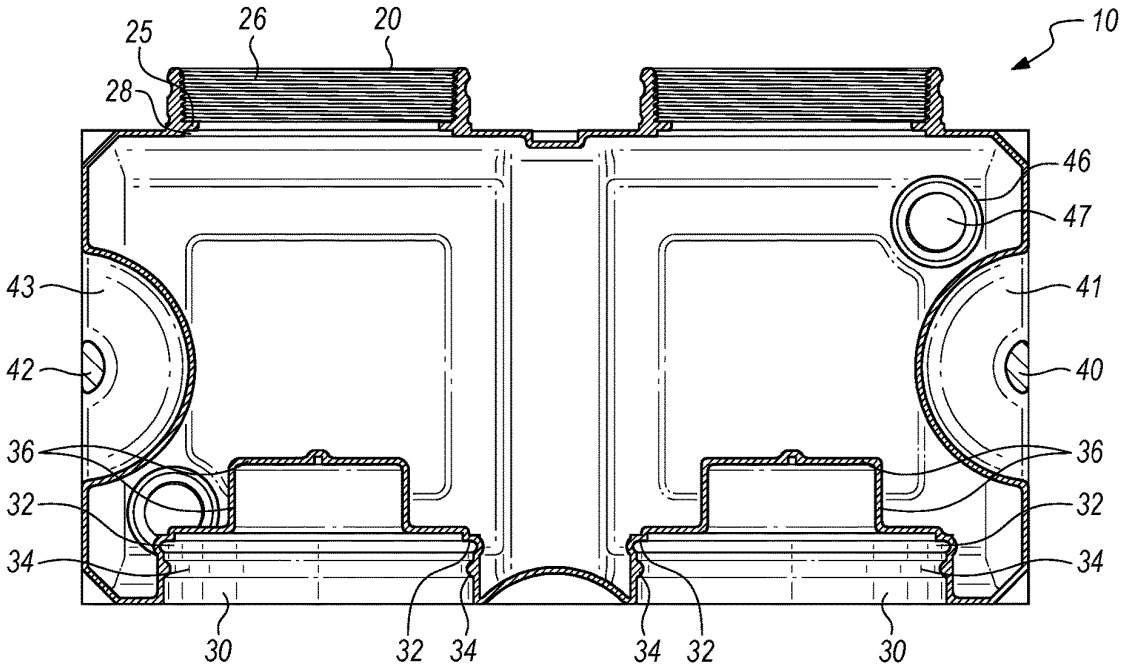
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FIG. 19

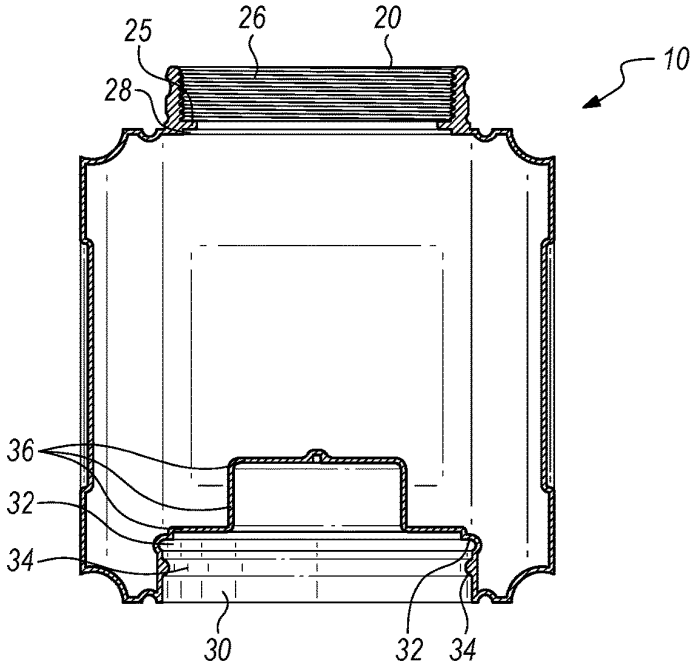
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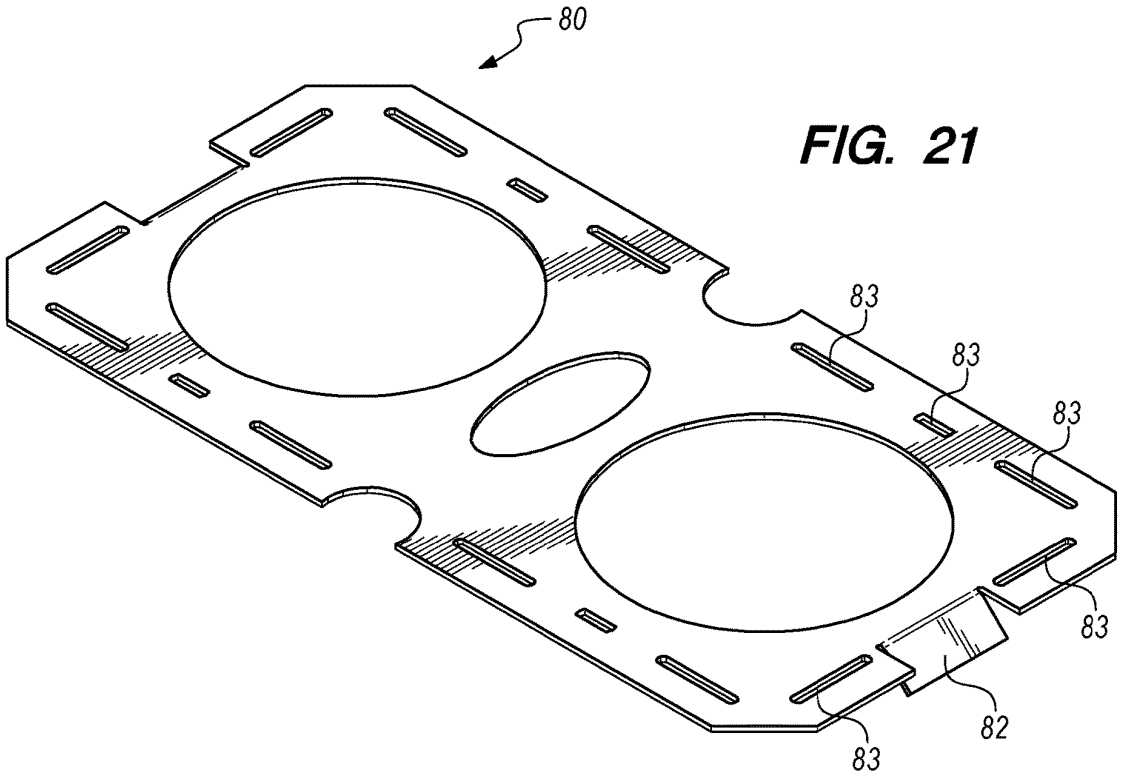
FIG. 20



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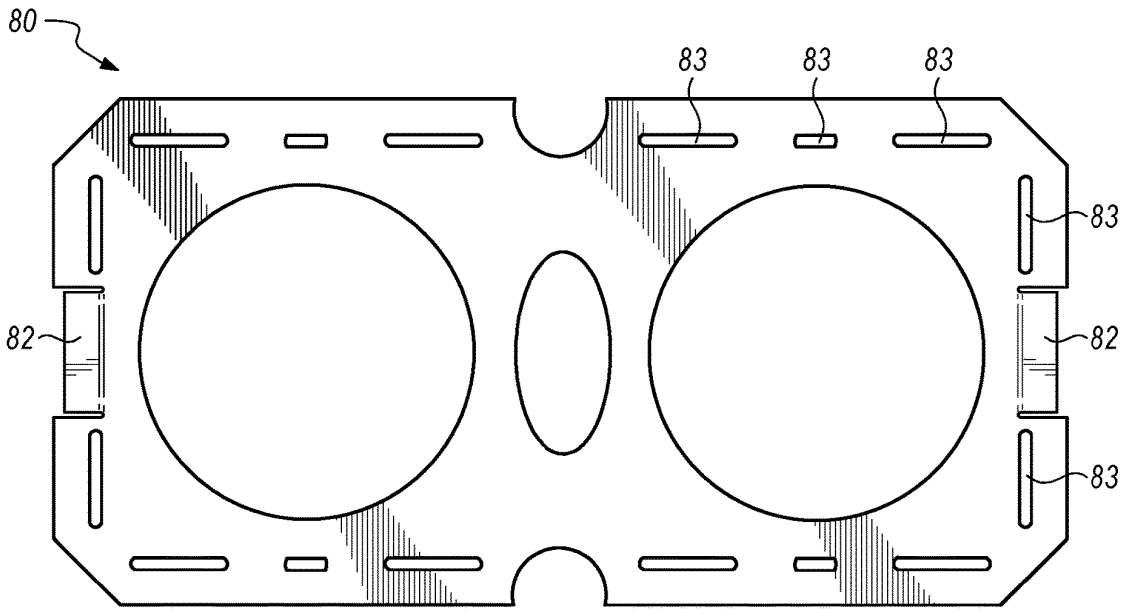

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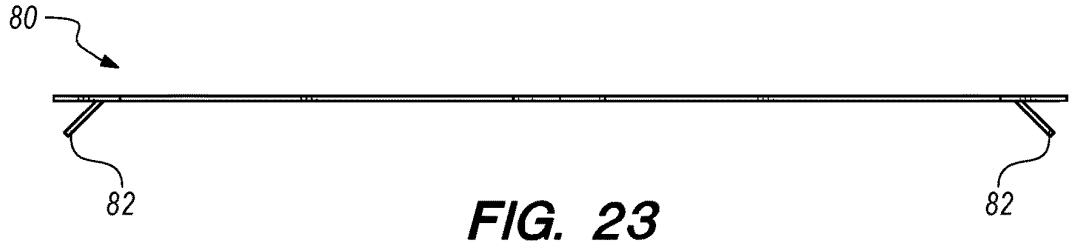

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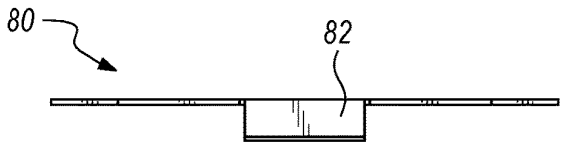

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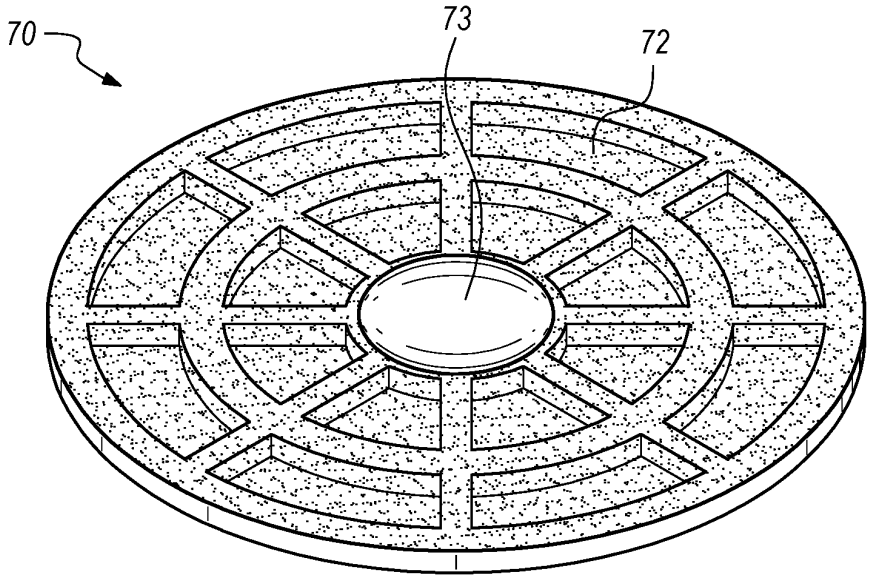

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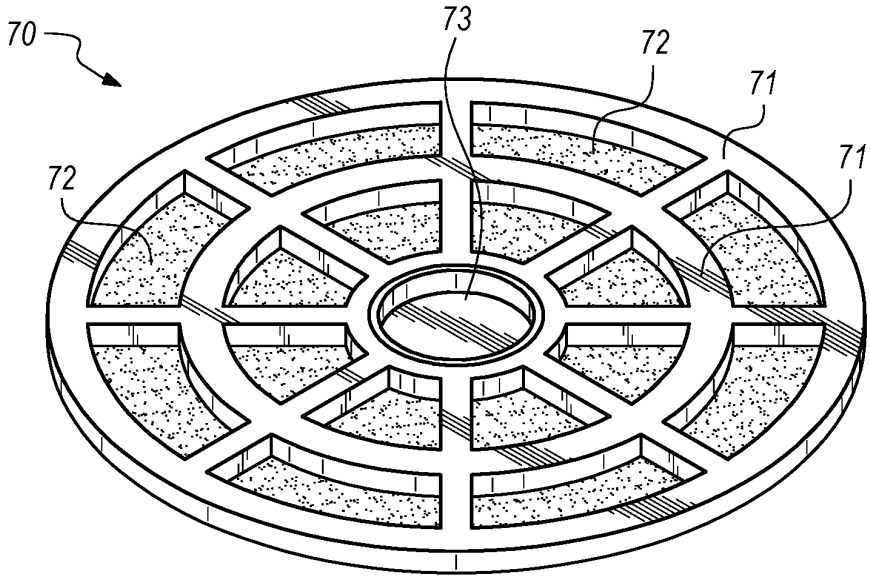

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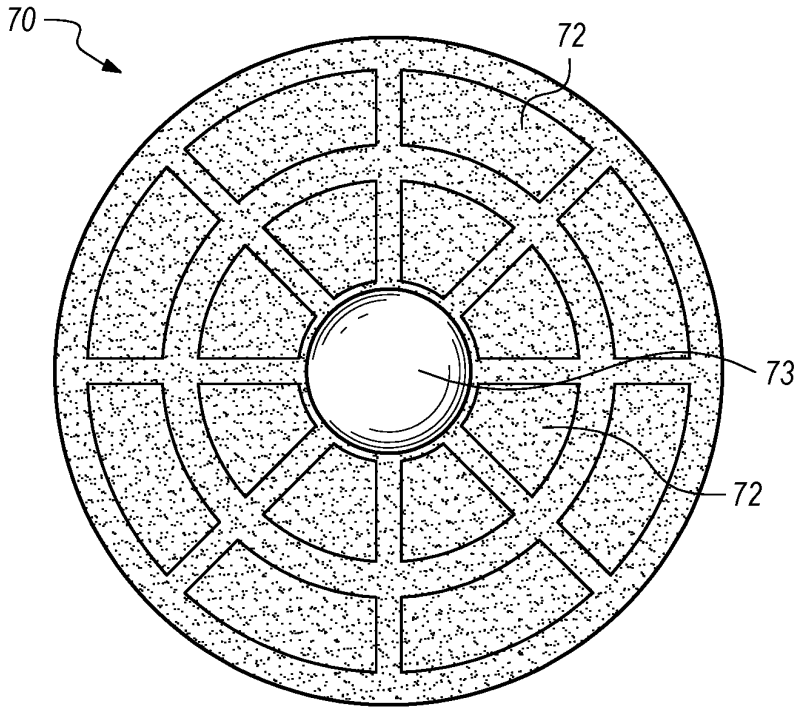

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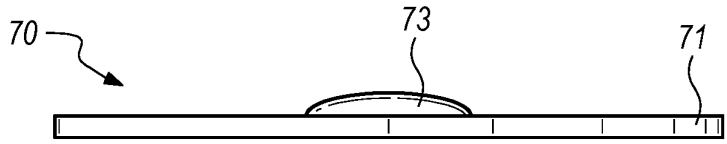

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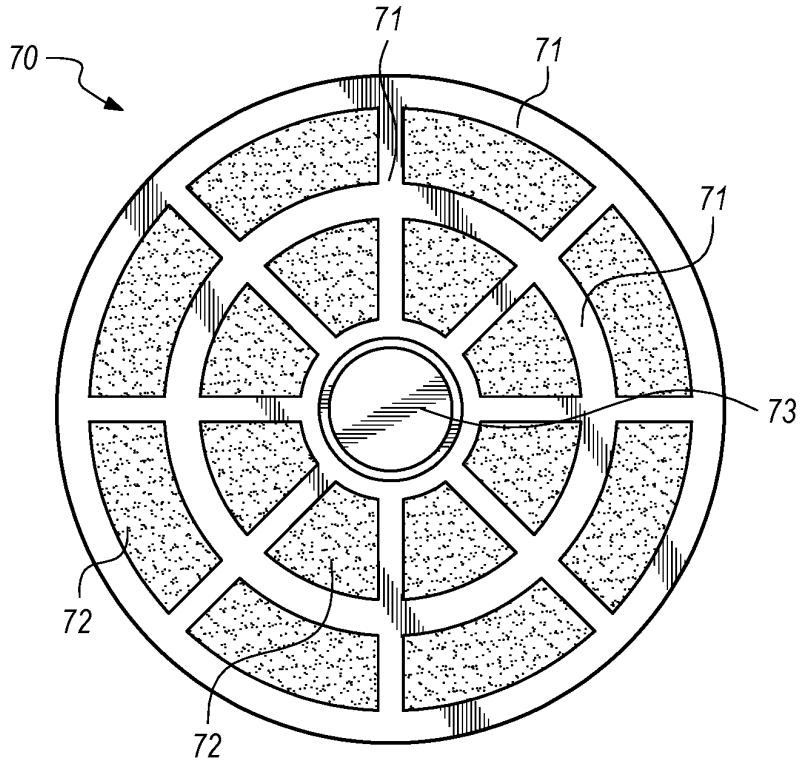

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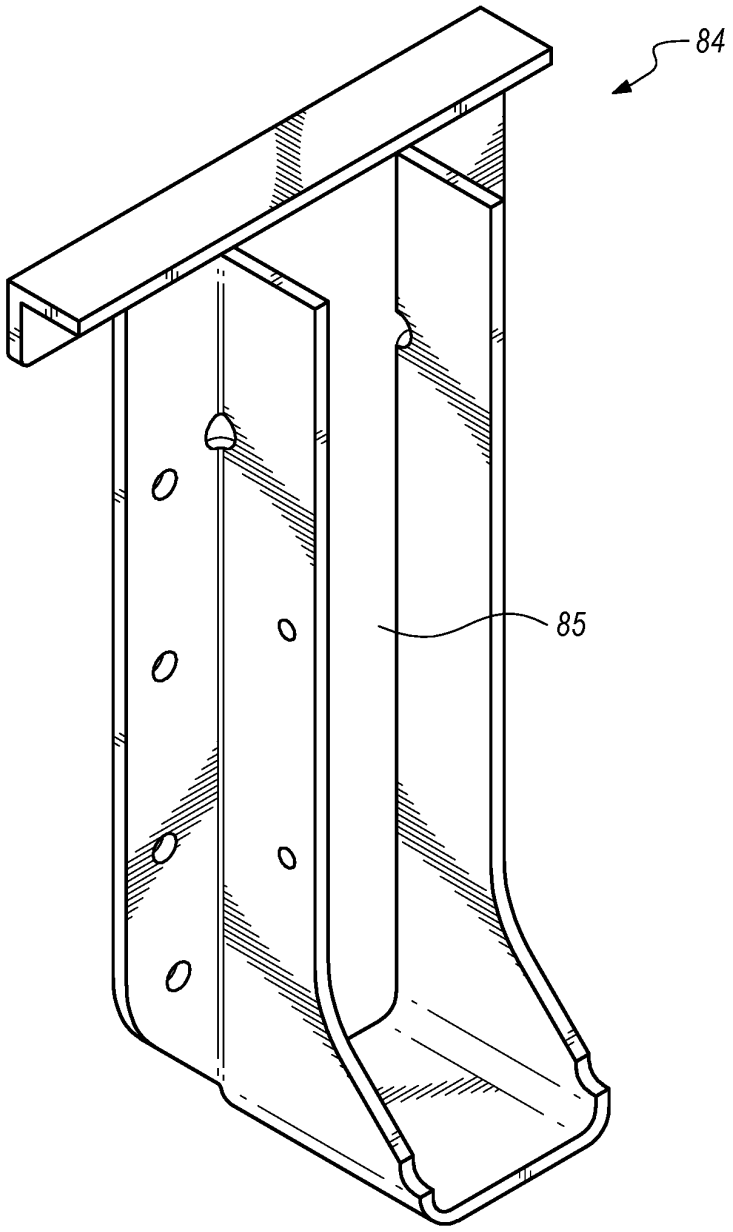

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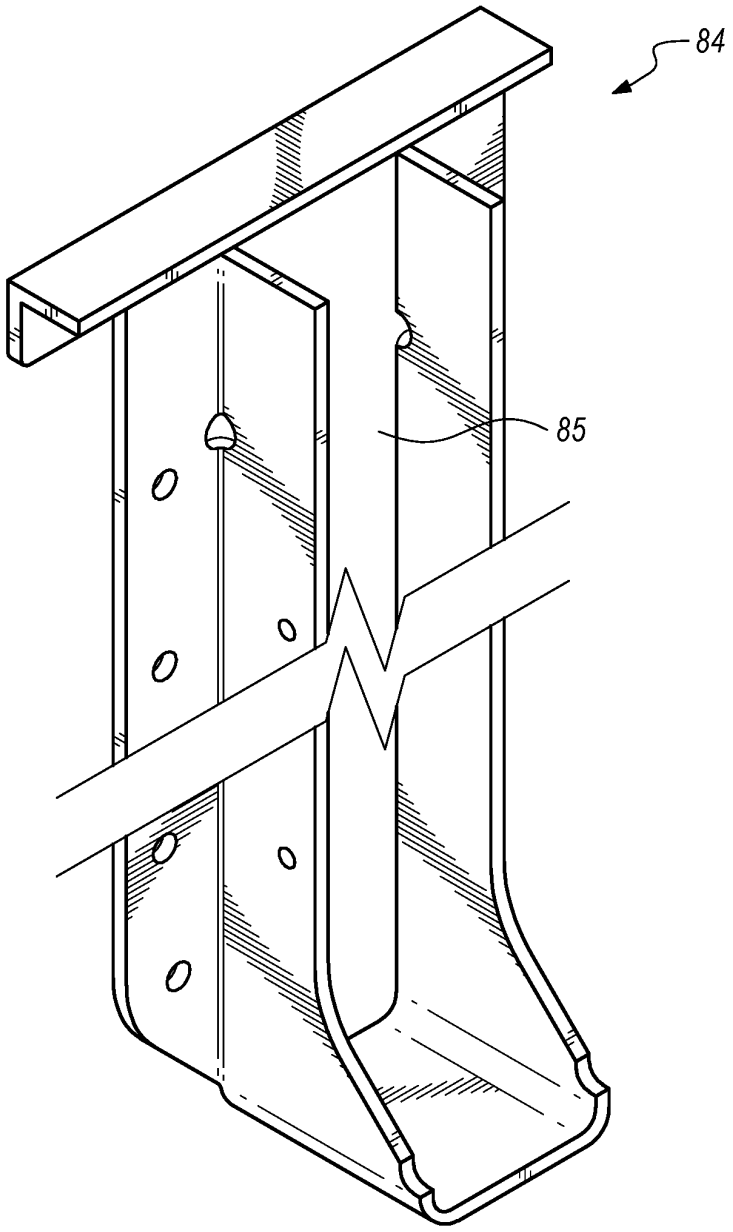

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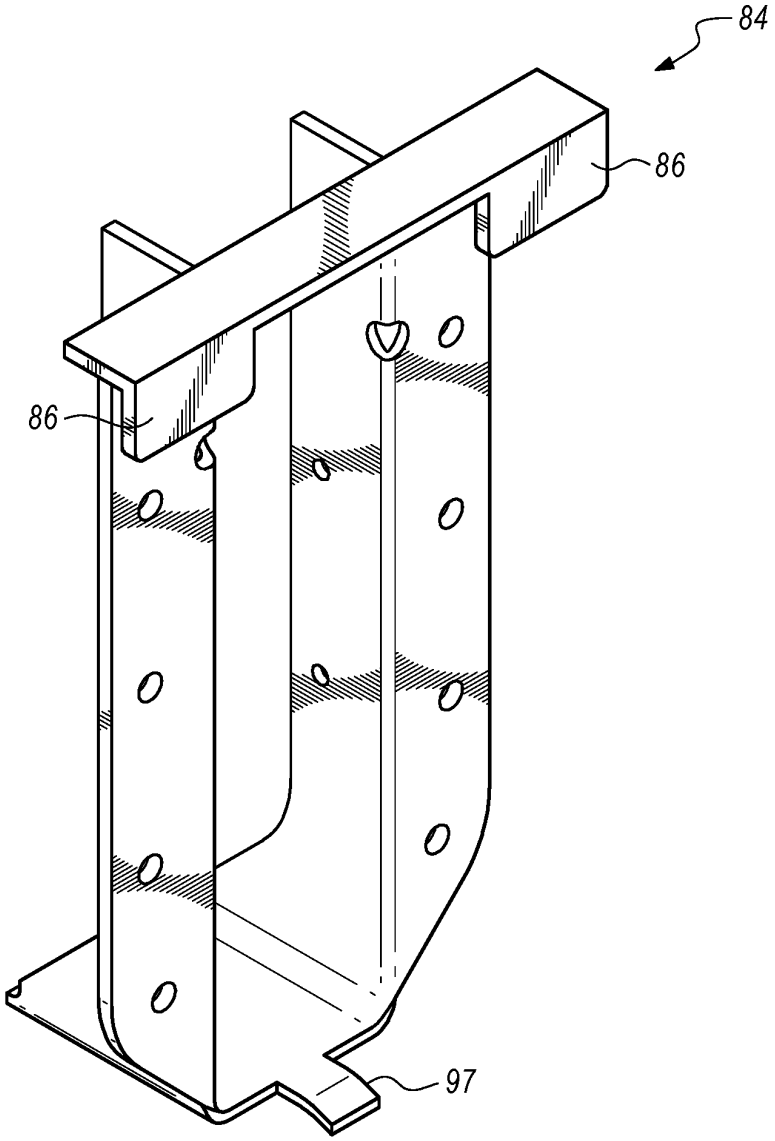

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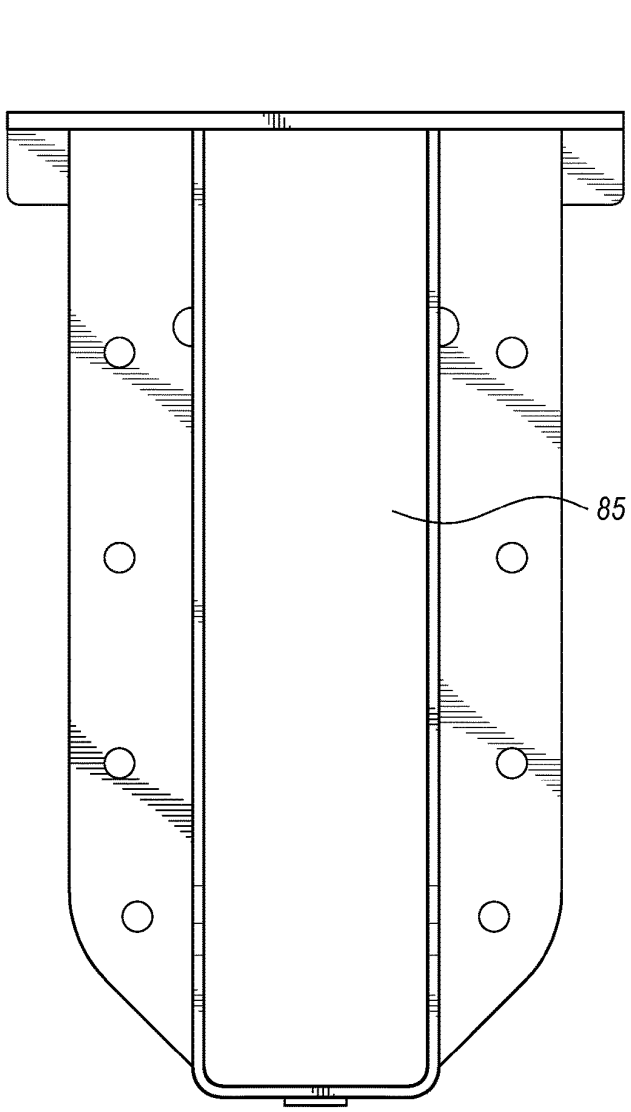

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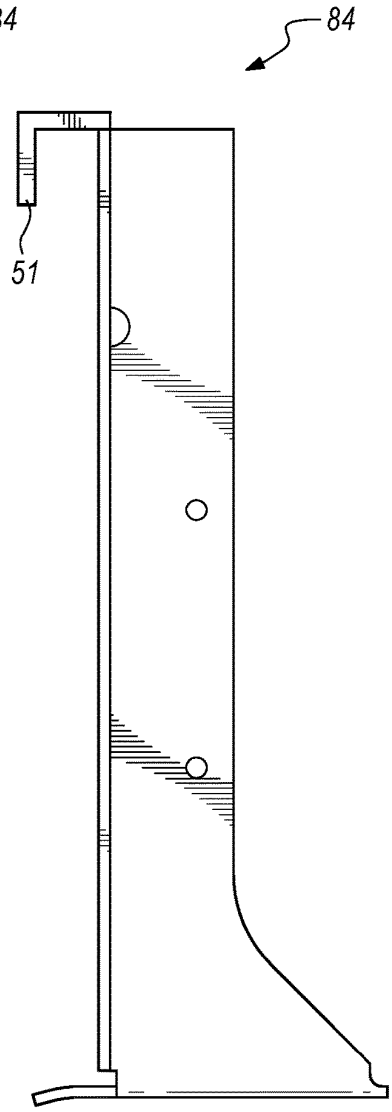

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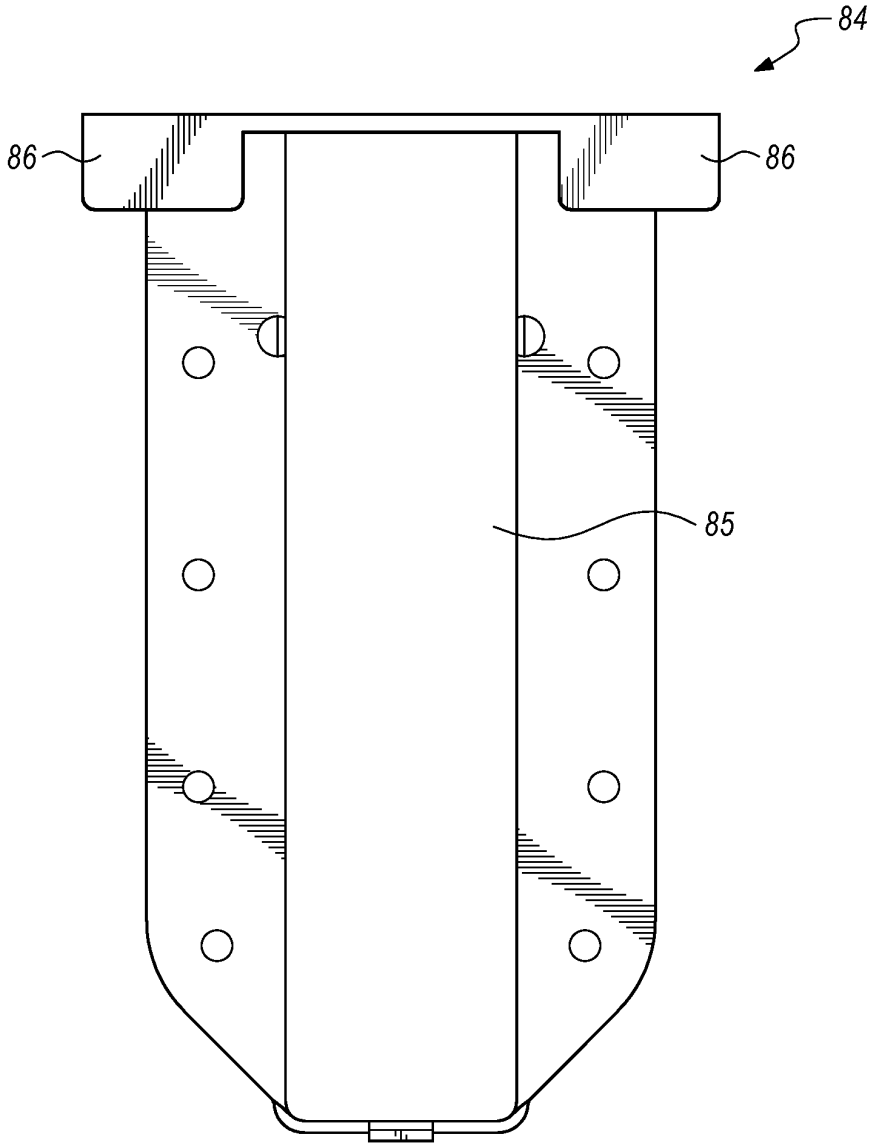

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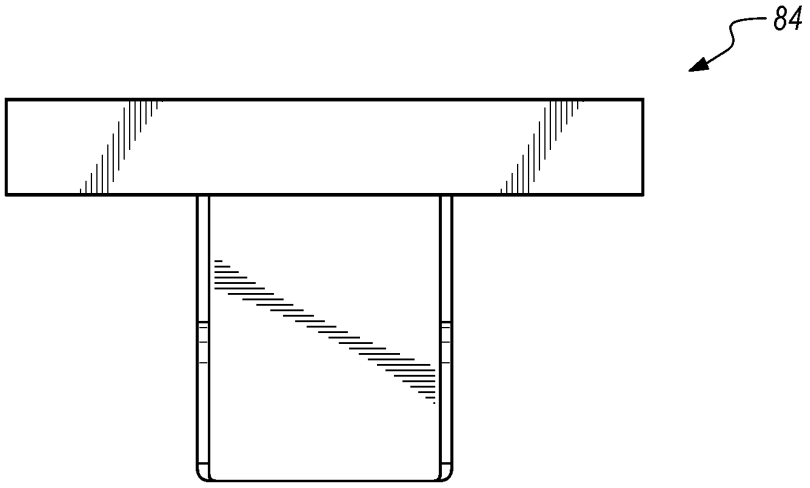

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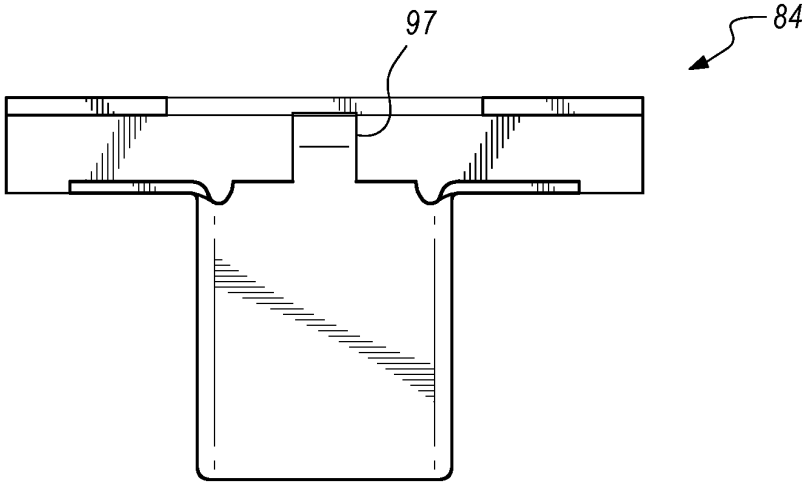

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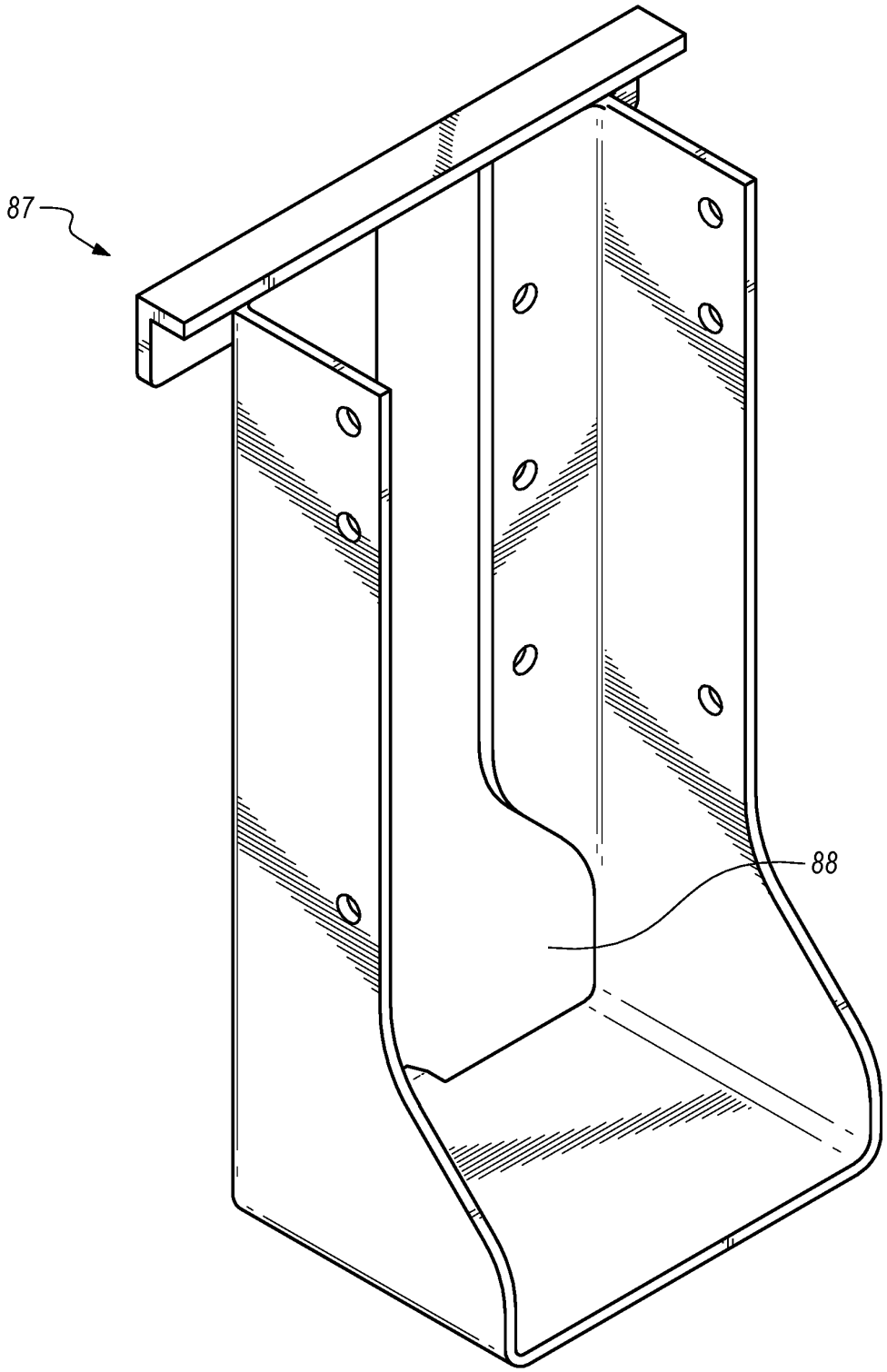

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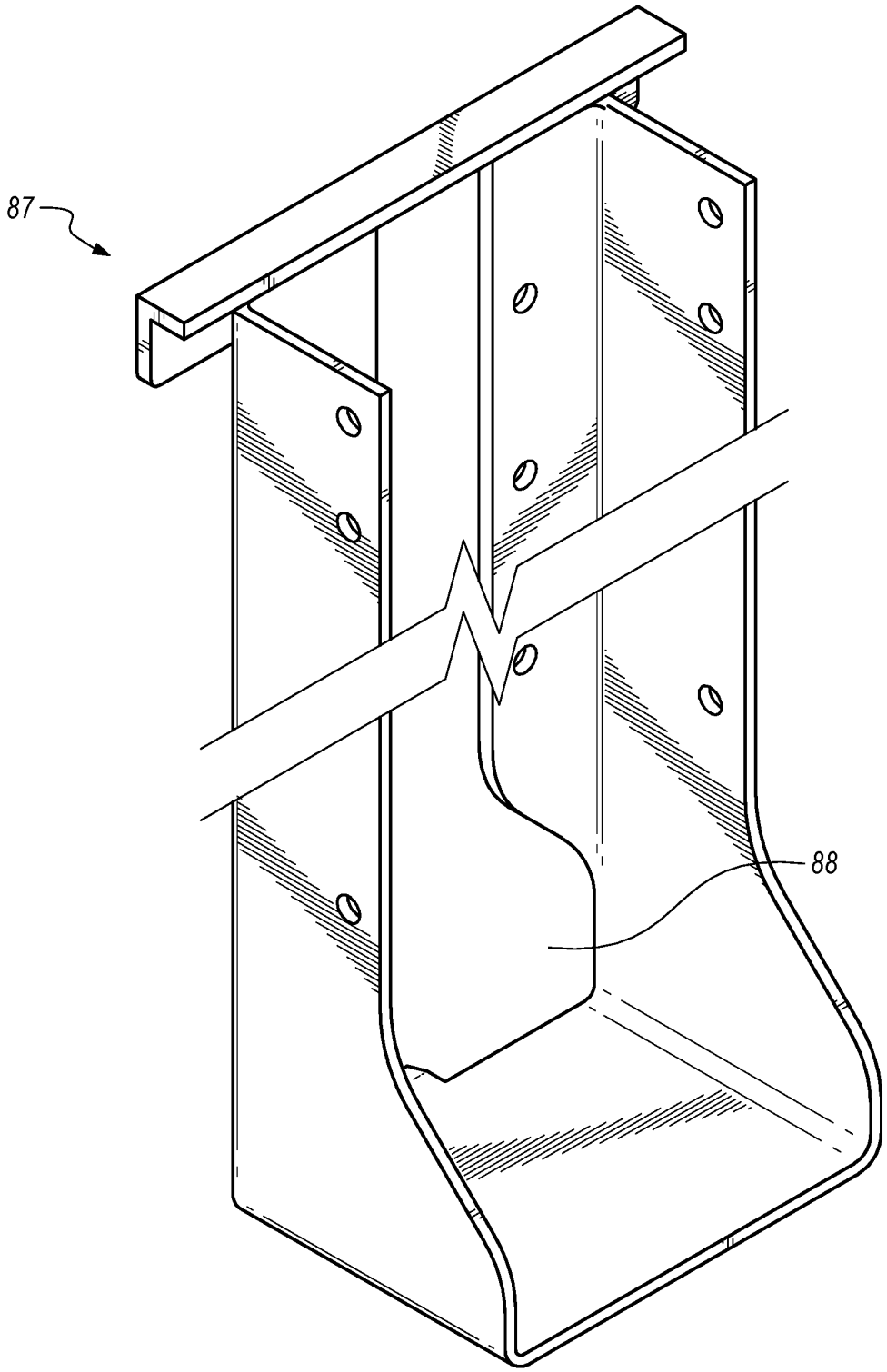

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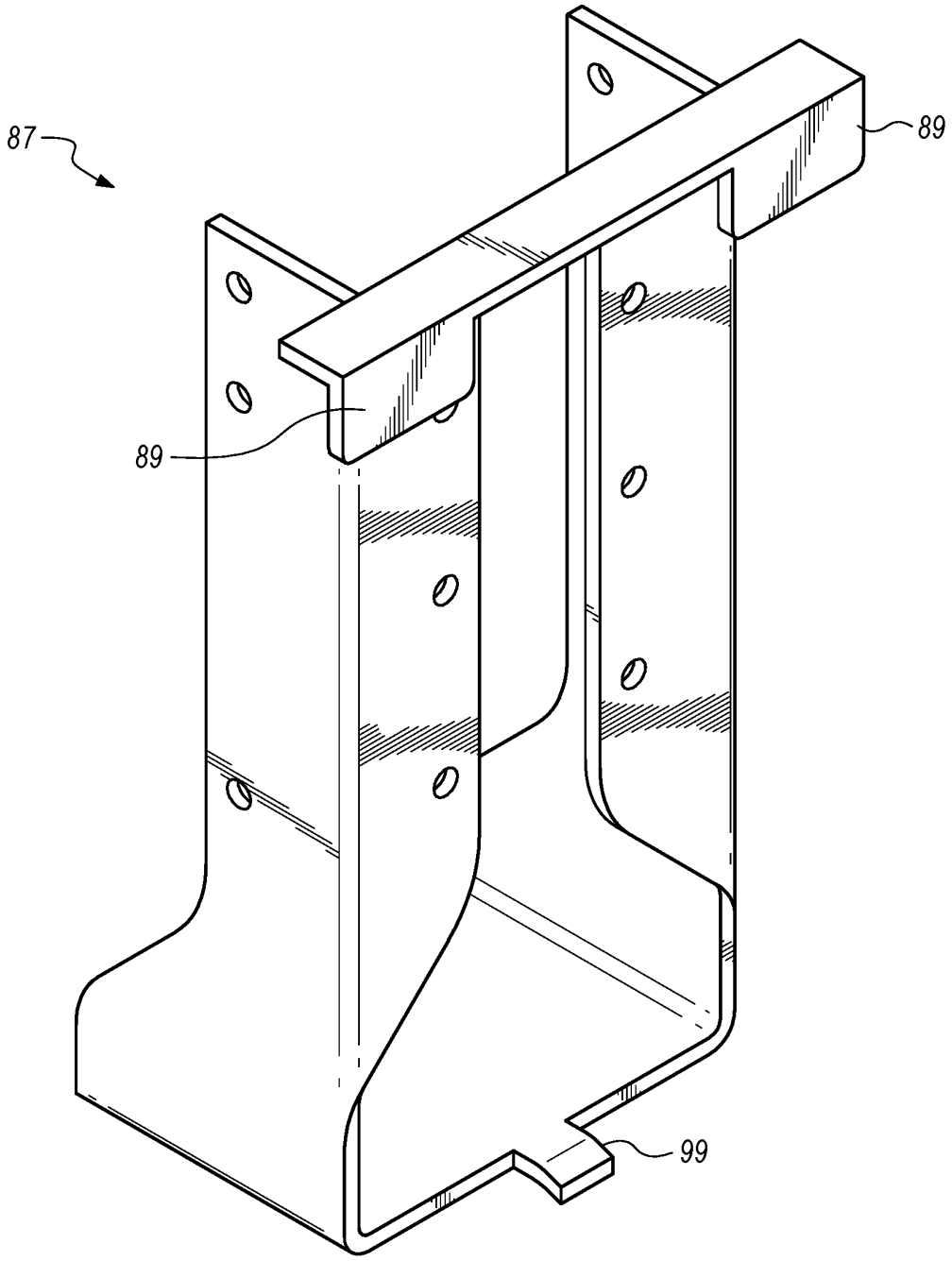

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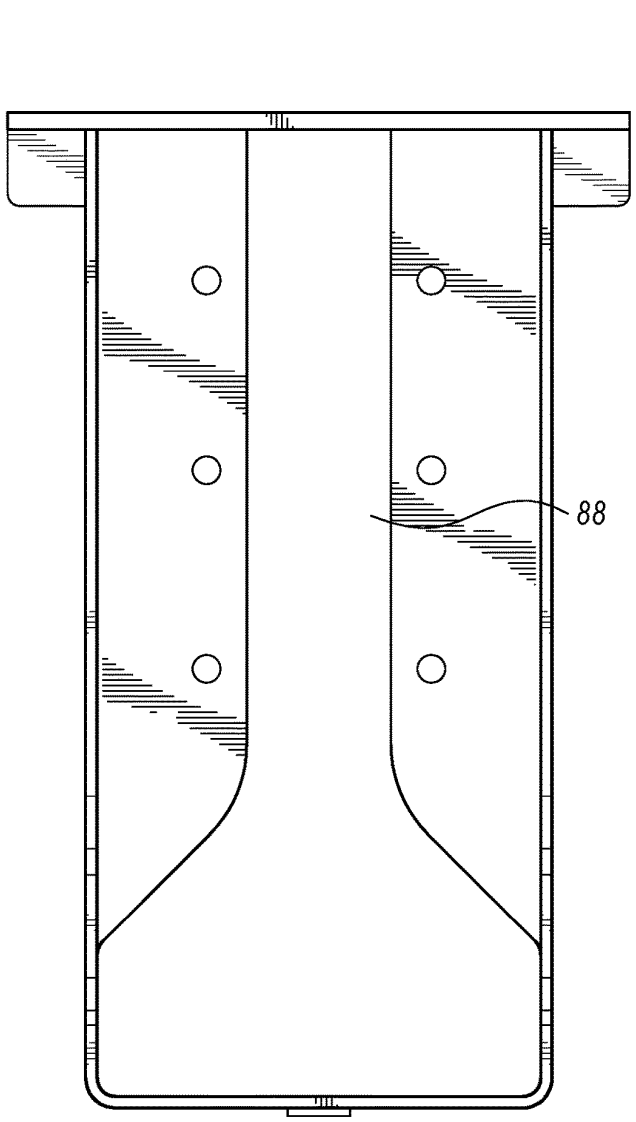

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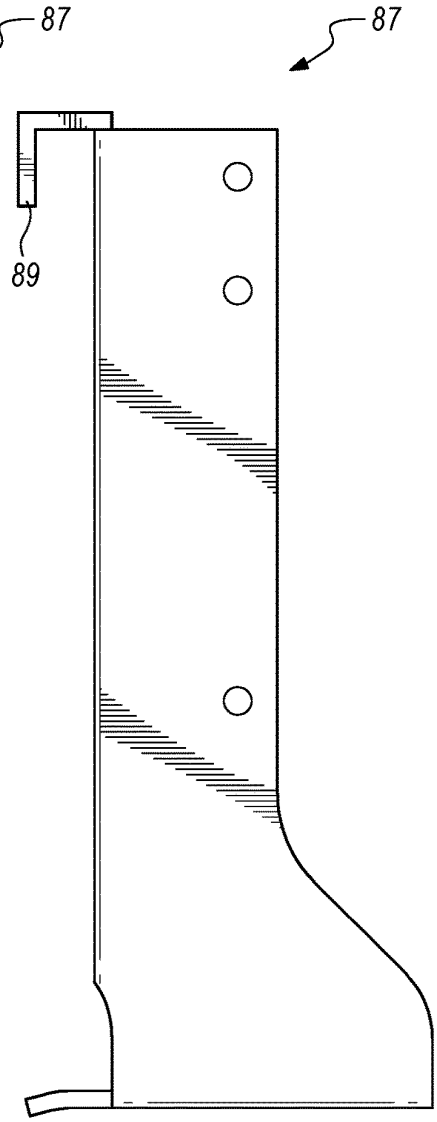

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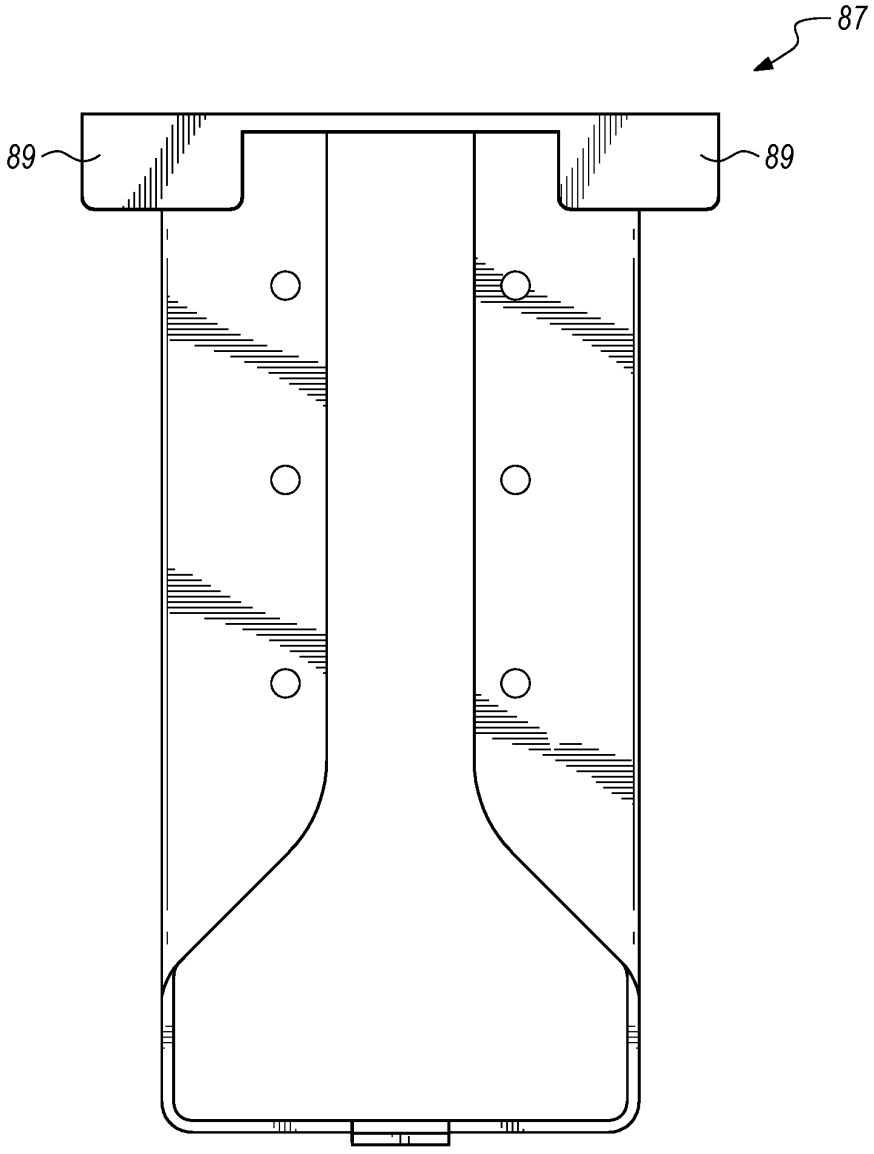

FIG. 43

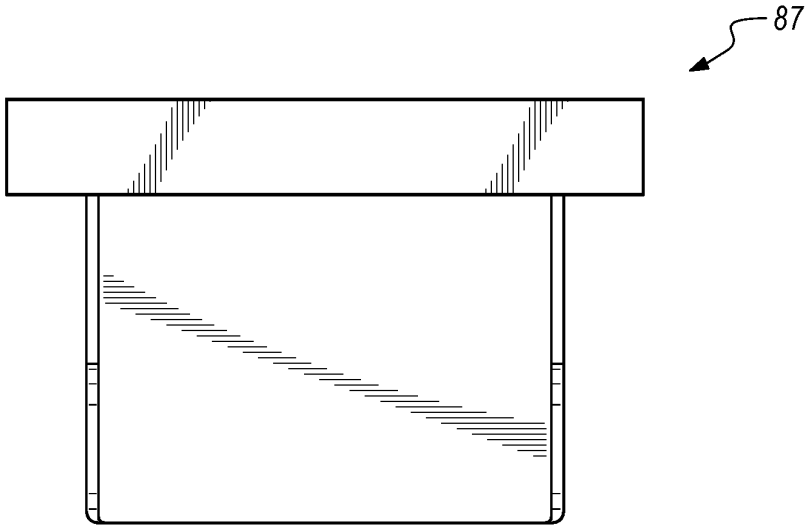

FIG. 44

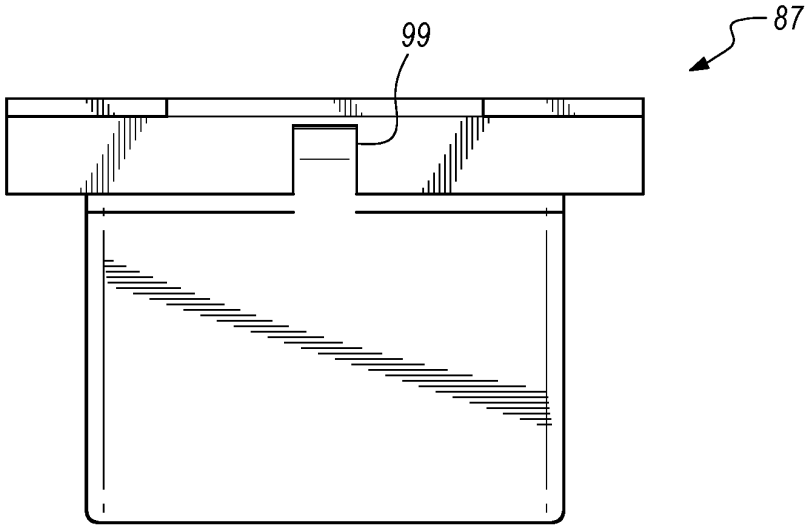

FIG. 45

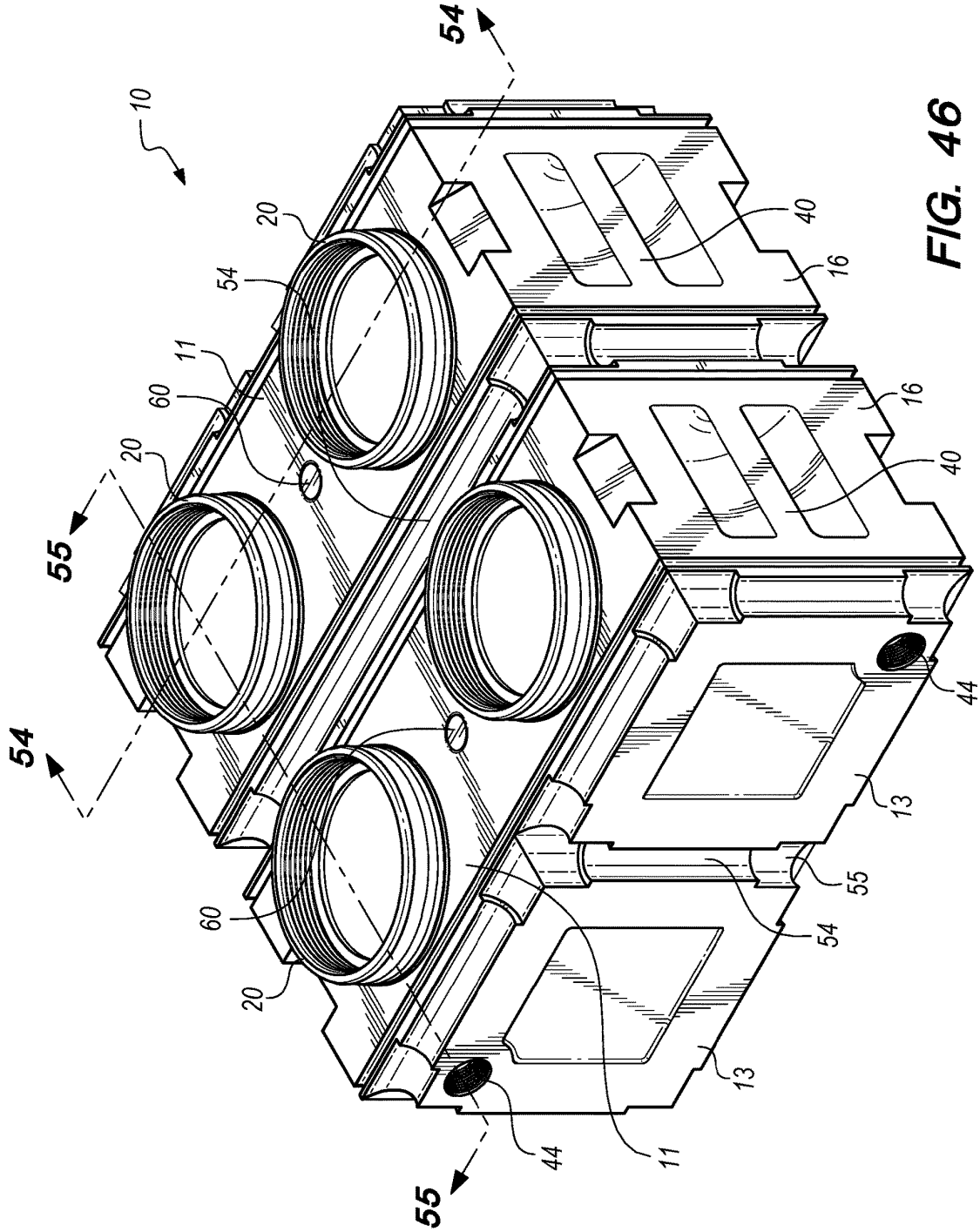

FIG. 46

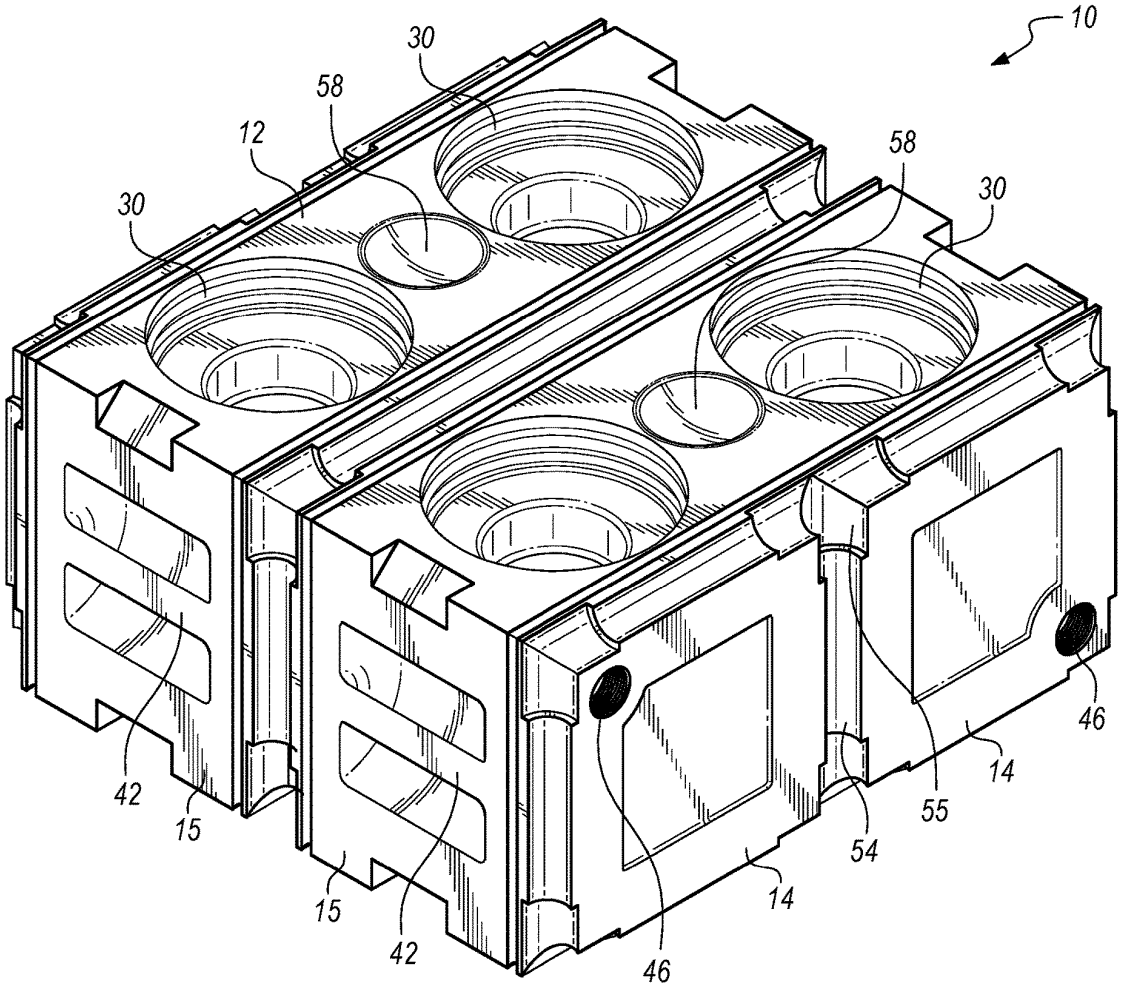

FIG. 47

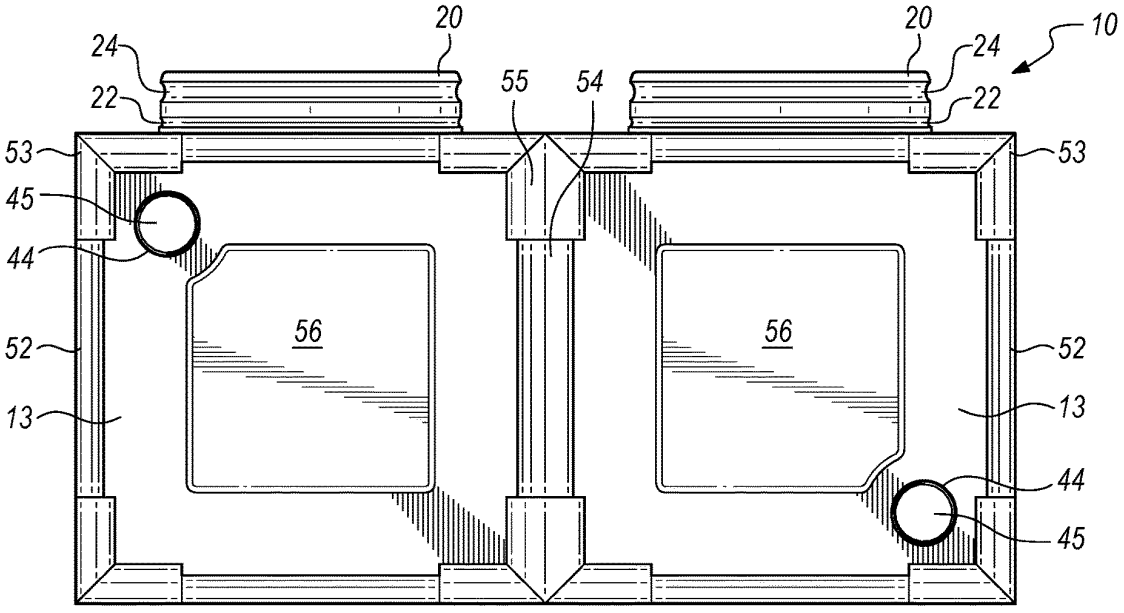
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FIG. 48

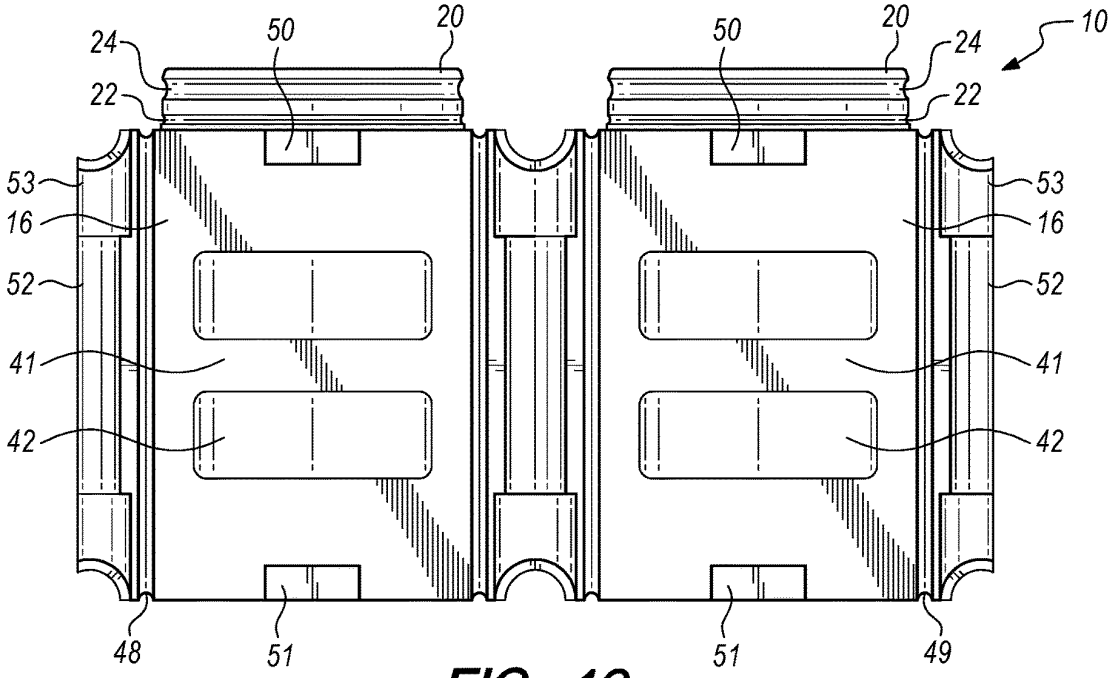
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FIG. 49

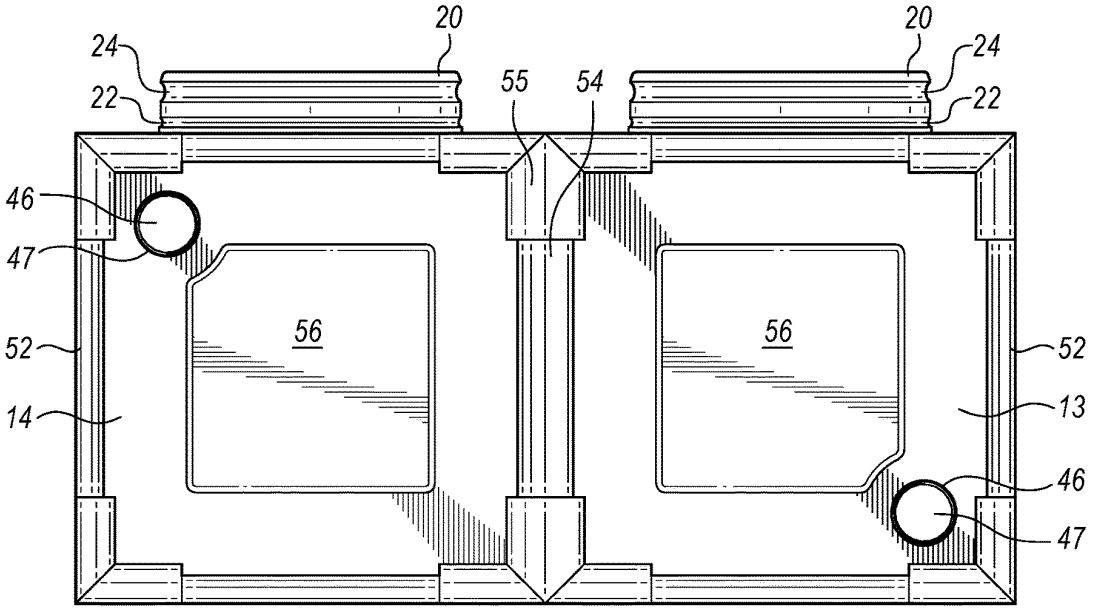
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FIG. 50

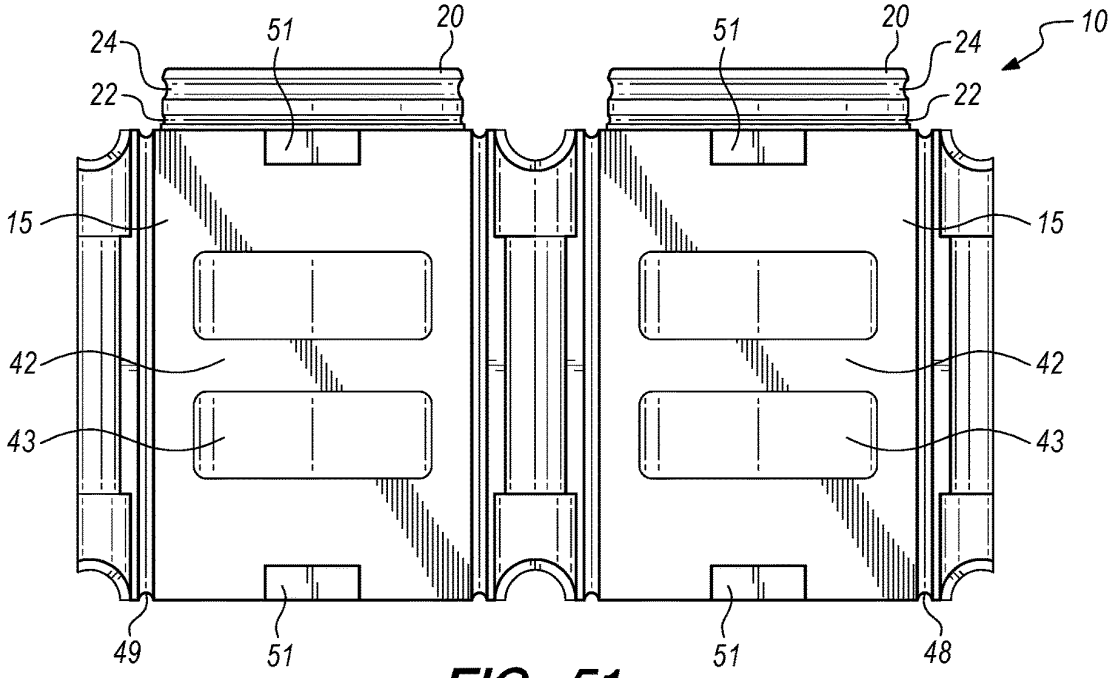
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FIG. 51

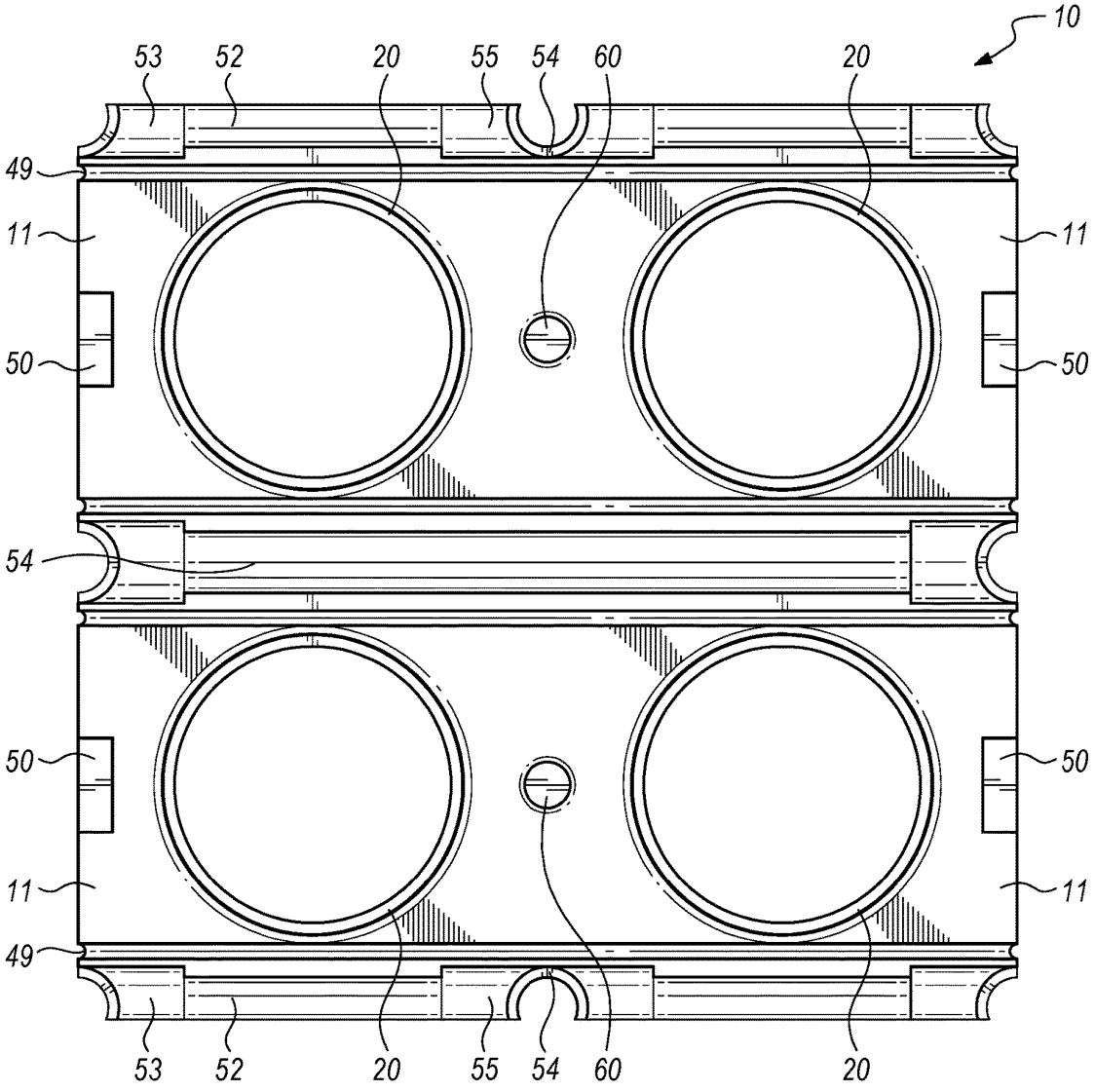
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FIG. 52

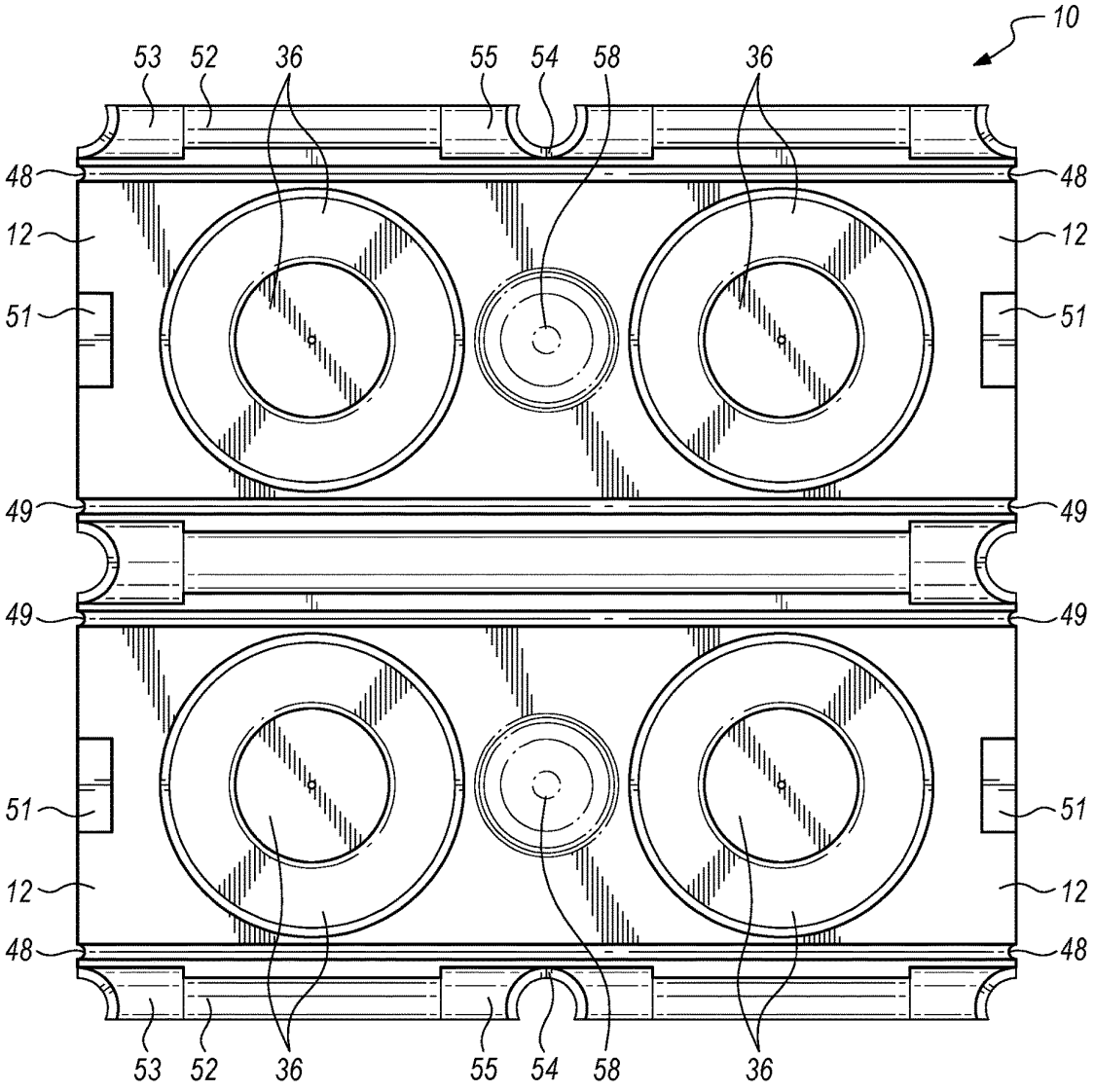
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FIG. 53

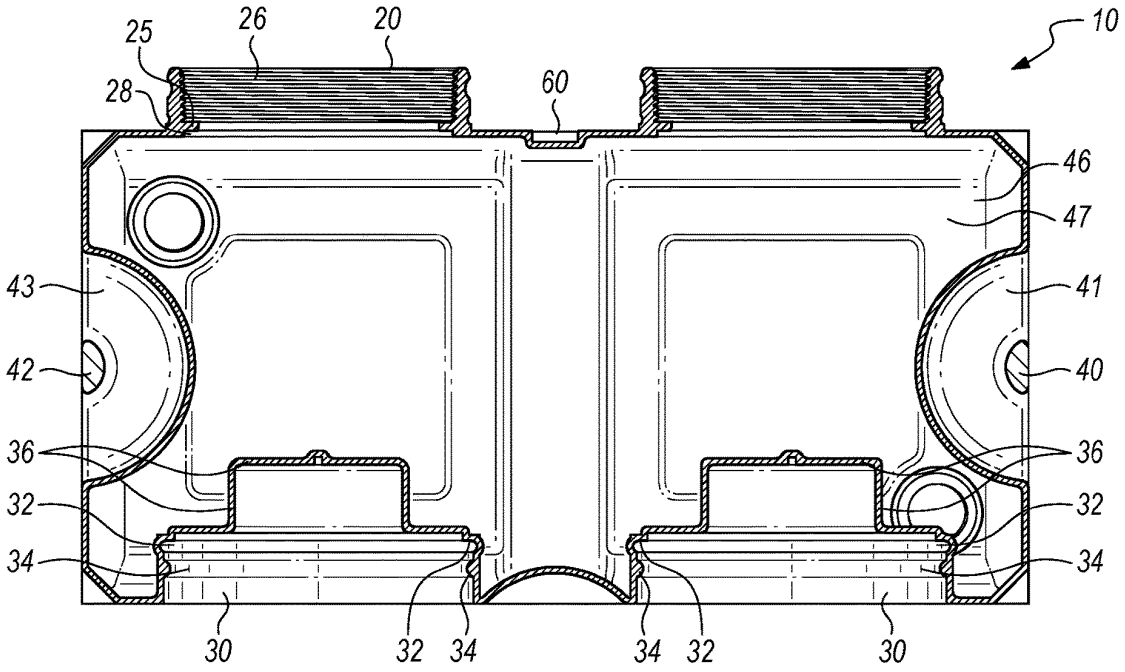
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FIG. 54

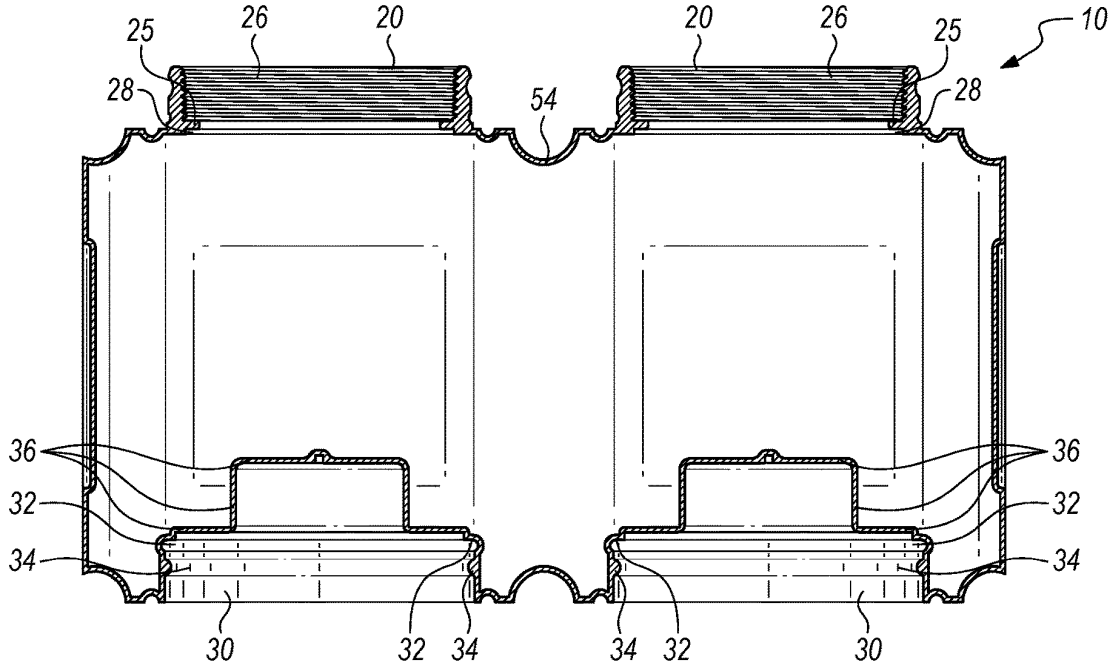
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FIG. 55

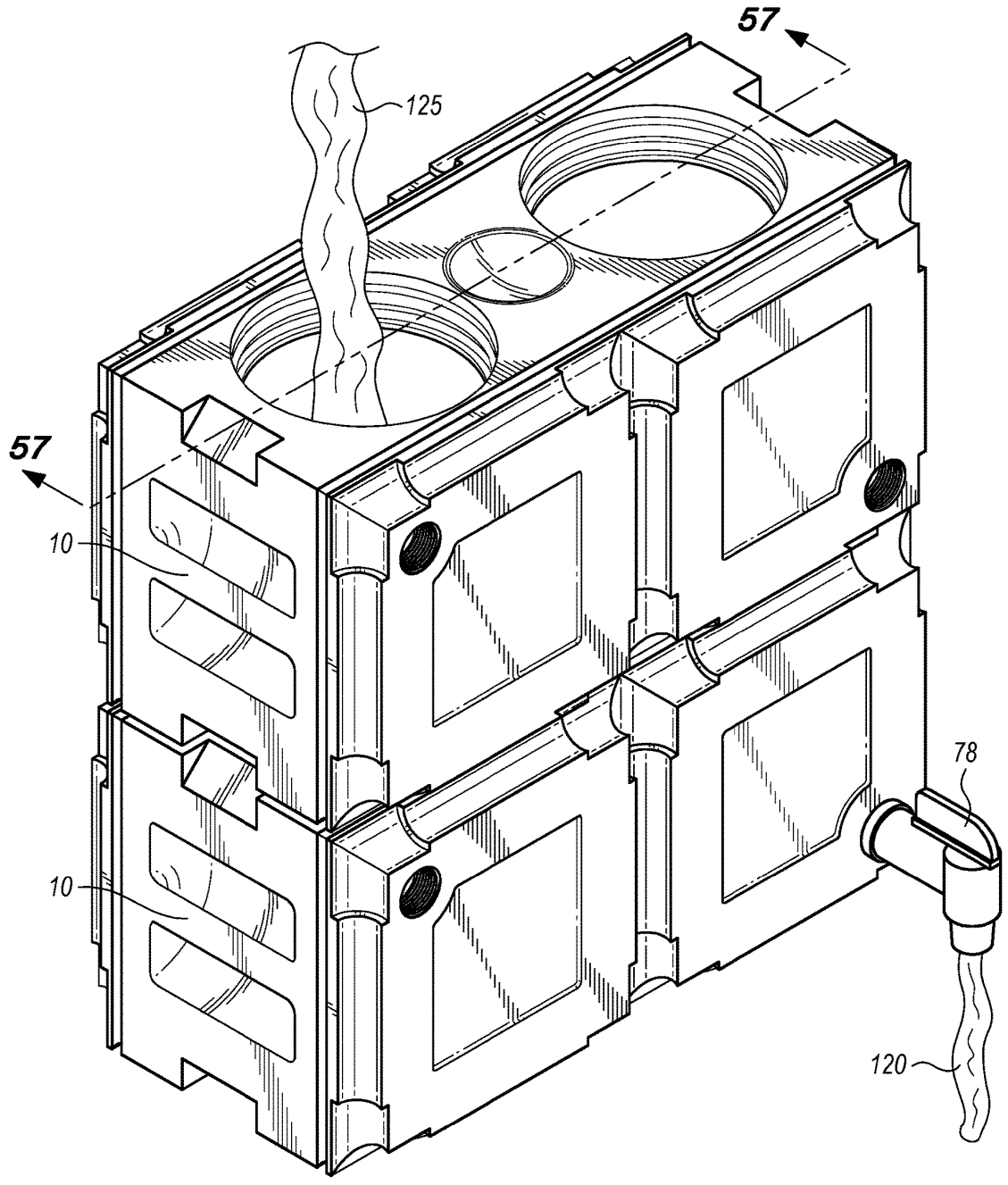


FIG. 56

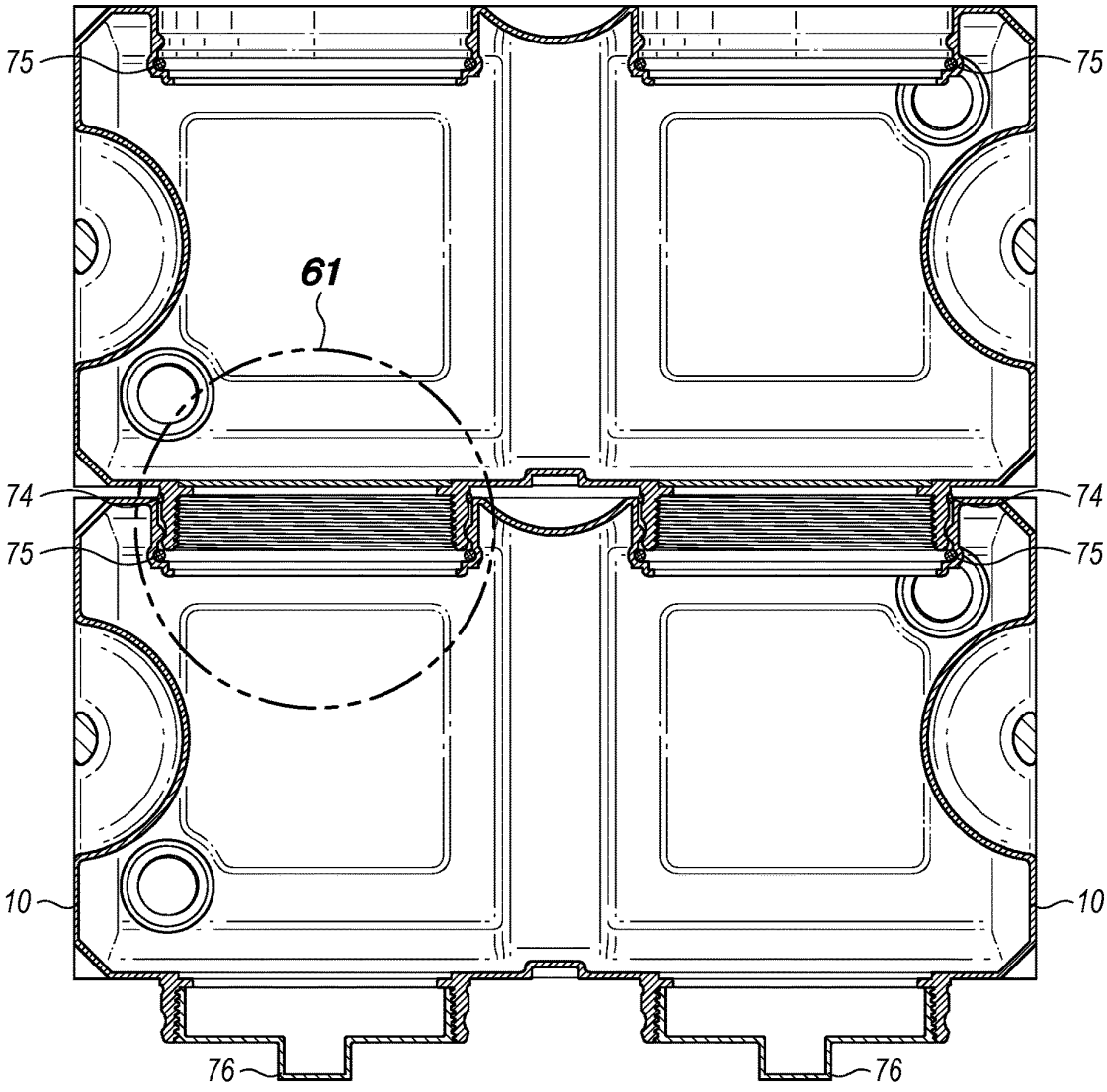


FIG. 57

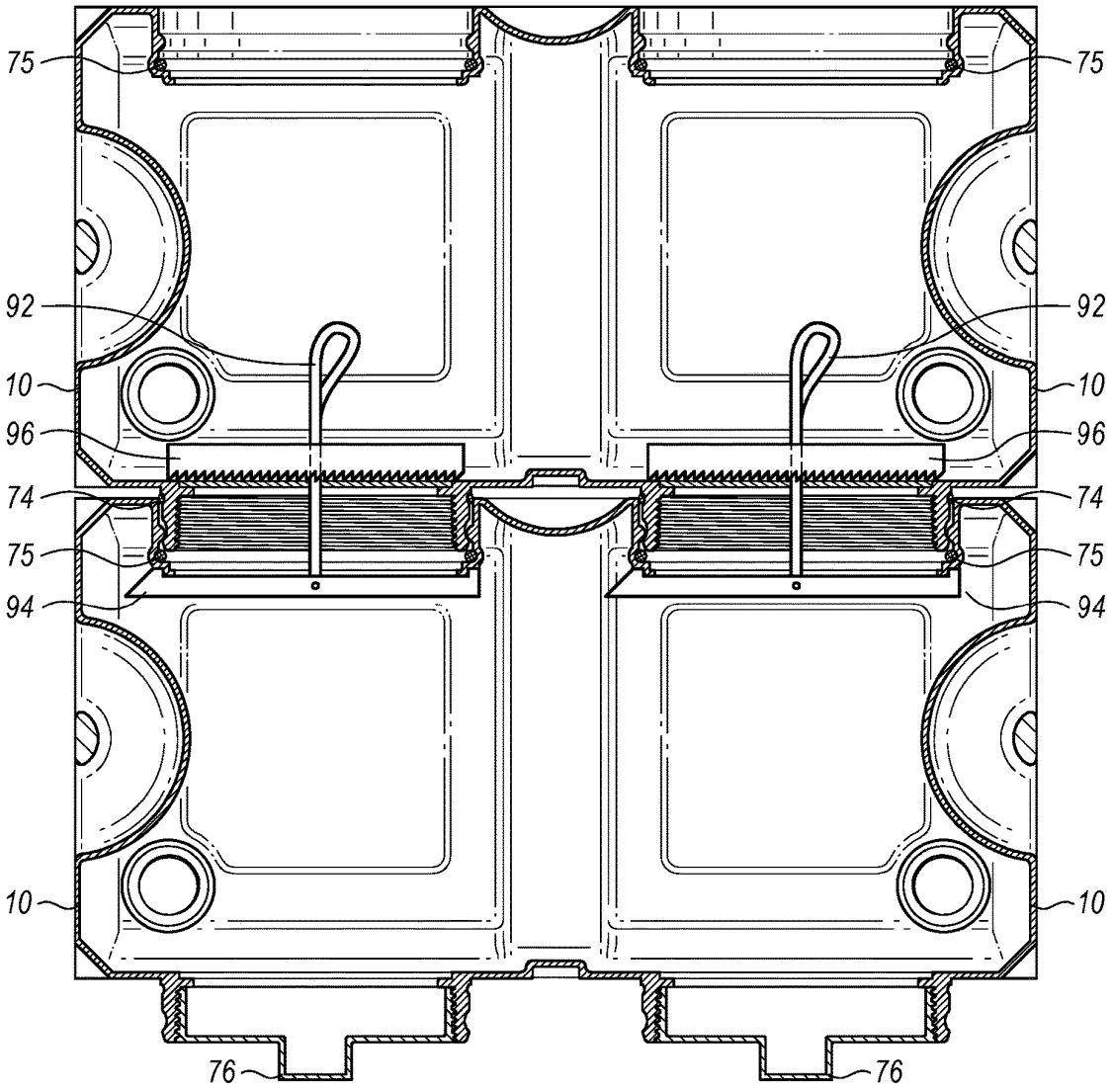


FIG. 58

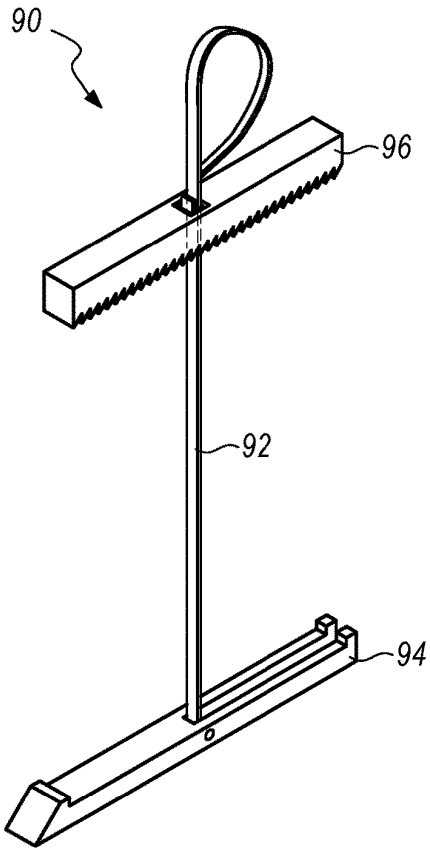


FIG. 59

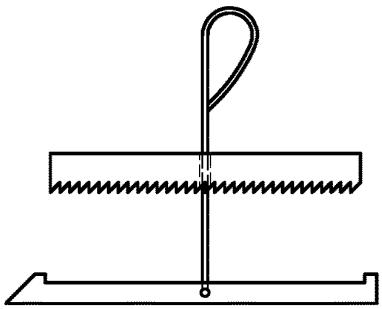


FIG. 59A

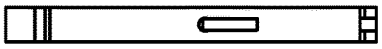


FIG. 59B

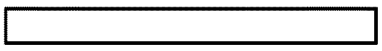


FIG. 59C

FIG. 59D

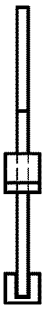
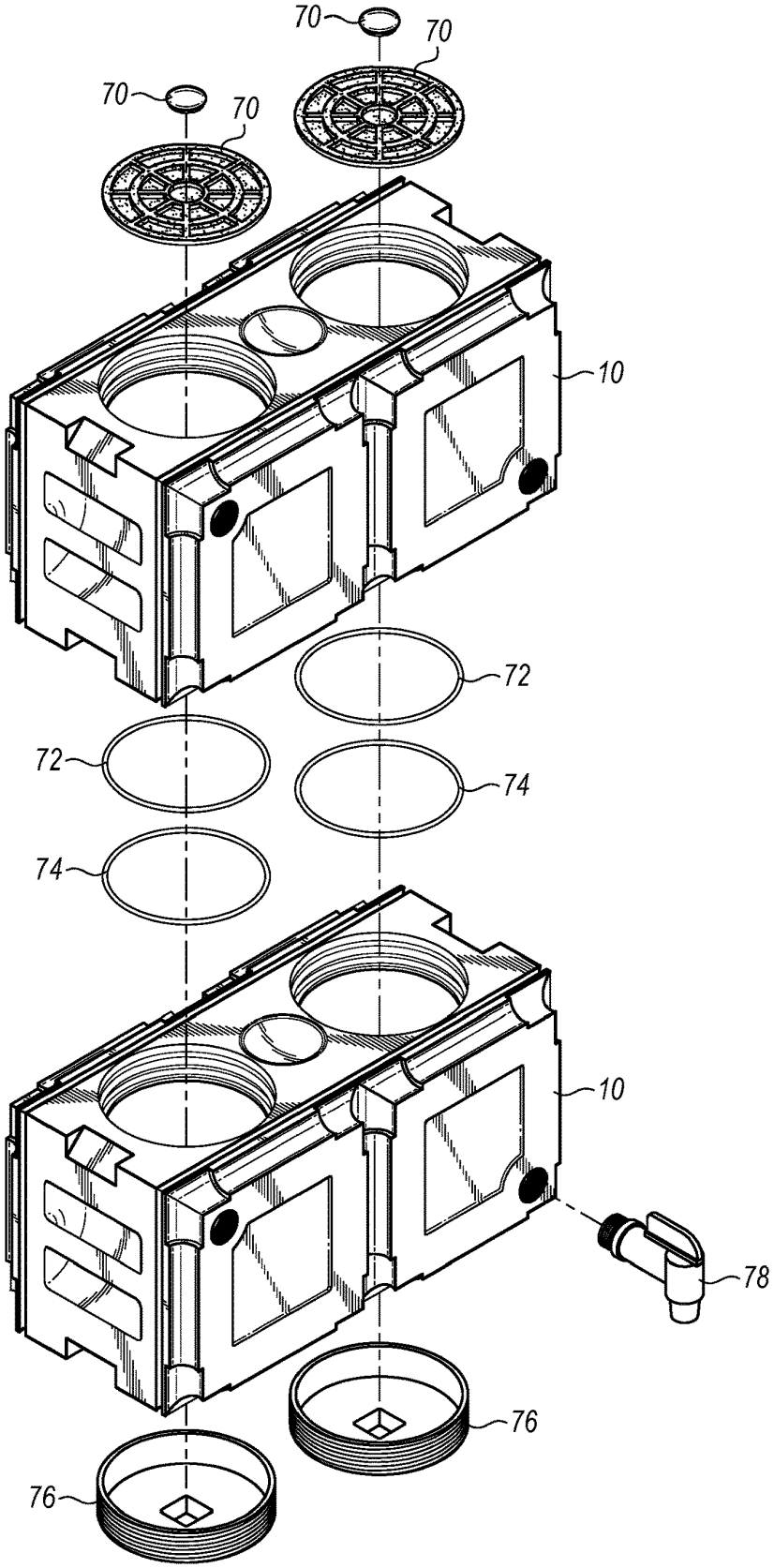


FIG. 59E

FIG. 60



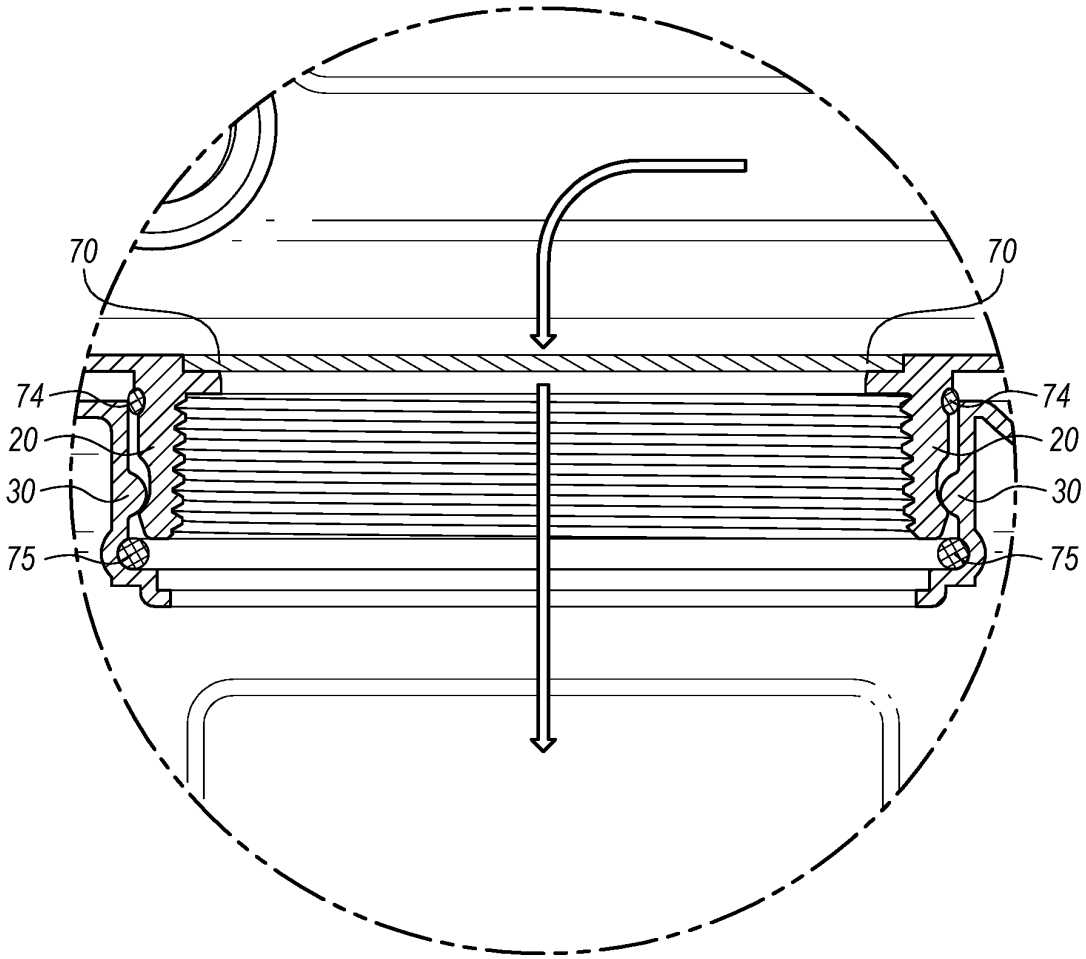


FIG. 61

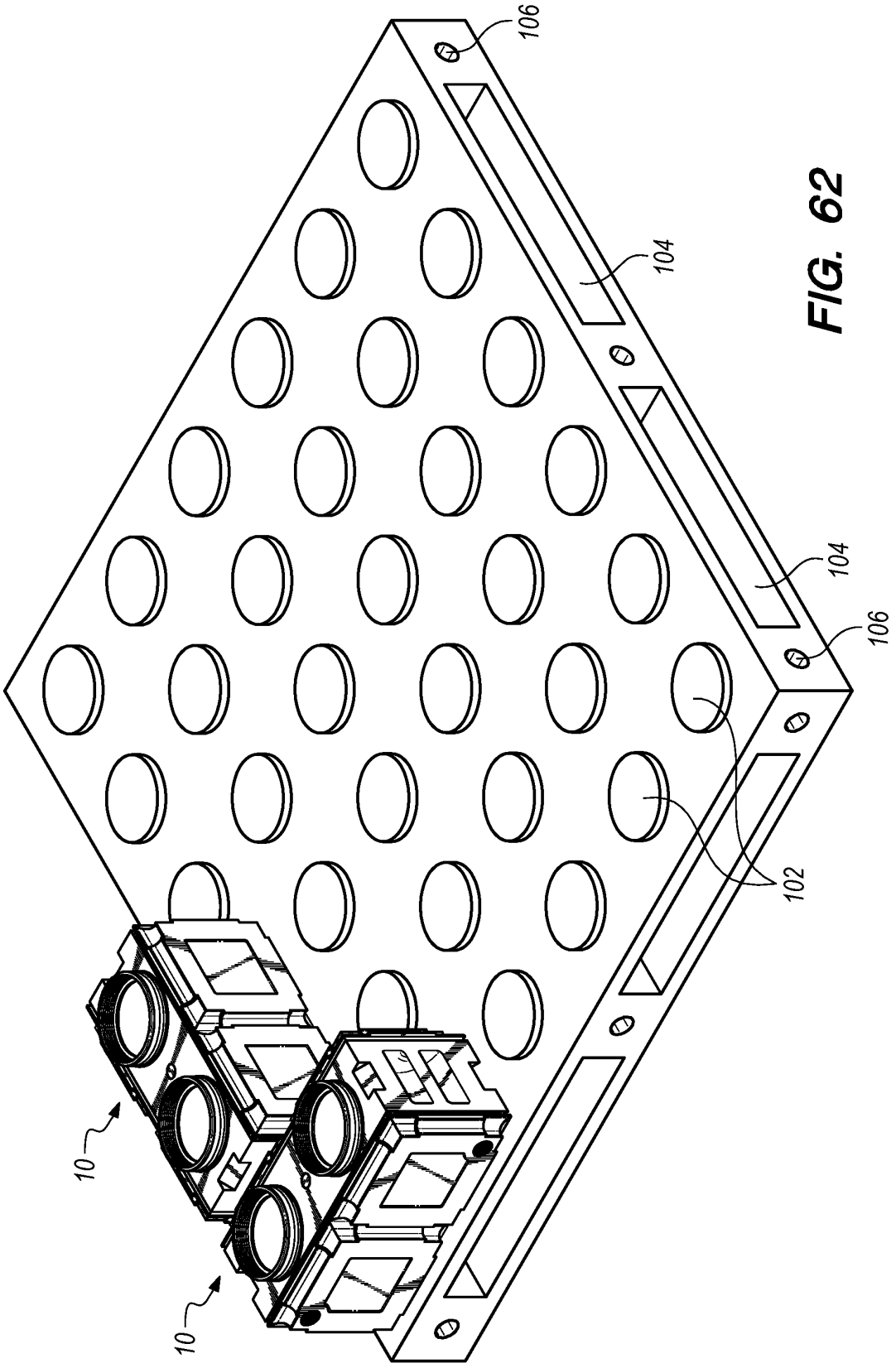


FIG. 62

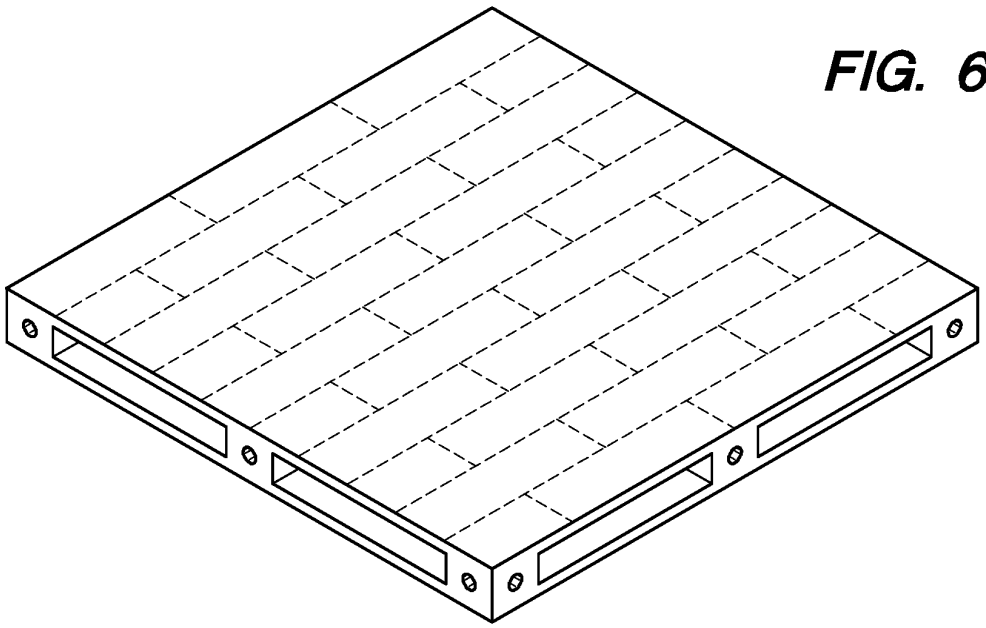


FIG. 62A

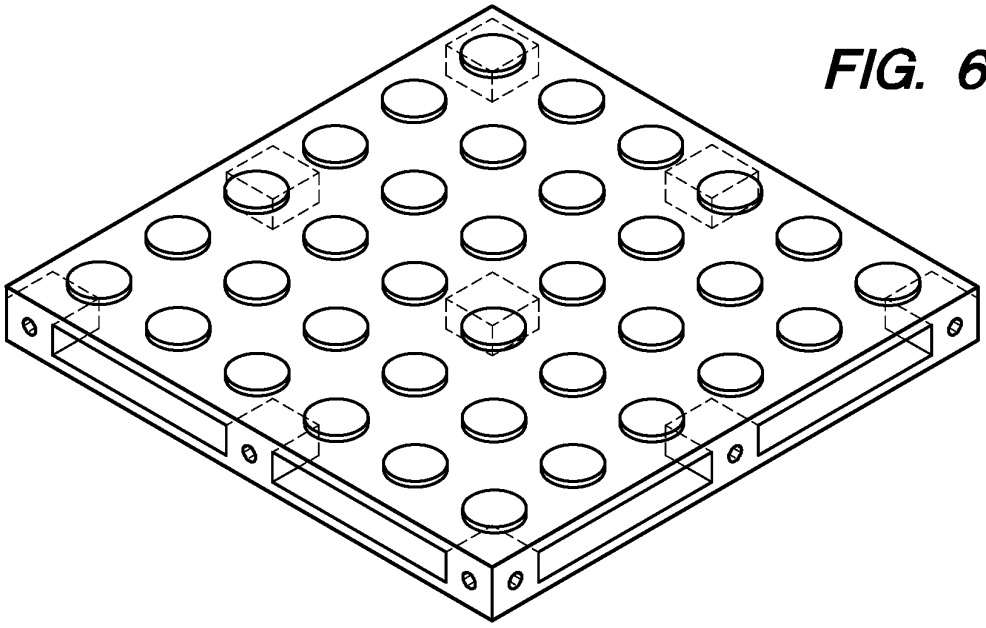


FIG. 62B

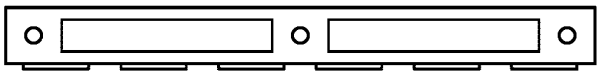


FIG. 62C

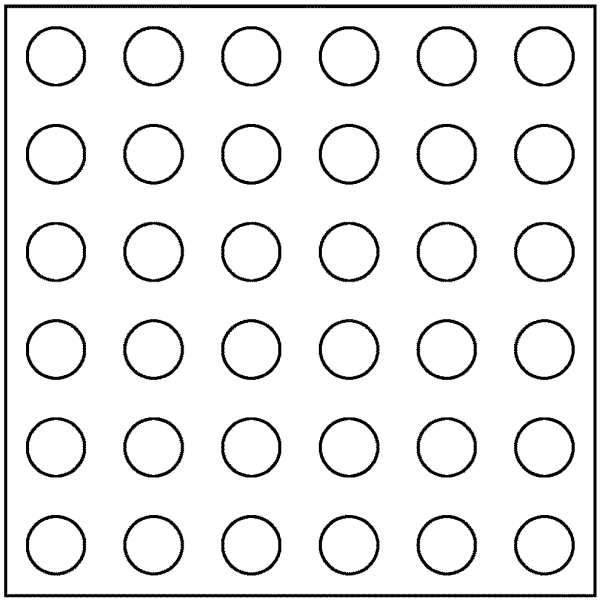


FIG. 62D

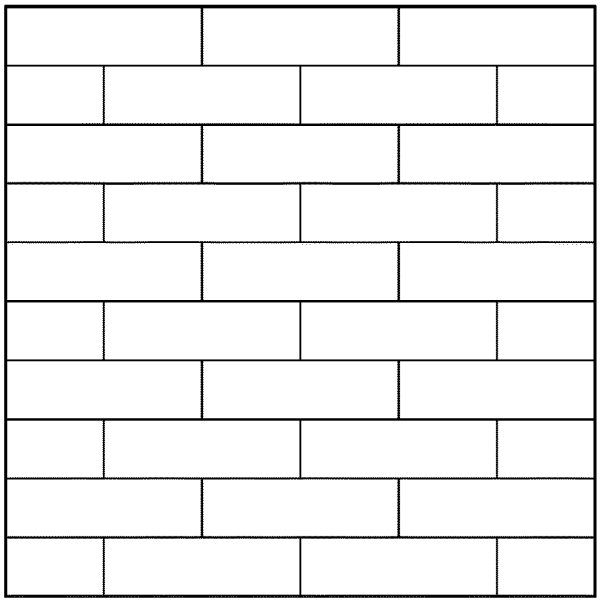


FIG. 62E

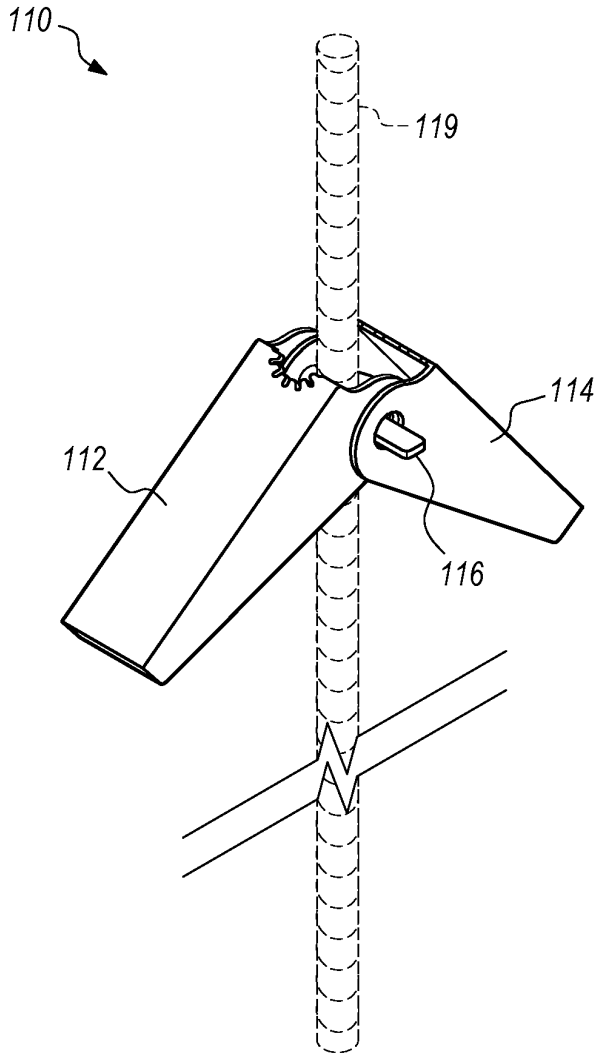


FIG. 63

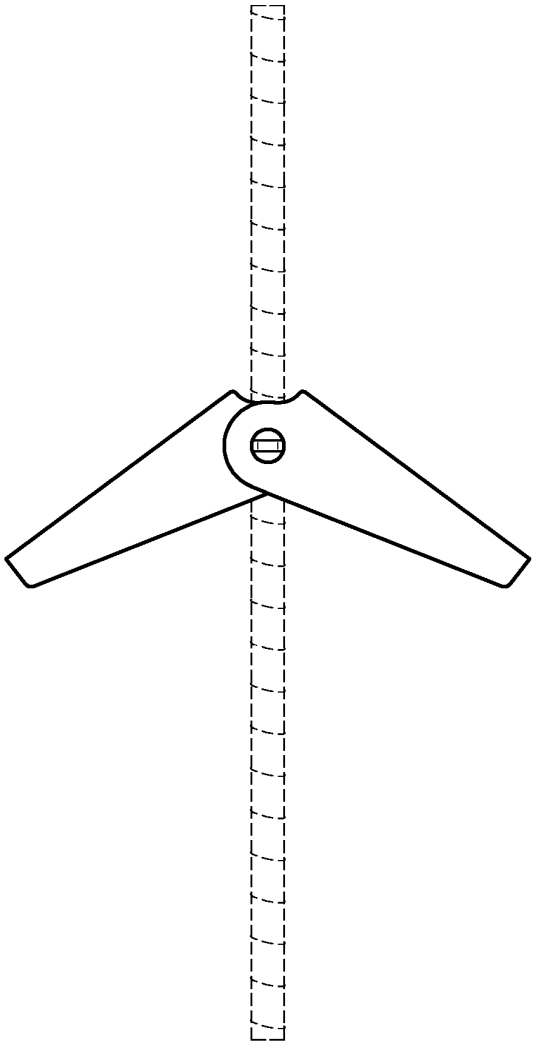


FIG. 63A

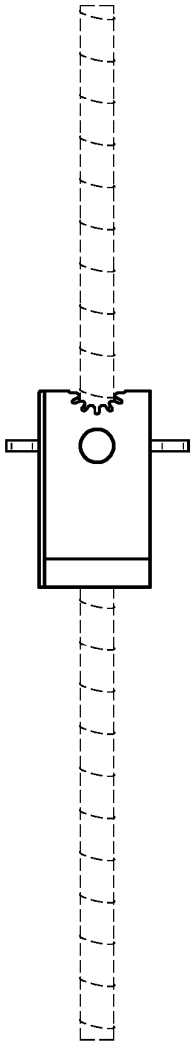


FIG. 63B

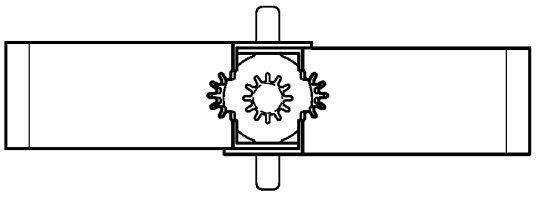


FIG. 63C

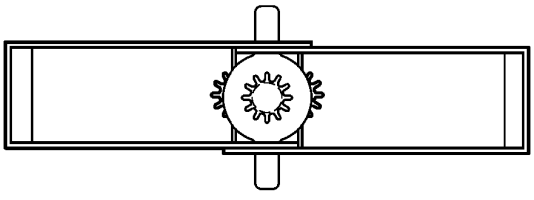


FIG. 63D

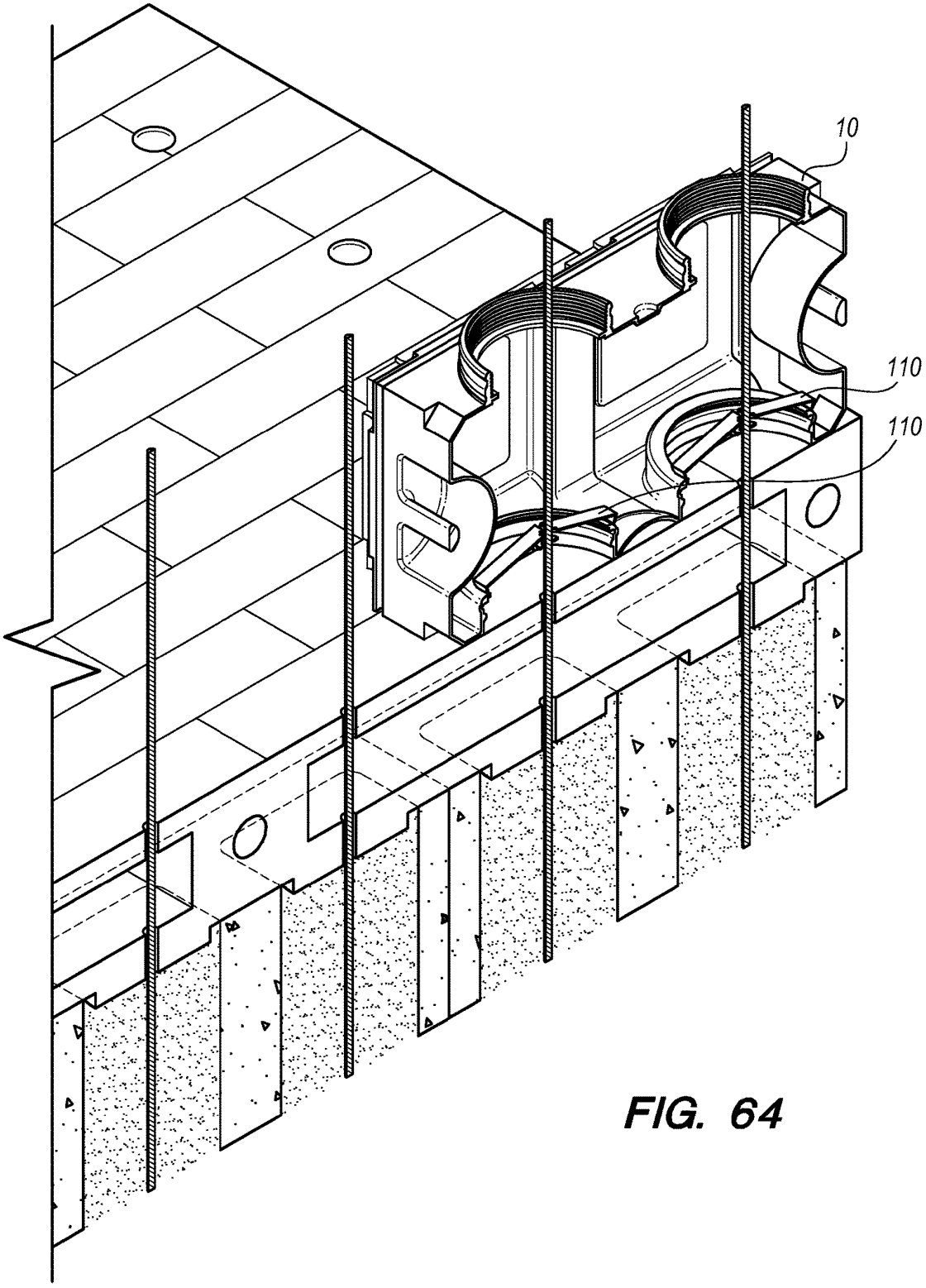


FIG. 64

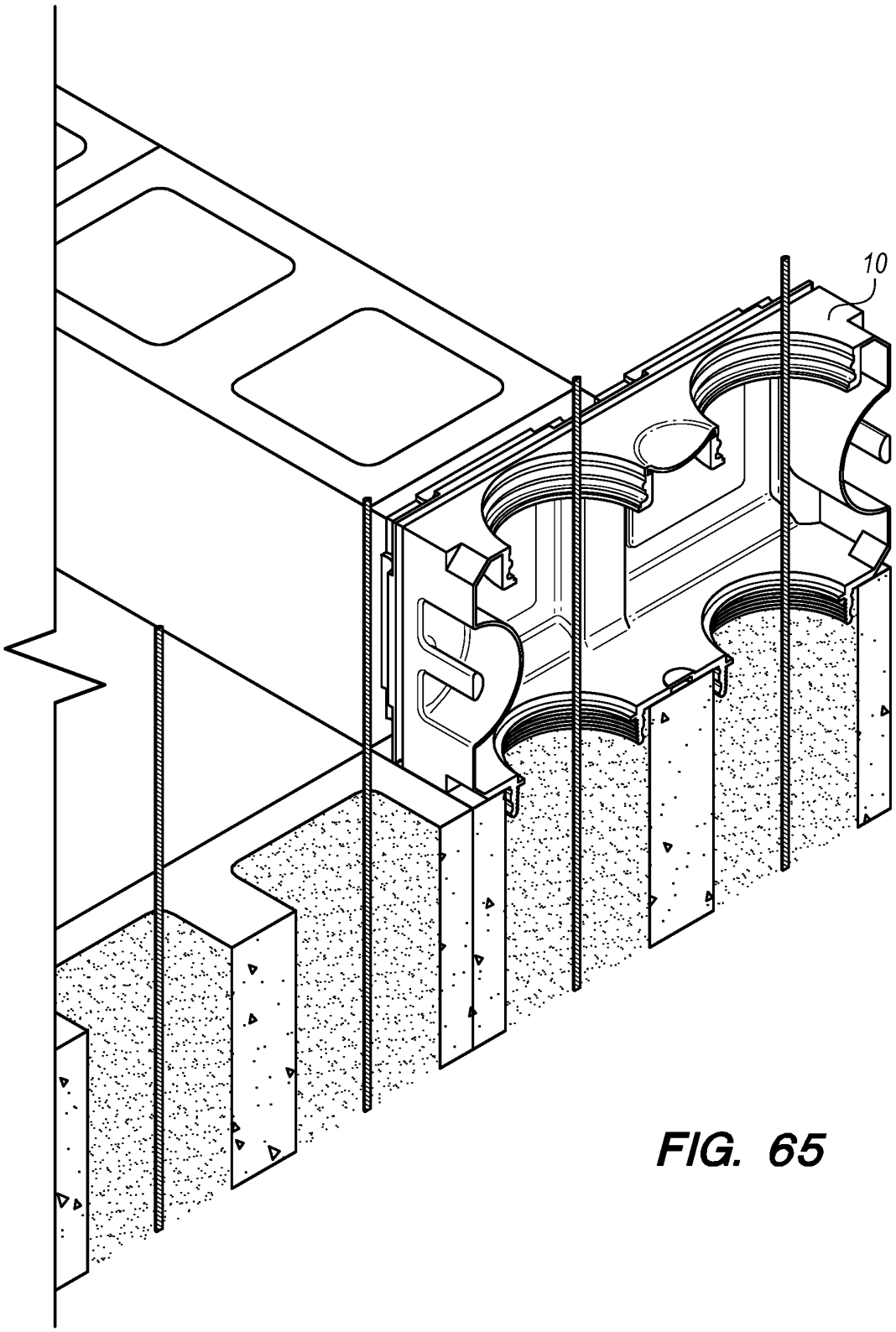


FIG. 65

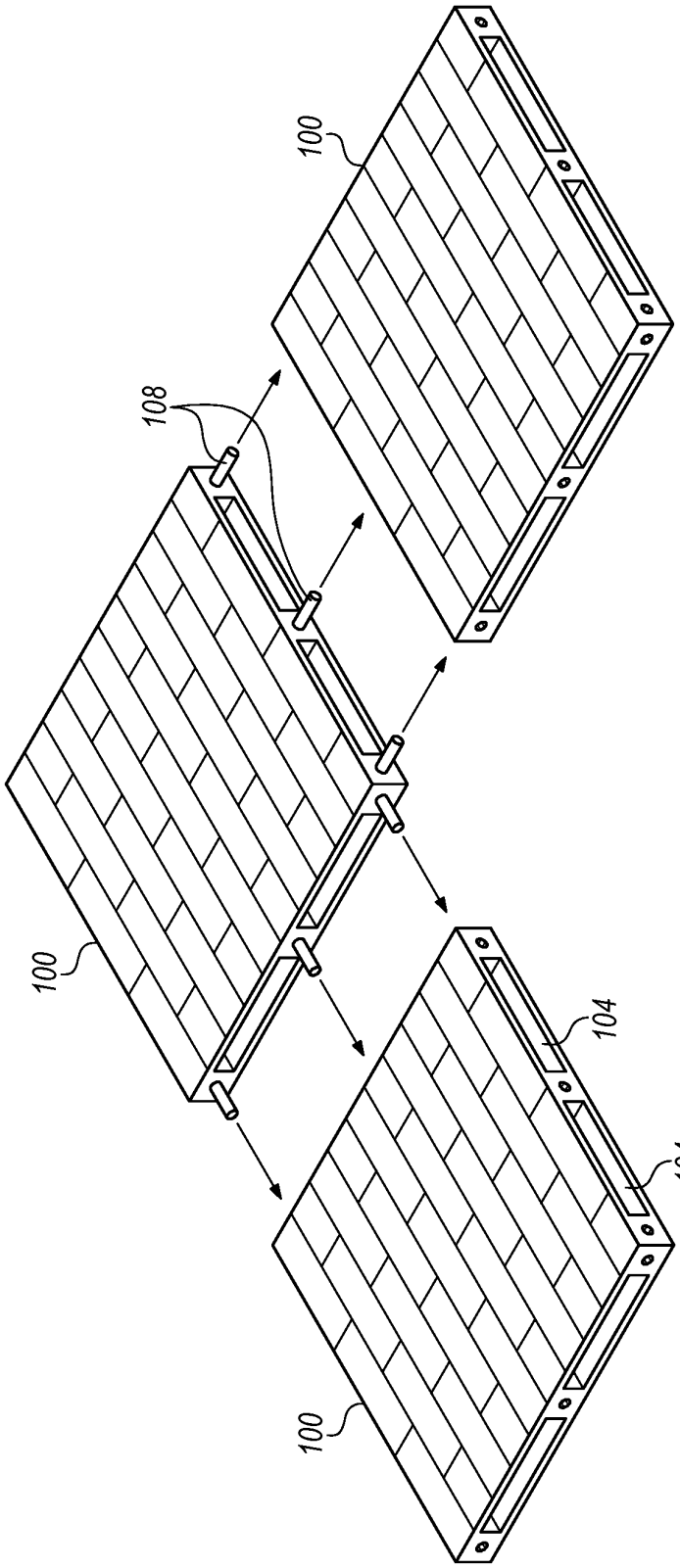


FIG. 66

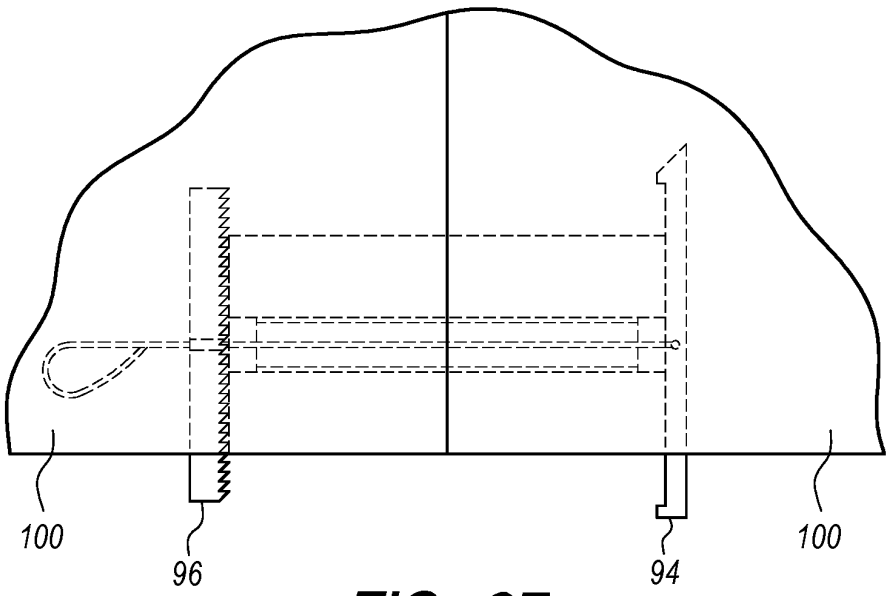


FIG. 67

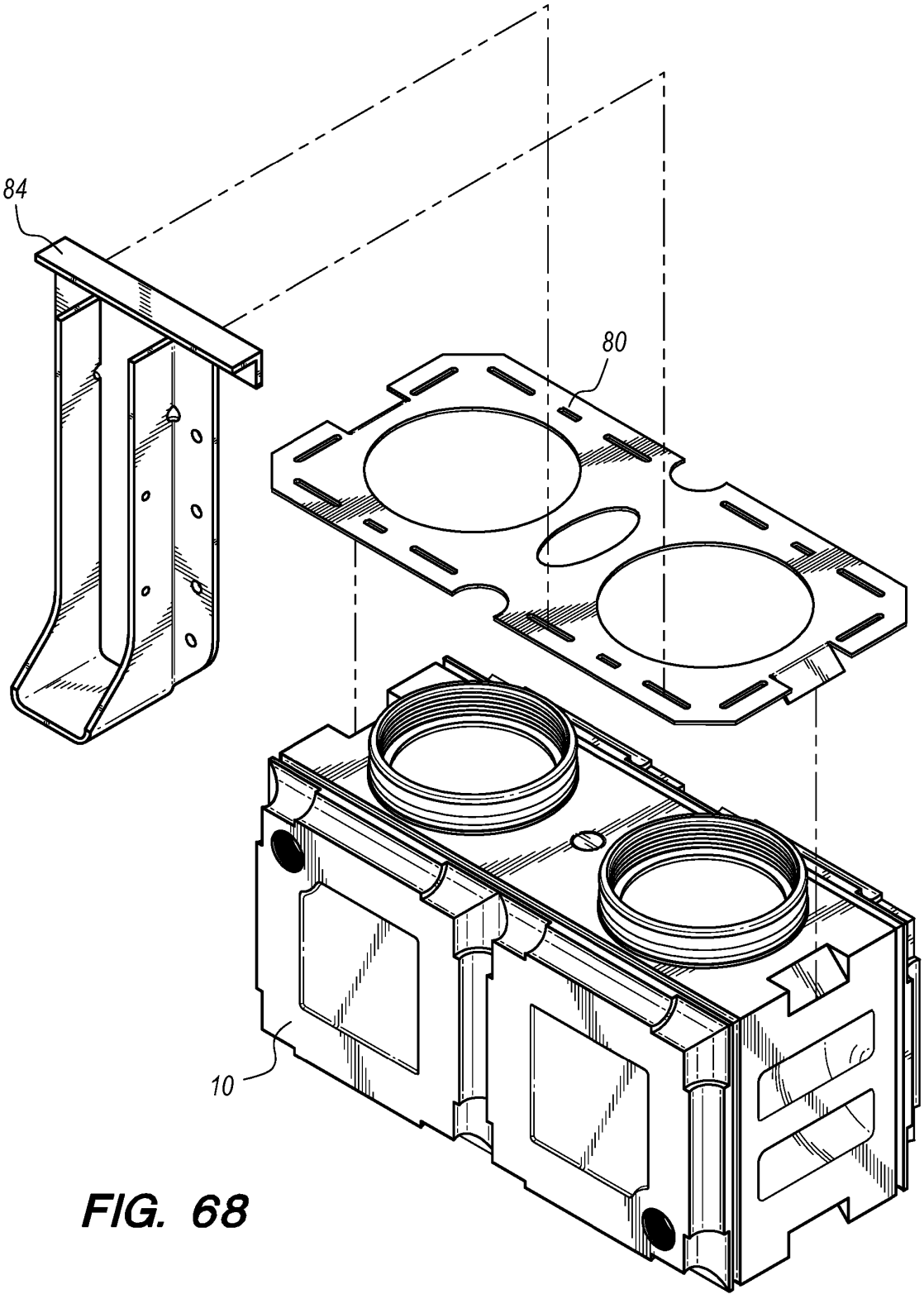


FIG. 68

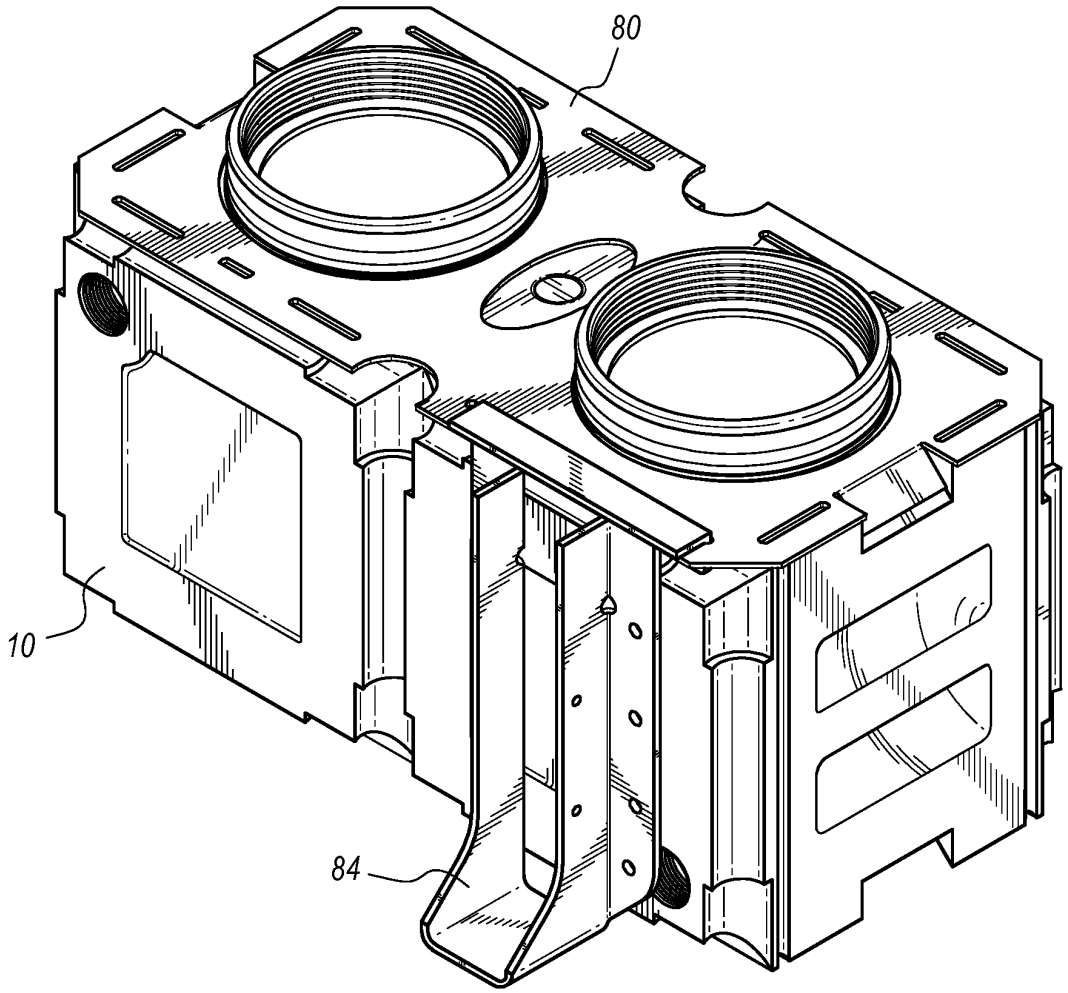


FIG. 69

BUILDING BLOCK CONTAINER

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention provides humanitarian aid and preemptive recycling. This invention relates to a hollow modular building block that is used to build a wall, shelter, structure, building, greenhouse, water filtration device, emergency shelter, pipeline, flood blockade, flood wall, dock, or raft where the hollow modular building block may also be used as a container to hold liquid or solid contents. Hollow modular building blocks are specially designed and shaped so that they may be ported together. Hollow modular building blocks the blocks are reversibly attachable to each other with or without fasteners. Hollow modular building blocks are specially designed and shaped to receive and hold pipe work and electrical conduit without any fasteners. Hollow modular building blocks are specially designed and shaped to also function as a water filtration device. The hollow modular building block system described below is a complete system for humanitarian aid that may be shipped to a disaster area, third world location, or anywhere with people in need, while filled with water or food, where the water or food may be consumed by those in need and the empty hollow modular building blocks may be used to build a wall, shelter, structure, building, greenhouse, water filtration device, emergency shelter, pipeline, flood blockade, dock, or raft.

2. Description of Related Art

There are many building blocks in the prior art, however, none have the special shape and features of the building block described here below. There are many containers in the prior art, however, none have the special shape and features of the container described here below.

BRIEF SUMMARY OF THE INVENTION

In is an aspect of building block container to be modular.

In is an aspect of building block container to be a watertight hollow container that can hold any type of liquid such as drinking water, milk, baby formula, juice, soup, or any other type of liquid.

In is an aspect of building block container to be a watertight hollow container that can hold any type of solid, granular solid, or powder such as grain, rice, corn, powdered milk, powdered baby formula, dehydrated food, concrete, cement, or any type of solid or powder, etc.

In is an aspect of building block container to be a watertight hollow container that can hold paperwork such as survival instructions, building instructions, evacuation instructions, public service announcements, political message, message to the people, or any other type of paperwork.

In is an aspect of building block container to be a hollow container that can hold just about anything that is desired.

In is an aspect of building block container to function as a building block wherein a plurality of such may be assembled or stacked together to form a wall, shelter, structure, building, greenhouse, water filtration device, emergency shelter, pipeline, flood blockade, dock, or raft.

In is an aspect of building block container to be a rigid block member or a rigid block-shaped member wherein a plurality of such may be used to build or erect a wall, shelter, structure, or building.

In is an aspect of building block container to be removeably attachable to all other building block containers without any fasteners.

In is an aspect of building block container to have at least one male cylindrical protrusion.

In is an aspect of building block container to have at least one female cylindrical cavity.

In is an aspect of male cylindrical protrusion to mate with female cylindrical cavity and vice versa.

In is an aspect of male cylindrical protrusion form a press-fit or snap-fit with female cylindrical cavity and vice versa.

In is an aspect of building block container to include a left handle and a right handle.

In is an aspect of building block container to include at least one pipe fitting port for the attachment of a pipe fitting.

In is an aspect of building block container to include pipe and conduit attachment surfaces or cavities wherein various pipes and conduits may be rigidly attached to building block containers without any fasteners.

In is an aspect of building block container to include a filter disc that may be inserted into building block container and used to filter water or any other liquid.

In is an aspect of building block container to include a series of bracket members that may be attached to one or more building block containers.

In is an aspect of the series of bracket members to support various support members such as a rafter, joist, beam, stud, post, header, truss, window, pre-hung door, siding, wall bond, insulation, or other support members associated with the construction of a wall, shelter, structure, or building.

In is an aspect of building block container to include an RFID electronic chip that may include various information such as: production dates, ship dates, fill dates, contents information, tracking information, building instructions, general instructions, requests, messages, or any other type of electronic information.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a top perspective view of building block container.

FIG. **2** is a bottom perspective view of building block container.

FIG. **3** is a front elevation view of building block container.

FIG. **4** is a right side elevation view of building block container.

FIG. **5** is a rear elevation view of building block container.

FIG. **6** is a left side elevation view of building block container.

FIG. **7** is a top plan view of building block container.

FIG. **8** is a bottom plan view of building block container.

FIG. **9** is a cross sectional view taken from section **9-9** of FIG. **1**.

FIG. **10** is a cross sectional view taken from section **10-10** of FIG. **1**.

FIG. **11** is a top perspective view of a second embodiment of building block container.

FIG. **12** is a bottom perspective view of a second embodiment of building block container.

FIG. **13** is a front elevation view of a second embodiment of building block container.

FIG. **14** is a right side elevation view of a second embodiment of building block container.

FIG. **15** is a rear elevation view of a second embodiment of building block container.

FIG. **16** is a left side elevation view of a second embodiment of building block container.

FIG. **17** is a top plan view of a second embodiment of building block container.

FIG. **18** is a bottom plan view of a second embodiment of building block container.

FIG. **19** is a cross sectional view taken from section **19-19** of FIG. **11**.

FIG. **20** is a cross sectional view taken from section **20-20** of FIG. **11**.

FIG. **21** is a perspective view of hanger bracket.

FIG. **22** is a top plan view of hanger bracket, the bottom plan view being a mirror image thereof.

FIG. **23** is a front elevation view of hanger bracket, the rear elevation view being a mirror image thereof.

FIG. **24** is a right side elevation view of hanger bracket, the left side elevation view being a mirror image thereof.

FIG. **25** is a top perspective view of filter disc.

FIG. **26** is a bottom perspective view of filter disc.

FIG. **27** is a top plan view of filter disc.

FIG. **28** is a front elevation view of filter disc, the rear elevation view being a mirror image thereof, the right side elevation view being a mirror image thereof, and the left side elevation view being a mirror image thereof.

FIG. **29** is a bottom plan view of filter disc.

FIG. **30** is a front perspective view of rafter hanger.

FIG. **31** is another front perspective view of rafter hanger.

FIG. **32** is a rear perspective view of rafter hanger.

FIG. **33** is a front elevation view of rafter hanger.

FIG. **34** is a right side elevation view of rafter hanger, the left side elevation view being a mirror image thereof.

FIG. **35** is a rear elevation view of rafter hanger.

FIG. **36** is a top plan view of rafter hanger.

FIG. **37** is a bottom plan view of rafter hanger.

FIG. **38** is a front perspective view of large rafter hanger.

FIG. **39** is another front perspective view of large rafter hanger.

FIG. **40** is a rear perspective view of large rafter hanger.

FIG. **41** is a front elevation view of large rafter hanger.

FIG. **42** is a right side elevation view of large rafter hanger, the left side elevation view being a mirror image thereof.

FIG. **43** is a rear elevation view of large rafter hanger.

FIG. **44** is a top plan view of large rafter hanger.

FIG. **45** is a bottom plan view of large rafter hanger.

FIG. **46** is a top perspective view of a third embodiment of building block container.

FIG. **47** is a bottom perspective view of a third embodiment of building block container.

FIG. **48** is a front elevation view of a third embodiment of building block container.

FIG. **49** is a right side elevation view of a third embodiment of building block container.

FIG. **50** is a rear elevation view of a third embodiment of building block container.

FIG. **51** is a left side elevation view of a third embodiment of building block container.

FIG. **52** is a top plan view of a third embodiment of building block container.

FIG. **53** is a bottom plan view of a third embodiment of building block container.

FIG. **54** is a cross sectional view taken from section **54-54** of FIG. **46**.

FIG. **55** is a cross sectional view taken from section **55-55** of FIG. **46**.

FIG. **56** is a perspective view of a liquid filtration device or water filtration device consisting of two stacked building block containers with two filter discs, four O-rings, two threaded plugs, and a threaded tap or faucet installed therein.

FIG. **57** is a cross sectional view taken from section **57-57** of FIG. **56**.

FIG. **58** is a cross sectional view taken from section **57-57** of FIG. **56** with the addition of two block ties holding the two stacked building block containers together.

FIG. **59** is a perspective view of block tie.

FIG. **59**A is a front elevation view of block tie, the rear elevation view being a mirror image thereof.

FIG. **59**B is a top plan view of block tie.

FIG. **59**C is a bottom plan view of block tie.

FIG. **59**D is left side elevation of block tie.

FIG. **59**E is a right side elevation of block tie.

FIG. **60** is an assembly view of the liquid filtration device or water filtration device depicted in FIG. **56**.

FIG. **61** is an enlarged cross sectional view taken from section **61** of FIG. **57** depicting a press fit or snap fit between two attached building block containers.

FIG. **62** is a perspective view of a floor pallet with two building block containers stacked thereon.

FIG. **62**A is a bottom perspective view of floor pallet.

FIG. **62**B is a top perspective view of floor pallet.

FIG. **62**C is a front elevation view of floor pallet, the rear elevation view, right side elevation, and left side elevation being a mirror image thereof.

FIG. **62**D is a top plan view of floor pallet.

FIG. **62**E is a bottom plan view of floor pallet.

FIG. **63** is a perspective view of a rebar toggle.

FIG. **63**A is a front elevation view of rebar toggle, the rear elevation view being a mirror image thereof.

FIG. **63**B is left side elevation of rebar toggle, the right side elevation being a mirror image thereof.

FIG. **63**C is a top plan view of rebar toggle.

FIG. **63**D is a bottom plan view of rebar toggle.

FIG. **64** is a cross sectional view of a building block container attached to a floor pallet using two rebar toggles.

FIG. **65** is another cross sectional view of a building block container attached to a floor pallet without rebar toggles.

FIG. **66** is an assembly view of three pallet floors attached together with six dowels.

FIG. **67** is a cross sectional view of two pallet floors attached together with a block tie, wherein the block tie squeezes a fork lift notch from one floor pallet against an adjacent fork lift notch from the second floor pallet.

FIG. **68** is an assembly view of a building block container with a hanger bracket and a rafter hanger attached thereto.

FIG. **69** is a perspective view of a building block container with a hanger bracket and a rafter hanger attached thereto.

DEFINITION LIST

Term	Definition
10	Building Block Container
11	Upper Surface of Building Block Container
12	Lower Surface Building Block Container
13	Front Surface Building Block Container
14	Rear Surface of Building Block Container
15	Left Surface Building Block Container
16	Right Surface Building Block Container
20	Male Cylindrical Protrusion
22	Male Cylindrical Protrusion O-Ring Groove
24	Locking Ridge Groove
25	Seal Lip
26	Female Thread on Male Cylindrical Protrusion
28	Filter Disc Seat

-continued

DEFINITION LIST

Term	Definition
30	Female Cylindrical Cavity
32	Female Cylindrical Cavity O-Ring Groove
34	Locking Ridge
36	Female Cylindrical Cavity Knockout Section
38	Large Diameter Female Cylindrical Cavity Score Line
39	Small Diameter Female Cylindrical Cavity Score Line
40	Right Handle
41	Right Handle Well
42	Left Handle
43	Left Handle Well
44	Front Threaded Port
45	Front Threaded Port Knockout Section
46	Rear Threaded Port
47	Rear Threaded Port Knockout Section
48	Front Perimeter O-Ring Groove
49	Rear Perimeter O-Ring Groove
50	Upper Hanger Bracket Retaining Slot
51	Lower Hanger Bracket Retaining Slot
52	Straight Conduit Quarter Round
53	L-Shaped Conduit Quarter Round
54	Straight Conduit Half Round
55	T-Shaped Conduit Half Round
56	Square or Rectangular Label Recess
58	Head Carrying Dimple
60	RFID Chip
70	Filter Disc
71	Filter Disc Frame
72	At Least One Layer of Filter Media
73	Filter Center
74	Male Cylindrical Protrusion O-Ring
75	Female Cylindrical Cavity O-Ring
76	Threaded Plug
78	Threaded Tap or Faucet
80	Hanger Bracket
82	Hanger Bracket Tab
83	Hanger Bracket Slot
84	Rafter Hanger
85	Rafter Hanger Vertical Slot
86	Rafter Hanger Vertical Tine
87	Large Rafter Hanger
88	Large Rafter Hanger Vertical Slot
89	Large Rafter Hanger Vertical Tine
90	Block Tie
92	Block Tie Strap
94	Block Tie Toggle
96	Block Tie Ratchet Stop
97	Rafter Hanger Foot Tab
99	Large Rafter Hanger Foot Tab
100	Pallet Floor
102	Pallet Floor Male Cylindrical Protrusion
104	Fork Lift Notch
106	Dowel Hole
108	Dowel
110	Rebar Toggle
112	Left Half
114	Right Half
116	Front Pin
118	Rear Pin
119	Rebar
120	Clean Water
125	Dirty Water

DETAILED DESCRIPTION OF THE INVENTION

Building block container **10** is a building block. A plurality of building block containers **10** can be used to build or erect a temporary or permanent a wall, shelter, structure, or building. Building block container **10** functions similarly to a cinder block, brick, or other masonry block that is used to build or erect a wall, shelter, structure, or building. Building block container **10** may have a length of about 5 inches to 10 yards. Building block container **10** may have a width of about 5 inches to 10 yards. Building block container **10** may have a height of about 5 inches to 10 yards. Building block containers **10** are stackable and reversibly attachable to each other without fasteners. Building block containers **10** do not require any fasteners such as screws, bolts, nails, spikes, ties, clips, etc. in order to stack onto each other or to rigidly attach to each other. Optionally, fasteners, boding agent, adhesive, or glue may be used. Building block container **10** can be made of any known material such as plastic, fiberglass, resin, metal, carbon fiber, wood, foam, concrete, cement, masonry, glass, polyethylene, HDPE, LDPE, PLA, ABS, or similar. Building block container **10** may include an anti-bacterial or antimicrobial agent to make the block mold resistant. Building block container **10** may be transparent, translucent, or opaque. Building block container **10** may be a one-piece molded product or may be assembled from multiple component pieces. Building block container **10** is a hollow structure with an open interior that can be used to store or hold any type of liquid such as: drinking water, milk, baby formula, liquid eggs, protein drinks, vitamin drinks, vegetable juice, fruit juice, soup, cooking oil, any type of canned food, fuel, diesel, gasoline, kerosene, or any type of liquid. Building block container **10** is a hollow structure with an open interior that can be used to store or hold any type of solid or granular solid such as: grain, rice, corn, powdered milk, powdered baby formula, sugar, salt, dehydrated food, freeze dried food, any type of dried food, potatoes, vegetables, fruit, filtration media, concrete, cement, dog food, kitty litter, or any type of solid.

The design of base mode building block container **10** is depicted in FIGS. **1-10**. Building block container **10** is a rigid hollow rectangular cuboid member or an essentially rectangular cuboid member. Building block container **10** has an upper surface **11**, a lower surface **12**, a front surface **13**, a rear surface **14**, a left surface **15**, a right surface **16**, and a hollow interior. Upper surface **11** is a rigid member with a front edge, a rear edge, a right edge, a left edge, an inner surface, and an outer surface. Lower surface **12** is a rigid member with a front edge, a rear edge, a right edge, a left edge, an inner surface, and an outer surface. Front surface **13** is a rigid member with an upper edge, a lower edge, a right edge, a left edge, an inner surface, and an outer surface. Rear surface **14** is a rigid member with an upper edge, a lower edge, a right edge, a left edge, an inner surface, and an outer surface. Left surface **15** is a rigid member with an upper edge, a lower edge, a front edge, a rear edge, an inner surface, and an outer surface. Right surface **16** is a rigid member with an upper edge, a lower edge, a front edge, a rear edge, an inner surface, and an outer surface. Upper surface **11** and lower surface **12** are parallel with each other and perpendicular to front surface **13**, rear surface **14**, left surface **15**, and right surface **16**. Front surface **13** and rear surface **14** are parallel with each other and perpendicular to upper surface **11**, lower surface **12**, left surface **15**, and right surface **16**. Left surface **15** and right surface **16** are parallel with each other and perpendicular to upper surface **11**, lower surface **12**, front surface **13**, and rear surface **14**. Each of the four edges of upper surface **11**, lower surface **12**, front surface **13**, rear surface **14**, left surface **15**, and right surface **16** is connected to or continuous with all four adjacent surfaces and at all four adjacent corners in a liquid-tight or watertight fashion. Except one or more male cylindrical protrusions **20**, the hollow interior of building block container **10** is a liquid-tight or watertight container.

The upper surface **11** of building block container **10** comprises a male cylindrical protrusion **20**. Male cylindrical protrusion **20** is a rigid cylindrical shaped protrusion with

open ends. Male cylindrical protrusion **20** has a diameter that is less than the length of building block container **10** or about 1 to 25 inches. Male cylindrical protrusion **20** has an outer surface, an outer diameter, an inner surface, an inner diameter, a first end, a second end, and a longitudinal axis. The first end of male cylindrical protrusion **20** is contiguous with the upper surface **11** of building block container **10**. The first end of male cylindrical protrusion **20** is rigidly attached to the upper surface **11** of building block container **10** in a liquid-tight or watertight fashion. The first end of male cylindrical protrusion **20** is open to provide access to the hollow interior of building block container **10**. The longitudinal axis of male cylindrical protrusion **20** is perpendicular to the upper surface **11** of building block container **10**. The second end of male cylindrical protrusion **20** protrudes outward from the upper surface **11** of building block container **10**. The second end of male cylindrical protrusion **20** is open to provide access to the hollow interior of building block container **10**. Male cylindrical protrusion **20** has an O-ring groove **22** around the entire the outer surface of male cylindrical protrusion **20**. O-ring groove **22** is half torus-shaped groove, channel, or cavity that encircles the entire outer surface of male cylindrical protrusion **20**.

O-ring groove **22** is located at the contiguous connection point or seam between the upper surface **11** of building block container **10** at the first end of male cylindrical protrusion **20**. O-ring groove **22** functions to provide an O-ring seat or nest location for a male cylindrical protrusion O-ring **74**. Male cylindrical protrusion O-ring **74** is a mechanical torus-shaped gasket or loop of elastomer with a round cross-section. Male cylindrical protrusion O-ring **74** is designed to be seated in O-ring groove **22** and compressed during assembly between two building block containers **10**, creating a seal at the interface of the parts. Male cylindrical protrusion O-ring **74** functions to provide a seal between the male cylindrical protrusion **20** of one building block container **10** and the female cylindrical cavity **30** of another building block container **10** stacked or reversibly attached thereto. Male cylindrical protrusion **20** has a locking ridge groove **24** on the outer surface of male cylindrical protrusion **20**. Locking ridge groove **24** is a half torus-shaped groove, channel, or cavity that encircles the entire outer surface of male cylindrical protrusion **20**. Locking ridge groove **24** is sized and shaped to make a press fit or snap fit with a locking ridge **34** on female cylindrical cavity **30**. A press fit is defined as an interference fit or friction fit that is a fastening between two parts achieved by friction after the parts are pushed together. A snap fit is a press fit using a snap member. Locking ridge groove **24** is located in between the O-ring groove **22** and the second end of male cylindrical protrusion **20**. Locking ridge groove **24** works in tandem with locking ridge **34** on female cylindrical cavity **30** to mount, lock, or snap onto locking ridge **34** when two building block containers **10** are stacked together or reversibly attached. Male cylindrical protrusion **20** has a seal lip **25** on the inner surface of male cylindrical protrusion **20**. Seal lip **25** is a rigid annulus shaped member protruding from the inner surface of male cylindrical protrusion **20**. Seal lip **25** is located at the contiguous connection point or seam between the upper surface **11** of building block container **10** at the first end of male cylindrical protrusion **20**. Seal lip **25** functions to provide washer seat or sealing surface for any type pipe fitting (not depicted) that may be attached to male cylindrical protrusion **20**. Male cylindrical protrusion **20** has a female thread **26** on the inner surface of male cylindrical protrusion **20**. Female thread **26** runs from the seal lip **25** to the second end of male cylindrical protrusion **20**. Female thread **26** functions to provide a threaded attachment point for a male threaded member such as a threaded plug **76** or other male threaded pipe fitting (not depicted). When block container **10** is shipped with liquid or solid inside, a threaded plug **76** is typically used to seal off male cylindrical protrusion **20**.

The upper surface of **11** of building block container **10** may further comprise a filter disc seat **28**. Filter disc seat **28** is an annulus shaped cavity in the inner surface of the upper surface **11** of building block container **10**. Filter disc seat **28** is centered around the male cylindrical protrusion **20** and concentric with the male cylindrical protrusion **20**. Filter disc seat **28** is an annulus shaped cavity around the male cylindrical protrusion **20** on the inner surface of the upper surface **11** of building block container **10**. Filter disc seat **28** functions to receive and hold a filter disc **70**. Filter disc **70** is a disc shaped filter that may be placed in filter disc seat **28** or snapped into filter disc seat **28** as described below. Filter disc **70** is sized and shaped to form a press fit or snap fit within filter disc seat **28** and vice versa. The diameter and depth of filter disc seat **28** is sized to form a press fit or snap fit with those of filter disc **70**.

The lower surface **12** of building block container **10** comprises a female cylindrical cavity **30**. Female cylindrical cavity **30** is a rigid cylindrical shaped cavity with open ends. Female cylindrical cavity **30** has a diameter that is less than the length of building block container **10** and a length that is about 1 to 25 inches. Female cylindrical cavity **30** has an outer surface, an outer diameter, an inner surface, an inner diameter, a first end, a second end, and a longitudinal axis. The first end of female cylindrical cavity **30** is contiguous with the lower surface **12** of building block container **10**. The first end of female cylindrical cavity **30** is rigidly attached to the lower surface **12** of building block container **10** in a liquid-tight or watertight fashion. The first end of female cylindrical cavity **30** is open to provide access to female cylindrical cavity knockout section **36**. The longitudinal axis of female cylindrical cavity **30** is perpendicular to the lower surface **12** of building block container **10**. The second end of female cylindrical cavity **30** protrudes inward from the lower surface **12** of building block container **10**. The second end of female cylindrical cavity **30** is located in the interior of building block container **10**. Male cylindrical protrusion **20** is sized and shaped to nest within female cylindrical cavity **30** and vice versa. Male cylindrical protrusion **20** is sized and shaped to form a slip fit or press fit with female cylindrical cavity **30** and vice versa. The outer diameter of male cylindrical protrusion **20** is sized to form a slip fit or press fit with the inner diameter of female cylindrical cavity **30** and vice versa. Female cylindrical cavity **30** has a locking ridge **34** on the inner surface of female cylindrical cavity **30**. Locking ridge **34** is a half torus-shaped ridge, protrusion, or projection that encircles the entire inner surface of female cylindrical cavity **30**. Locking ridge **34** is sized and shaped to make a press fit or snap fit with the locking ridge groove **24** on male cylindrical protrusion **20**. Locking ridge **34** is located just above the contiguous connection point or seam between the lower surface **12** of building block container **10** and the first end of female cylindrical cavity **30**. Locking ridge **34** works in tandem with locking ridge groove **24** on male cylindrical protrusion **20** to mount, lock, or snap into locking ridge groove **24** when two building block containers **10** are stacked or reversibly attached together. Female cylindrical cavity **30** has an O-ring groove **32** around the entire inner surface of female cylindrical cavity **30**. O-ring groove **32** is half torus-shaped groove, channel, or cavity that encircles

the entire inner surface of female cylindrical cavity **30**. O-ring groove **32** is located just above locking ridge **34** or between the locking ridge **34** and the second end of female cylindrical cavity **30**. O-ring groove **32** is adjacent to a large diameter female cylindrical cavity score line **38**. O-ring groove **32** functions to provide an O-ring seat or nest location for a female cylindrical cavity O-ring **75**. Female cylindrical cavity O-ring **75** is a mechanical torus-shaped gasket or loop of elastomer with a round cross-section. Female cylindrical cavity O-ring **75** is designed to be seated in O-ring groove **32** and compressed during assembly between two building block containers **10**, creating a seal at the interface. Female cylindrical cavity O-ring **75** functions to provide a seal between the male cylindrical protrusion **20** of one building block container **10** and the female cylindrical cavity **30** of another building block container **10** stacked or reversibly attached thereto. The second end of female cylindrical cavity **30** is sealed or sealed off with a female cylindrical cavity knockout section **36**. Female cylindrical cavity knockout section **36** is a rigid liquid tight or watertight barrier member. Female cylindrical cavity knockout section **36** is rigidly attached to the second end of female cylindrical cavity **30** to form a liquid tight or watertight connection therewith. Female cylindrical cavity knockout section **36** is a barrier that may be "knocked out" to yield an opening or port into the interior of building block container **10**. In best mode, female cylindrical cavity knockout section **36** is a stepped disc shaped member as depicted with an annulus shaped member on one end, connected to cylindrical member in the middle, that is connected to a disc member on the other end, to form the stepped disc member as depicted. Female cylindrical cavity knockout section **36** has one or more female cylindrical cavity score lines. Each female cylindrical cavity score line is a score line or line with reduced thickness that is may be more easily torn, cracked, or broken than other areas of female cylindrical cavity knockout section **36**. Each female cylindrical cavity score line functions to provide a clean break line that allows the female cylindrical cavity knockout section **36** to be knocked out or removed by hitting the female cylindrical cavity knockout section **36** with a hammer or tool. Each female cylindrical cavity score line is a circular score line that is centered around the female cylindrical cavity **30** and concentric with the female cylindrical cavity **30**. Each female cylindrical cavity score line is located between the female cylindrical cavity O-ring groove **32** and the second end of female cylindrical cavity **30**. In best mode, there are two female cylindrical cavity score lines as depicted. There is a large diameter female cylindrical cavity score line **38** and a small diameter female cylindrical cavity score line **39**. Large diameter female cylindrical cavity score line **38** is located on the annulus shaped member of female cylindrical cavity knockout section **36** and adjacent to female cylindrical cavity O-ring groove **32** with a diameter less than that of female cylindrical cavity O-ring groove **32**. Small diameter female cylindrical cavity score line **39** is located at the intersection or seam between the cylindrical member and the disc member of female cylindrical cavity knockout section **36**. Small diameter female cylindrical cavity score line **39** has a diameter less than that of large diameter female cylindrical cavity score line **38**. Building block containers **10** may be ported together to make a pipeline or aqua duct to transfer any type of liquid or slurry. Building block containers may be placed on the side and connected together to form pipeline or aqua duct.

The right surface **16** of building block container **10** may further comprise a right handle **40** and a right handle well **41**. Right handle well **41** is a rigid concave depression in the right surface **16** of building block container **10**. In best mode, right handle well **41** is half cylinder shaped as depicted. Right handle well **41** has a first end and a second end. The full perimeter of right handle well **41** is contiguous with the right surface **16** of building block container **10** to form a liquid-tight or watertight connection therewith. Right handle **40** is a rigid horizontal oblong member with a first end, a second end, an outside surface, and an inside surface. The first end of right handle **40** is rigidly attached to first end of right handle well **41**, which is adjacent to the front surface **13** of building block container **10**. The second end of right handle **40** is rigidly attached to the second end of right handle well **41**, which is adjacent to the rear surface **14** of building block container **10**. The outside surface of right handle **40** is flush with the outer surface of the right surface **16** of building block container **10**.

The left surface **15** of building block container **10** may further comprise a left handle **42** and a left handle well **43**. Left handle well **43** is a rigid concave depression in the left surface **15** of building block container **10**. In best mode, left handle well **43** is half cylinder shaped as depicted. Left handle well **43** has a first end and a second end. The full perimeter of left handle well **43** is contiguous with the left surface **15** of building block container **10** to form a liquid-tight or watertight connection therewith. Left handle **42** is a rigid horizontal oblong member with a first end, a second end, an outside surface, and an inside surface. The first end of left handle **42** is rigidly attached to first end of left handle well **43**, which is adjacent to the front surface **13** of building block container **10**. The second end of left handle **42** is rigidly attached to the second end of left handle well **43**, which is adjacent to the rear surface **14** of building block container **10**. The outside surface of left handle **42** is flush with the outer surface of the left surface **15** of building block container **10**.

The front surface **13** of building block container **10** may further comprise a front threaded port **44**. Front threaded port **44** is a threaded female cylindrical hole or threaded female pipe fitting connection. Front threaded port **44** is a cylindrical threaded cavity with a first end, a second end, and a longitudinal axis. The first end of front threaded port **44** is flush with the outer surface of the front surface **13** of building block container **10**. The second end of front threaded port **44** is located in the interior of building block container **10**. The longitudinal axis of front threaded port **44** is perpendicular to the front surface **13** of building block container **10**. The second end of front threaded port **44** is sealed off with a front threaded port knockout section **45** to yield a liquid tight or watertight barrier in the front threaded port **44**. Front threaded port knockout section **45** may be knocked out or removed by hitting it with a hammer or similar in order to open the front threaded port **44**.

The rear surface **14** of building block container **10** may further comprise a rear threaded port **46**. Rear threaded port **46** is a threaded female cylindrical hole or threaded female pipe fitting connection. Rear threaded port **46** is a cylindrical threaded cavity with a first end, a second end, and a longitudinal axis. The first end of rear threaded port **46** is flush with the outer surface of the front surface **13** of building block container **10**. The second end of rear threaded port **46** is located in the interior of building block container **10**. The longitudinal axis of rear threaded port **46** is perpendicular to the front surface **13** of building block container **10**. The second end of rear threaded port **46** is sealed off with a rear threaded port knockout section **47** to yield a liquid tight or watertight barrier in the rear threaded port **46**. Rear

threaded port knockout section **47** may be knocked out or removed by hitting it with a hammer or similar in order to open the rear threaded port **46**.

The front surface **13** of building block container **10** may further comprise a front perimeter O-ring groove **48**. Front perimeter O-ring groove **48** is half torus-shaped groove or cavity around the perimeter of front surface **13** of building block container **10**. Front perimeter O-ring groove **48** is located at the contiguous connection point or seam between the front surface **13** and its four adjacent surfaces of building block container **10**. Front perimeter O-ring groove **48** functions to provide an O-ring seat or nest location for an O-ring (not depicted) that functions to provide a seal between block container **10** and all adjacent block containers **10** stacked or reversibly attached thereto. This 0-ring functions to make the wall weather tight and watertight and to also prevent animals and insects from ingress into the structure.

The rear surface **14** of building block container **10** may further comprise a rear perimeter O-ring groove **49**. Rear perimeter O-ring groove **49** is half torus-shaped groove or cavity around the perimeter of rear surface **14** of building block container **10**. Rear perimeter O-ring groove **49** is located at the contiguous connection point or seam between the rear surface **14** and its four adjacent surfaces of building block container **10**. Rear perimeter O-ring groove **49** functions to provide an O-ring seat or nest location for an O-ring (not depicted) that function to provide a seal between block container **10** and all adjacent block containers **10** stacked or reversibly attached thereto. This 0-ring functions to make the wall weather tight and watertight and to also prevent animals and insects from ingress into the structure.

Building block container **10** may further comprise two upper hanger bracket retaining slots **50**. An upper hanger bracket retaining slot **50** is an angled slot at the intersection of the upper surface **11** of building block container **10** and the left surface **15** of building block container. There is another upper hanger bracket retaining slot **50** at the intersection of the upper surface **11** of building block container **10** and the right surface **16** of building block container **10**. Each upper hanger bracket retaining slot **50** is a shaved or angled portion of the seam between upper surface **11** and left and right surfaces **15**,**16** as depicted. The width of each upper hanger bracket retaining slot **50** is less than the width of building block container **10**. Each upper hanger bracket retaining slot **50** is located at the center of the seam between upper surface **11** and left and right surfaces **15**,**16** as depicted. Each of these upper hanger bracket retaining slots **50** functions to located and retain a hanger bracket tab **82** of a hanger bracket **80**.

Building block container **10** may further comprise two lower hanger bracket retaining slots **51**. A lower hanger bracket retaining slot **51** is an angled slot at the intersection of the lower surface **12** of building block container **10** and the left surface **15** of building block container. There is another lower hanger bracket retaining slot **51** at the intersection of the lower surface **12** of building block container **10** and the right surface **16** of building block container **10**. Each lower hanger bracket retaining slot **51** is a shaved or angled portion of the seam between lower surface **12** and left and right surfaces **15**,**16** as depicted. The width of each lower bracket retaining slot **51** is less than the width of building block container **10**. Each lower hanger bracket retaining slot **51** is located at the center of the seam between lower surface **12** and left and right surfaces **15**,**16** as depicted. Each of these lower hanger bracket retaining slots **51** functions to located and retain a hanger bracket tab **82** of a hanger bracket **80** when building block container is turned upside down.

The front surface **13** and/or the rear surface **14** of building block container **10** may further comprise conduit quarter round. Conduit quarter round is a one-quarter cylindrical shaped cavity or depression around all four edges of front surface **13** or rear surface **14**. Conduit quarter round is a one-quarter cylindrical shaped cavity or depression at the contiguous connection point or seam between the front surface **13** and all four adjacent surfaces **11**,**12**,**15**,**16** or between the rear surface **14** and all four adjacent surfaces **11**,**12**,**15**,**16**. One-quarter cylindrical shaped cavity or depression can be described as the shape of the inside surface of an open-ended cylindrical member that has been quartered longitudinally. The addition of conduit quarter round causes the front surface **13** to appear extended or protruded from the contiguous connection point or seam between the front surface **13** and all four adjacent surfaces **11**,**12**,**15**,**16**. Conduit quarter round includes straight conduit quarter round **52** and L-shaped conduit quarter round **53**. L-shaped conduit quarter round **53** is a L-shaped section of conduit quarter round. L-shaped conduit quarter round **53** is a section of conduit quarter round along each corner of front surface **13** or rear surface **14**. L-shaped conduit quarter round **53** must be L-shaped or a 90 degree elbow in order to follow each corner of front surface **13** or rear surface **14**. Straight conduit quarter round **52** is a straight section of conduit quarter round. Straight conduit quarter round **52** is a straight section of conduit quarter round in between each section of L-shaped conduit quarter round **53** that links each section of L-shaped conduit quarter round **53**. Thus, there is a straight conduit quarter round **52** section in between each L-shaped conduit quarter round **53** section as depicted.

When two building block containers **10** are stacked or reversibly attached together, one conduit quarter round section from one building block container **10** is adjacent to another conduit quarter round section from the other building block container **10** to yield a "half round" section. This half round section functions to receive and hold a section of round conduit (not depicted) or round pipe (not depicted). Round conduit or round pipe may be snapped into or installed into the half round without any brackets or fasteners. The diameter of L-shaped conduit quarter round **53** is larger than that of straight conduit quarter round **52** in order to allow clearance for elbow or 90 degree conduit or pipe fittings and T-shaped conduit or pipe fittings to be installed therein. Elbow conduit or pipe fittings and T conduit or pipe fittings have larger diameters than straight sections of conduit or pipe. L-shaped conduit quarter round **53** and straight conduit quarter round **52** are sized to receive and attached a particular size of conduit or pipe. The diameter of L-shaped conduit quarter round **53** is slightly larger than that of an elbow fitting or T-fitting of a particular size of conduit or pipe. The diameter of straight conduit quarter round **52** is sized slight larger slightly larger than that of a particular size of conduit or pipe. Thus, conduit quarter round functions to receive and hold fittings and sections of pipe or conduit. After a building or structure is erected from building block containers **10**, conduit and pipe systems may be simply snapped into place with requiring any brackets or fasteners.

The front surface **13** and/or rear surface **14** of building block container **10** may further comprise a square or rectangular label recess **56**. Square or rectangular label recess **56** is a square-shaped or rectangle-shaped recess or depression in the outer surface of the front surface **13** or rear surface **14**

of building block container **10**. Square or rectangular label recess **56** functions to receive a label that is affixed or adhered in the recess.

The upper surface **11** of building block container **10** may further comprise a second male cylindrical protrusion **20** and the lower surface **12** of building block container **10** may further comprise a second female cylindrical cavity **30** as depicted in FIGS. **11-20**. The design of this mode building block container **10** is depicted in FIGS. **11-20**. In this mode, building block container **10** is typically longer than the base mode building block container **10** with one male cylindrical protrusion **20** and one female cylindrical cavity **30**, as depicted in FIGS. **1-10**. This mode building block container **10** is typically the same size as a standard concrete cinder block. In this mode, building block containers **10** may be staggered as they are stacked together or reversibly attached to each other. In a staggered configuration, vertical seams between building block containers **10** are alternated or staggered and do not run straight down in a continuous line. Cinder block walls or structures are typically built with a staggered block configuration as well. In a staggered configuration, the male cylindrical protrusion **20** on the right side of one building block container **10** is mated with or attached to a female cylindrical cavity **30** on the left side of another building block containers **10**. This pattern is repeated to build or erect a wall or corner of a shelter, structure, or building.

In the double male cylindrical protrusion **20** and double female cylindrical cavity **30** mode, the front surface **13** and/or the rear surface **14** of building block container **10** may further comprise conduit half round. Conduit half round is a one-half cylindrical shaped cavity or depression in the front surface **13** or rear surface **14**. Conduit half round is a one-half cylindrical shaped cavity or depression along the center of front surface **13** or rear surface **14**. Conduit half round includes straight conduit half round **54** and T-shaped conduit half round **55**. T-shaped conduit half round **55** is a T-shaped section of conduit half round. T-shaped conduit half round **55** is a section of conduit half round on front surface **13** or rear surface **14**. Straight conduit half round **54** is a straight section of conduit half round that runs vertically in between each section of T-shaped conduit half round **55**. Conduit half round functions to receive and hold a section of round conduit or round pipe. Round conduit or round pipe may be snapped into or installed into the half round without any brackets or fasteners. The diameter of T-shaped conduit half round **55** is larger than that of straight conduit half round **54** in order to allow clearance for elbow or 90 degree conduit or pipe fittings and T-shaped conduit or pipe fittings to be installed therein. Elbow conduit or pipe fittings and T conduit or pipe fittings have larger diameters than straight sections of conduit or pipe. T-shaped conduit half round **55** and straight conduit half round **54** are sized to receive and attached a particular size of conduit or pipe. The diameter of T-shaped conduit half round **55** is slightly larger than that of an elbow fitting or T-fitting of a particular size of conduit or pipe. The diameter of straight conduit half round **54** is sized slight larger slightly larger than that of a particular size of conduit or pipe. Thus, conduit half round functions to receive and hold fittings and sections of pipe or conduit. After a building or structure is erected from building block containers **10**, conduit and pipe systems may be simply snapped into place with requiring any brackets or fasteners.

The lower surface **12** of building block container **10** may further comprise a head carrying dimple **58**. Head carrying dimple **58** is a semispherical shaped recess or depression in the lower surface **12**. Head carrying dimple **58** functions as recess or depression that conforms to the shape of the top of a human's head in order to provide a recess or depression that can more comfortably rest on top of a human's head to allow for easier balancing and holding of a building block container **10** on a person's head. If the building block container **10** were filled with water or other heavy material, the full building block container **10** may be more easily transported by a person by resting or placing the head carrying dimple **58** on your head.

Building block container **10** may further comprise an RFID chip **60**. An RFID chip **60** is radio-frequency identification chip that uses electromagnetic fields to automatically identify and track the object connected to the RFID chip **60**. A chip is an integrated circuit or monolithic integrated circuit that is a set of electronic circuits on one small flat piece of semiconductor material. RFID chip **60** contains electronically stored information that passively collects energy from a nearby RFID chip reader emitting interrogating radio waves. RFID chip **60** functions to track a building block container **10** and/or its contents as it is logistically moved or transferred from one location to another.

The upper surface **11** of building block container **10** may further comprise a third and fourth male cylindrical protrusion **20** and the lower surface **12** of building block container **10** may further comprise a third and fourth female cylindrical cavity **30** as depicted in FIGS. **46-55**. The design of this mode building block container **10** is depicted in FIGS. **46-55**. In this mode, building block container **10** is typically longer or wider than the mode building block container **10** with two male cylindrical protrusions **20** and two female cylindrical cavities **30** depicted in FIGS. **11-20**. This mode is essentially two building block depicted in FIGS. **11-20** connected together in parallel by length or in series by width to form one large building block container **10**. Typically, there are no interior walls to yield one large storage tank inside the building block container **10**. This mode building block container **10** is typically twice the size of a standard concrete cinder block. In this mode, building block containers **10** are much larger so that they can hold much more liquid or solid inside and also provide a thicker barrier with more insulation value in a wall, shelter, structure, or building.

Building block container **10** may further comprise a filter disc **70**. The design of filter disc **70** is depicted in FIGS. **25-29**. Filter disc **70** is a disc shaped filter that is used to filter liquid such as water. Filter disc **70** comprises: a frame **71**, at least one layer of filter media **72**, and a center **73**. Frame **71** is a rigid structural member with a thickness and an outer diameter. At least one layer of filter media **72** is rigidly attached to frame **71**. At least one layer of filter media **72** is supported by frame **71**. At least one layer of filter media **72** may be a layer of any known material such as: plastic, polymer, fluoropolymer, ceramic, fabric, husk, mesh, cartridge paper, carbon, cartridge membrane, pad, or any other material. Filter disc **70** may be reusable or single use. Filter disc frame **71** has a diameter that is slightly greater than the inner diameter of male cylindrical protrusion **20** but slightly less than the inner diameter of female cylindrical cavity **30**. Filter disc **70** is reversibly attachable within filter disc seat **28** on the inner surface of the lower surface **12** of building block container **10** as depicted in FIGS. **57** and **61**. To install or attach filter disc **70** within filter disc seat **28**, the female cylindrical cavity knockout section **36** must be removed, and the filter disc **70** must be curled, squeezed, or bent slightly, so that it may pass through the opening of female cylindrical cavity **30** in order to be placed within filter disc seat **28** of

the upside down building block container **10**. Filter disc **70** is also reversibly attachable to the inner diameter of female cylindrical cavity **30**. To install or attach filter disc **70** within female cylindrical cavity **30**, part of the female cylindrical cavity knockout section **36** must first be knocked out by breaking the small diameter female cylindrical cavity score line **39** but leaving the large diameter female cylindrical cavity score line **38** in tact. This opens a port through female cylindrical cavity **30** but leaves an annulus shaped portion of female cylindrical cavity knockout section **36** for the filter disc **70** to rest on. One or more filter discs **70** may be installed into a building block containers **10** in order to create a water filtration device that may be used to filter non-potable water into drinkable water as depicted in FIG. **56**. A multicellular filtration device using multiple layers of filter media may be created by stacking two or more upside down building block containers **10** together. This is done by installing a threaded plug **76** into the male cylindrical protrusions **20**, facing the male cylindrical protrusion **20** downward, knocking out the female cylindrical cavity knockout section **36**, and installing a filter disc **70** within the filter disc seat **28** of the male cylindrical protrusions **20** and another filter disc within the female cylindrical cavities **30** as depicted in FIGS. **57** and **61**. Each filter disc **70** may be made of different filter media. Additionally, each building block container **10** could contain different types of filter media such as: large gravel, medium gravel, small gravel, sand, activated carbon, anthracite, garnet, VOC filter, filter fabric, filter paper, or other material. Filter center **73** is a removable center or plug member. Filter center **73** would need to be removed in order install a block tie **90** between two attached building block containers **10** with a filter disc **70** in between. Block tie **90** would pass through the open center of filter disc **70** after filter center **73** is removed. To install a block tie **90** between two building block containers **10**, the toggle **94** is passed through the center of filter disc **70** to the female cylindrical cavity **30** of the adjacent building block container **10**, while keeping the ratchet stop **96** on the other side of filter disc **70**, and pulling the strap **92** to press ratchet stop **96** onto the open filter center to form a watertight seal thereto.

Building block container **10** may further comprise a hanger bracket **80**. The design of hanger bracket **80** is depicted in FIGS. **21-24**. Hanger bracket **80** is a bracket that is reversibly attachable to the upper surface **11** of building block container **10** as depicted in FIGS. **56-57**. Hanger bracket **80** is a rigid planar member with two or more tabs **82** and a plurality of slots **83**. Each tab **82** rests or nests within a hanger bracket retaining slot **50**,**51**. Hanger bracket **80** functions to receive and hold a plurality of other brackets within its plurality of slots **83**.

Building block container **10** may further comprise a rafter hanger **84**. The design of rafter hanger **84** is depicted in FIGS. **30-37**. Rafter hanger **84** is a bracket that is reversibly attachable to hanger bracket **80** as depicted in FIGS. **56-67**. Rafter hanger **84** is a rigid bracket member with a vertical slot **85** to receive and hold a rafter. Rafter hanger **84** has a plurality of vertical tines **86** or protrusions that are reversibly attachable within the plurality of slots **83** on hanger bracket **80**. Rafter hanger **84** also has foot tab **97** that is also reversibly attachable within a slot **83** on hanger bracket **80**.

Building block container **10** may further comprise a large rafter hanger **87**. The design of large rafter hanger **87** is depicted in FIGS. **38-45**. Large rafter hanger **87** is a bracket that is reversibly attachable to hanger bracket **80** as depicted in FIGS. **56-67**. Large rafter hanger **87** is a rigid bracket member with a vertical slot **88** to receive and hold a large rafter. Large rafter hanger **87** has a plurality of vertical tines **89** or protrusions that are reversibly attachable within the plurality of slots **83** on hanger bracket **80**. Large rafter hanger **87** also has foot tab **99** that is also reversibly attachable within a slot **83** on hanger bracket **80**.

Hanger bracket **80**, rafter hanger **84**, and large rafter hanger **87** can be used to quickly add rafters to a wall, shelter, structure, or building erected from building block containers **10** as described above. Rafters may be hung or rigidly attached to a wall, shelter, structure, or building erected from building block containers **10** without any fasteners.

Building block container **10** may further comprise a block tie **90**. The design of block tie **90** is depicted in FIGS. **59-59**E. Block tie **90** is a toggle member that functions to hold two stacked building block containers **10** together under tension. Block tie **90** is a toggle member that functions to compress the two O-rings **74**,**75** to create a strong seal and to add rigidity to the stacked building block containers **10**. Block tie **90** comprises: a strap **92**, a toggle **94**, and a ratchet stop **96**. Toggle **94** is a rigid oblong member that is a toggle member with a first end, a middle section, and a second end. Tie is a flexible linear cordage or strap member with a first end and a second end. Ratchet stop **96** is a rigid oblong member that is a toggle member with a first end, a middle section, and a second end. Ratchet stop **96** has a ratchet member in the middle section. A ratchet member is a mechanical device that allows continuous linear motion in only one direction while preventing motion in the opposite direction. Ratchet member functions to allow strap **92** to be tightened or pulled tight but does not allow strap **92** to loosen or travel in the other direction without first releasing a latch. The first end of strap **92** is slideably attached to the ratchet member on ratchet stop **96**. The second of strap **92** is rotationally attached to the middle section of toggle **94**. To install block tie **90** between two building block containers **10**, the female cylindrical cavity knockout sections **36** must be removed from each building block container **10**, then the two building block containers are stacked together by connecting the male cylindrical protrusion **20** of one block container **10** with the female cylindrical cavity **30** of another building block container **10**, then toggle **94** is passed through the connection while keeping ratchet stop **96** on the other side of the connection, and pulling the strap **92** to press ratchet stop **96** onto the connection to squeeze the connection and hold it together under tension as depicted in FIG. **58**.

A plurality of building block containers **10** may be stacked and shipped on a pallet floor **100**. The design of pallet floor **100** is depicted in FIGS. **62**A-**62**E. Pallet floor **100** is a pallet. A pallet is a flat transport structure that supports goods in a stable fashion while being lifted by a forklift, a pallet jack, a front loader, crane, or other machinery. Pallet floor **100** is a specially shaped to include a plurality of male cylindrical protrusions **102** on its upper surface. Male cylindrical protrusions **102** are reversibly attachable to female cylindrical cavities **30** on building block containers **10**. Male cylindrical protrusion **102** is similar in size and shape to the male cylindrical protrusion **20** on a building block container **10**. Building block containers **10** may be attached to pallet floor **100** and shipped without straps and without shrink wrap. Pallet floor **100** has two fork lift notches **104** in its front side, rear side, left side, and right side, making a total of eight fork lift notches **104** per pallet floor **100**. A fork lift notch **104** is a cavity where a fork from a fork lift may be inserted in order to lift the pallet floor **100**. Pallet floor **100** has three dowel holes **106**

in its front side, rear side, left side, and right side, making a total of 12 dowel holes **106** per pallet floor **100**. Pallet floor **100** is also a floor. Pallet floor **100** may be used as a floor in the wall, shelter, structure, building, greenhouse, water filtration device, emergency shelter, pipeline, flood blockade, flood wall, dock, or raft erected from building block containers **10**. The bottom surface of pallet floor **100** becomes the floor surface in the wall, shelter, structure, building, greenhouse, water filtration device, emergency shelter, pipeline, flood blockade, flood wall, dock, or raft erected from building block containers **10**. A plurality of upside-down pallet floors **100** may be connected together with a plurality of dowels **108** as depicted in FIG. **66**. A dowel **108** is a rigid cylindrical member. Dowel **108** is sized to form a slip fit or press fit with dowel hole **106** and vice versa. Pallet floors **100** may be held together under tension with one or more a block ties **90**. A block tie **90** squeezes a fork lift notch **104** from one floor pallet against an adjacent fork lift notch **104** from the second floor pallet as depicted by cross sectional view in FIG. **67**. One end of the block tie **90** is passed through each fork lift notch **104**, then the block tie ratchet stop **96** is pressed inward to hold the two pallet floors **100** together.

Building block containers **10** may be attached to a pallet floor **100** using rebar **119** and one of more rebar toggles **110**. The design of rebar toggle **110** is depicted in FIGS. **63**-**63**D. A rebar toggle **110** is a toggle. Rebar toggle **110** is rigidly attachable to rebar **119**. Rebar **119** is standard concrete or cement reinforcement metal that is solidified inside the liquid concrete or cement to add strength to the concrete or cement. Rebar toggle **110** comprises a left half **112**, a right half **114**, a front pin **116**, and a rear pin **117**. Left half **112** and right half **114** are pivotally attached to each other by front pin **116** and rear pin **117**. Front pin **116** and rear pin **117** are each attached to left half **112**. Front pin **116** and rear pin **117** each extend through a hole in right half **114** to pivot therein. When left half **112** and a right half **114** are squeezed together, rebar toggle **110** is slideable along rebar **119**. When left half **112** and a right half **114** are pulled out to flatten these members, rebar toggle **110** becomes rigidly attached to rebar **119**. When left half **112** and a right half **114** are pulled out to flatten these members, teeth on the rebar toggle **110** grab or bite onto the rebar **119** to rigidly attach thereto. Building block containers **10** are placed onto a pallet floor **100**, the female cylindrical cavity knockout sections **36** are removed, and a rebar **119** is inserted through each male cylindrical protrusion **20** and driven into the ground as depicted in FIG. **64**. A rebar toggle **110** is inserted over the end of each rebar **119** and slid downward to push against the inner surface of the lower surface **12** of building block container **10** as depicted in FIG. **64**. A rebar toggle **110** is locked onto rebar **119** by pushing it flat. Then cement or concrete may be poured into the open building block containers **10** and solidified to for a permanent and solid foundation. This solid foundation is similar to an insulated concrete form structure because there is cement or concrete inside the building block containers **10** which themselves act as insulation against the cement or concrete.

What is claimed is:

1. A building block container comprising: a rigid hollow member with an upper surface, a lower surface, a front surface, a rear surface, a left surface, a right surface, and a hollow interior, wherein, said upper surface comprises a male cylindrical protrusion and said lower surface comprises a female cylindrical cavity, wherein,

said male cylindrical protrusion is a rigid cylindrical shaped protrusion with an outer surface, an outer diameter, an inner surface, an inner diameter, a first end, a second end, a longitudinal axis, an O-ring groove, a locking ridge groove, and a female thread, wherein,

said first end of said male cylindrical protrusion is contiguous with said upper surface of said rigid hollow member,

said first end of said male cylindrical protrusion is rigidly attached to said upper surface of said rigid hollow member,

said first end of said male cylindrical protrusion is open to provide access to said hollow interior of said rigid hollow member,

said longitudinal axis of said male cylindrical protrusion is perpendicular to said upper surface of said rigid hollow member,

said second end of said male cylindrical protrusion protrudes outward from said upper surface of said rigid hollow member,

said second end of said male cylindrical protrusion is open to provide access to said hollow interior of said rigid hollow member,

said male cylindrical protrusion O-ring groove is a groove, channel, or cavity around said outer surface of said male cylindrical protrusion adjacent to said first end of said male cylindrical protrusion,

said locking ridge groove is a groove, channel, or cavity around said outer surface of said male cylindrical protrusion located between said male cylindrical protrusion O-ring groove and said second end of said male cylindrical protrusion,

said locking ridge groove on said male cylindrical protrusion is sized and shaped to make a press fit or snap fit with a locking ridge on said female cylindrical cavity,

said female thread is a plurality of female pipe thread on said inner surface of said male cylindrical protrusion,

said female cylindrical cavity is a rigid cylindrical shaped cavity with an outer surface, an outer diameter, an inner surface, an inner diameter, a first end, a second end, a longitudinal axis, an O-ring groove, a locking ridge, and a knockout section, wherein,

said first end of said female cylindrical cavity is contiguous with said lower surface of said rigid hollow member,

said first end of said female cylindrical cavity is rigidly attached to said lower surface of said rigid hollow member,

said first end of said female cylindrical cavity is open to provide access to said knockout section,

said longitudinal axis of said female cylindrical cavity is perpendicular to said lower surface of said rigid hollow member,

said second end of said female cylindrical cavity protrudes inward from said lower surface of said rigid hollow member,

said second end of said female cylindrical cavity is located in said hollow interior of said rigid hollow member,

said female cylindrical cavity O-ring groove is a groove, channel, or cavity around said inner surface of said female cylindrical cavity adjacent to said second end of said female cylindrical cavity,

said locking ridge is a ridge, protrusion, or projection on said inner surface of said female cylindrical

cavity located between female cylindrical cavity O-ring groove and said first end of said female cylindrical cavity,

said locking ridge on said female cylindrical cavity is sized and shaped to make a press fit or snap fit with said locking ridge groove on said male cylindrical protrusion,

said knockout section is a rigid liquid tight or watertight barrier member, and

said knockout section is rigidly attached to said second end of said female cylindrical cavity to form a liquid tight or watertight connection therewith.

2. A building block container as recited in claim **1** further comprising: a threaded port, wherein said thread port is threaded female cylindrical hole or threaded female pipe fitting connection on said upper surface, said lower surface, said front surface, said rear surface, said left surface, or said right surface of said building block container.

3. A building block container as recited in claim **1** wherein said upper surface further comprises a second male cylindrical protrusion and said lower surface further comprises a second female cylindrical cavity as described in claim **1**.

4. A building block container as recited in claim **3** further comprising: a threaded port, wherein said thread port is threaded female cylindrical hole or threaded female pipe fitting connection on said upper surface, said lower surface, said front surface, said rear surface, said left surface, or said right surface of said building block container.

5. A building block container as recited in claim **3** wherein said upper surface further comprises a third male cylindrical protrusion and said lower surface further comprises a third female cylindrical cavity as described in claim **1**.

6. A building block container as recited in claim **5** further comprising: a threaded port, wherein said thread port is threaded female cylindrical hole or threaded female pipe fitting connection on said upper surface, said lower surface, said front surface, said rear surface, said left surface, or said right surface of said building block container.

7. A building block container as recited in claim **5** wherein said upper surface further comprises a fourth male cylindrical protrusion and said lower surface further comprises a fourth female cylindrical cavity as described in claim **1**.

8. A building block container as recited in claim **7** further comprising: a threaded port, wherein said thread port is threaded female cylindrical hole or threaded female pipe fitting connection on said upper surface, said lower surface, said front surface, said rear surface, said left surface, or said right surface of said building block container.

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