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Hefner et al.

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(54) **PIPE CLEANING SYSTEM AND METHOD**

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(51) **Int. Cl.**

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E21B 44/02 (2006.01)

(52) **U.S. Cl.**

CPC **E21B 17/006** (2013.01); **B08B 1/005** (2013.01); **B08B 1/008** (2013.01); **B08B 1/02** (2013.01); **B08B 9/023** (2013.01); **E21B 33/08** (2013.01); **E21B 10/28** (2013.01); **E21B 17/076** (2013.01); **E21B 23/04** (2013.01); **E21B 44/02** (2013.01)

(58) **Field of Classification Search**

CPC E21B 37/00; E21B 17/006; E21B 33/08; B08B 9/023

See application file for complete search history.

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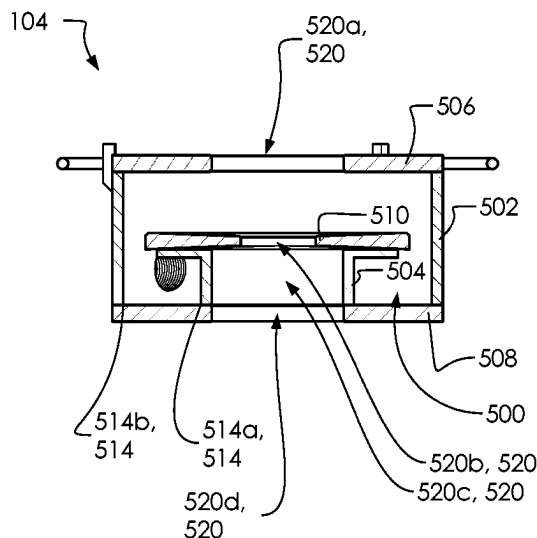
(74) *Attorney, Agent, or Firm* — Shannon Warren

(57)

ABSTRACT

A containment head comprises a center aperture, a reservoir, a wiping rubber, an outer body, a bottom plate and a support cylinder. The center aperture comprises a central portion of the containment head configured to pass around a tubing. The reservoir comprises a space within the outer body and above the bottom plate. The containment head is configured to selectively attach to a tubing cleaning assembly.

14 Claims, 15 Drawing Sheets



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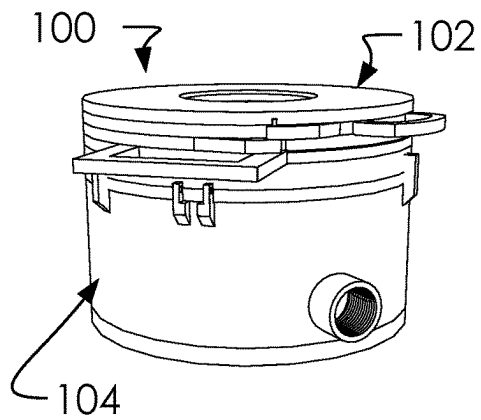


Fig. 1A

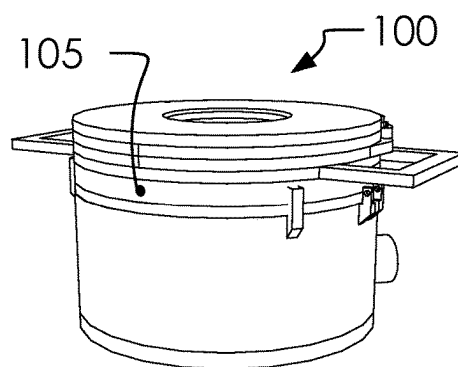


Fig. 1B

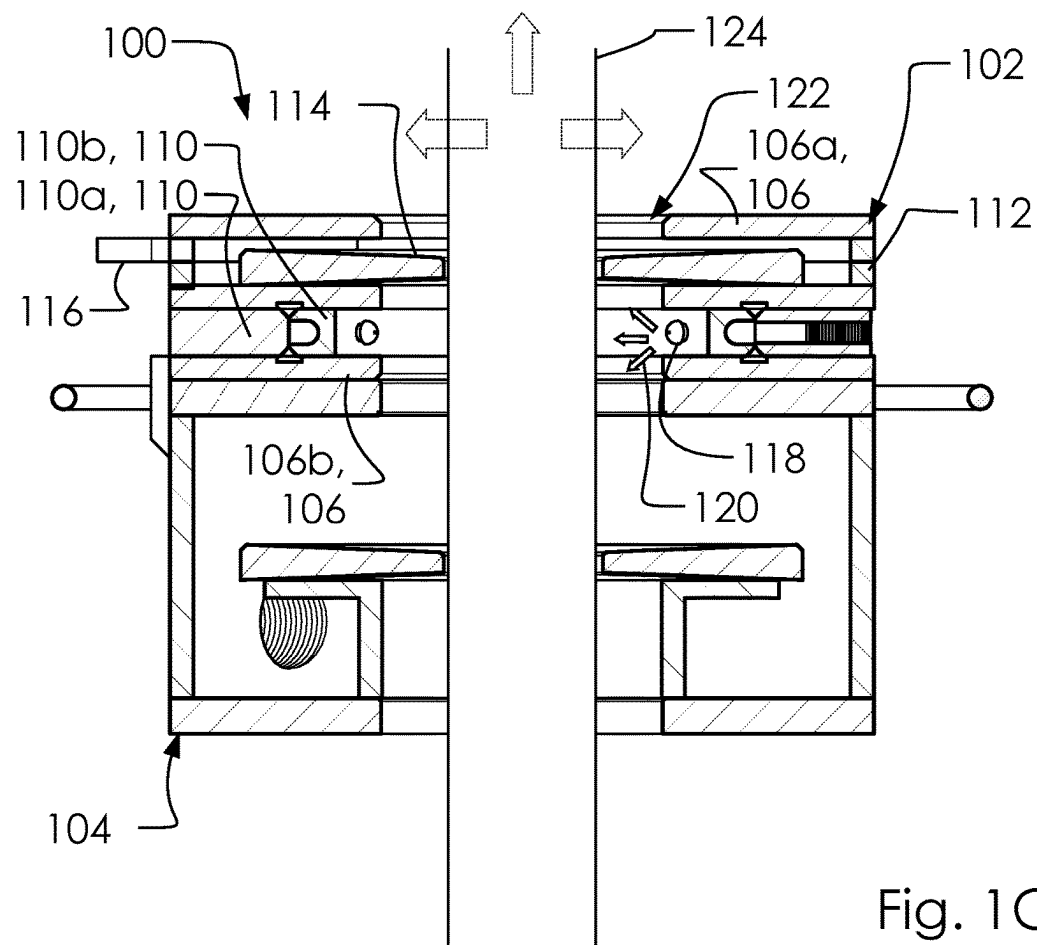


Fig. 1C

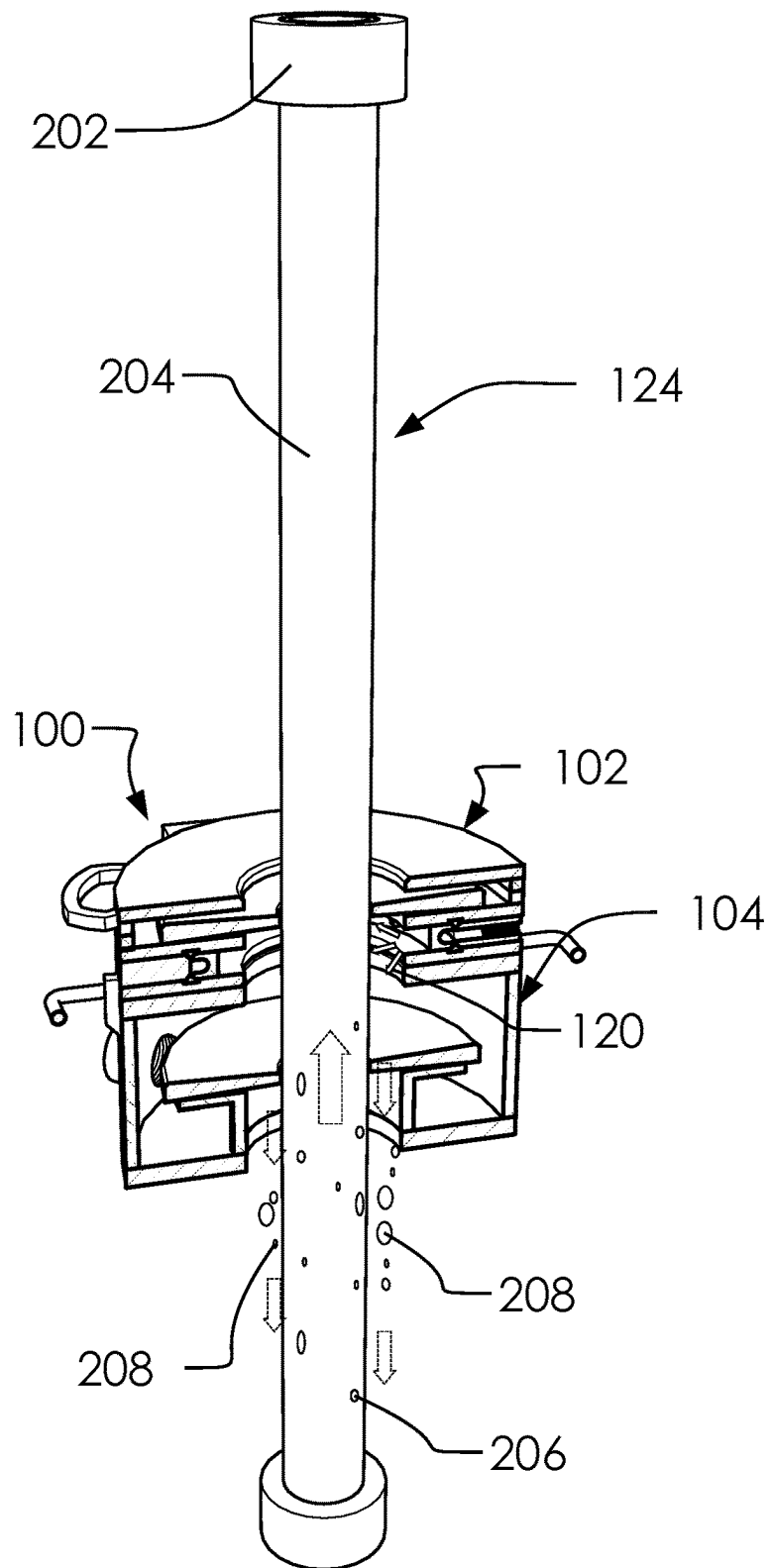


Fig. 2

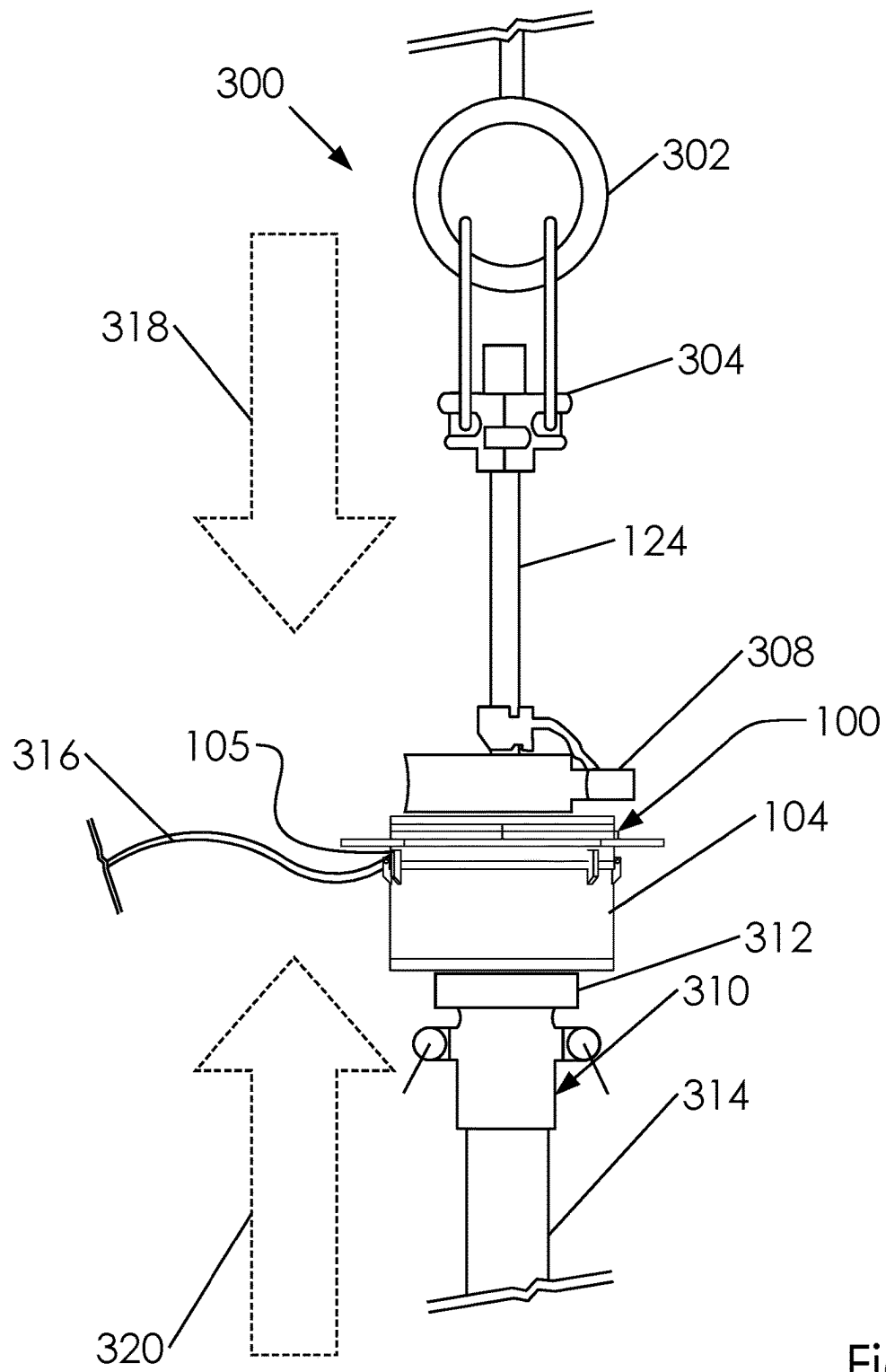


Fig. 3

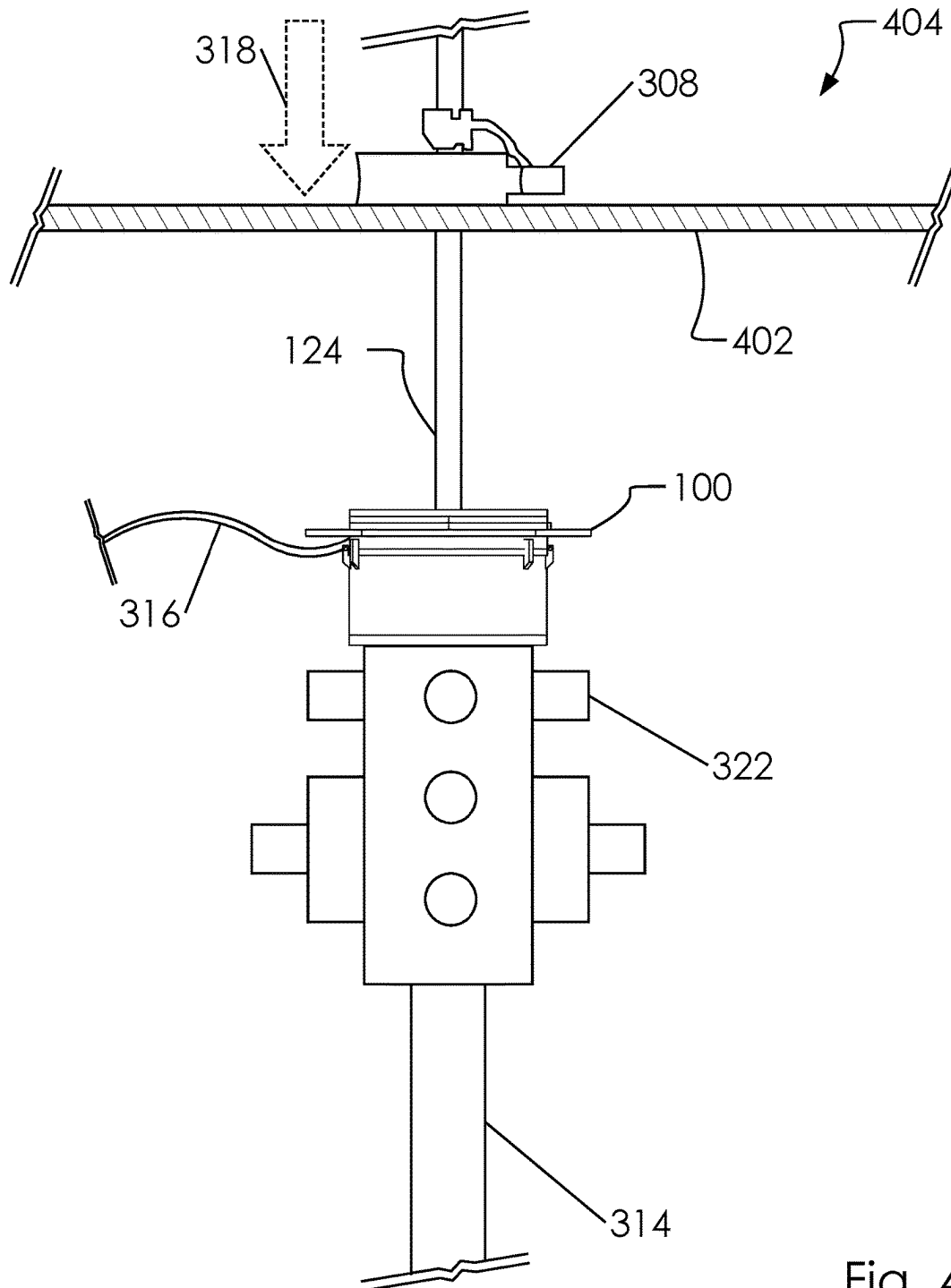


Fig. 4

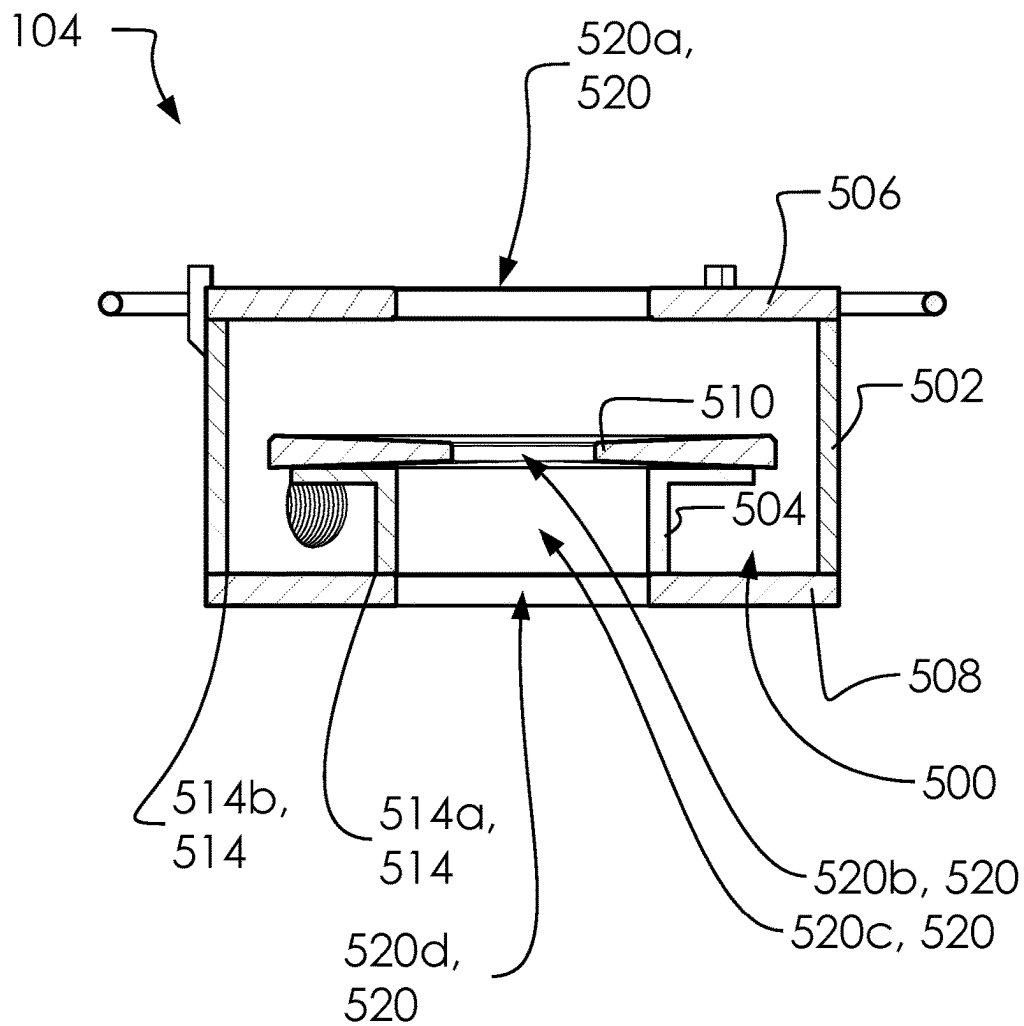


Fig. 5

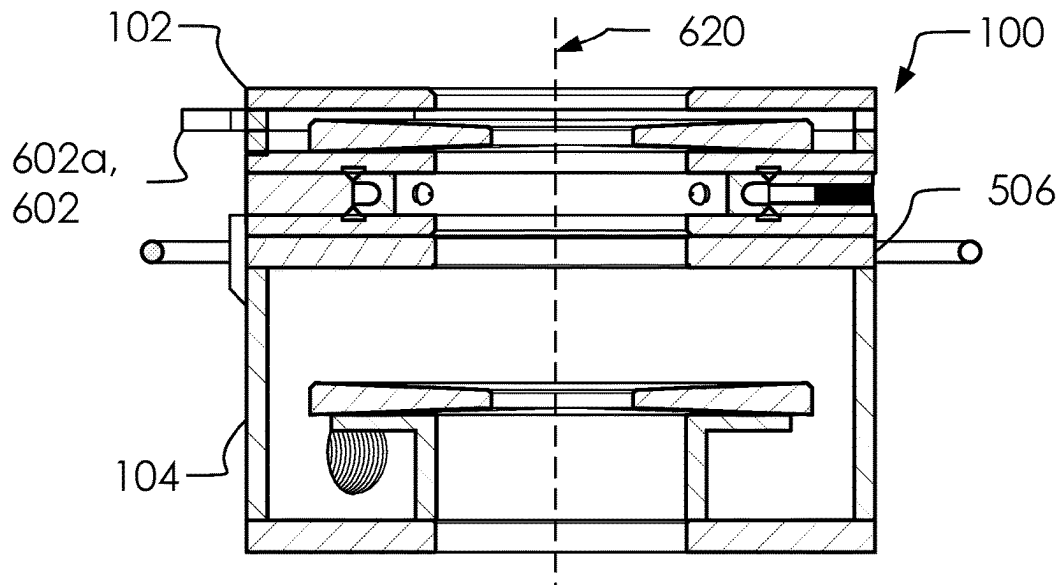


Fig. 6A

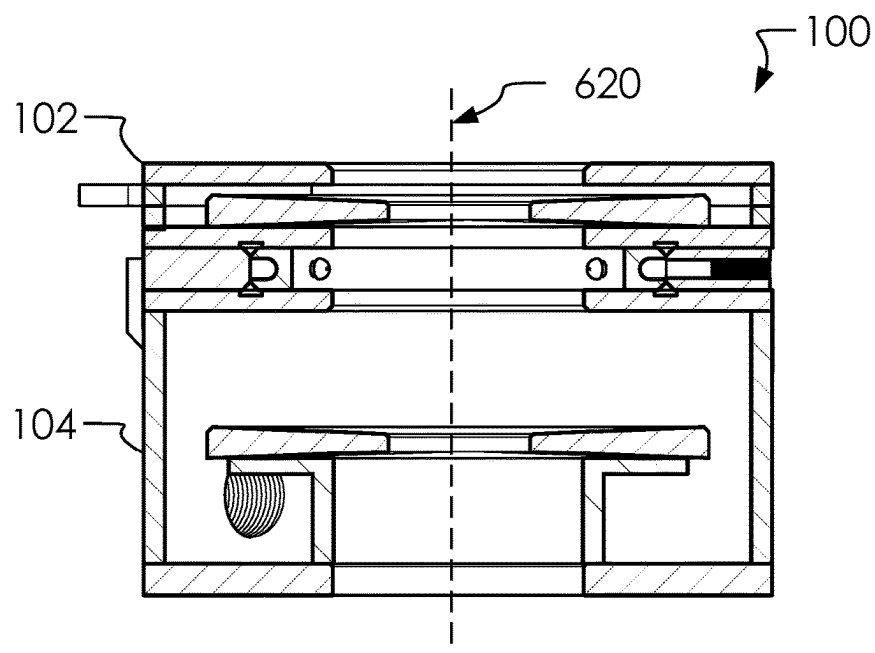


Fig. 6B

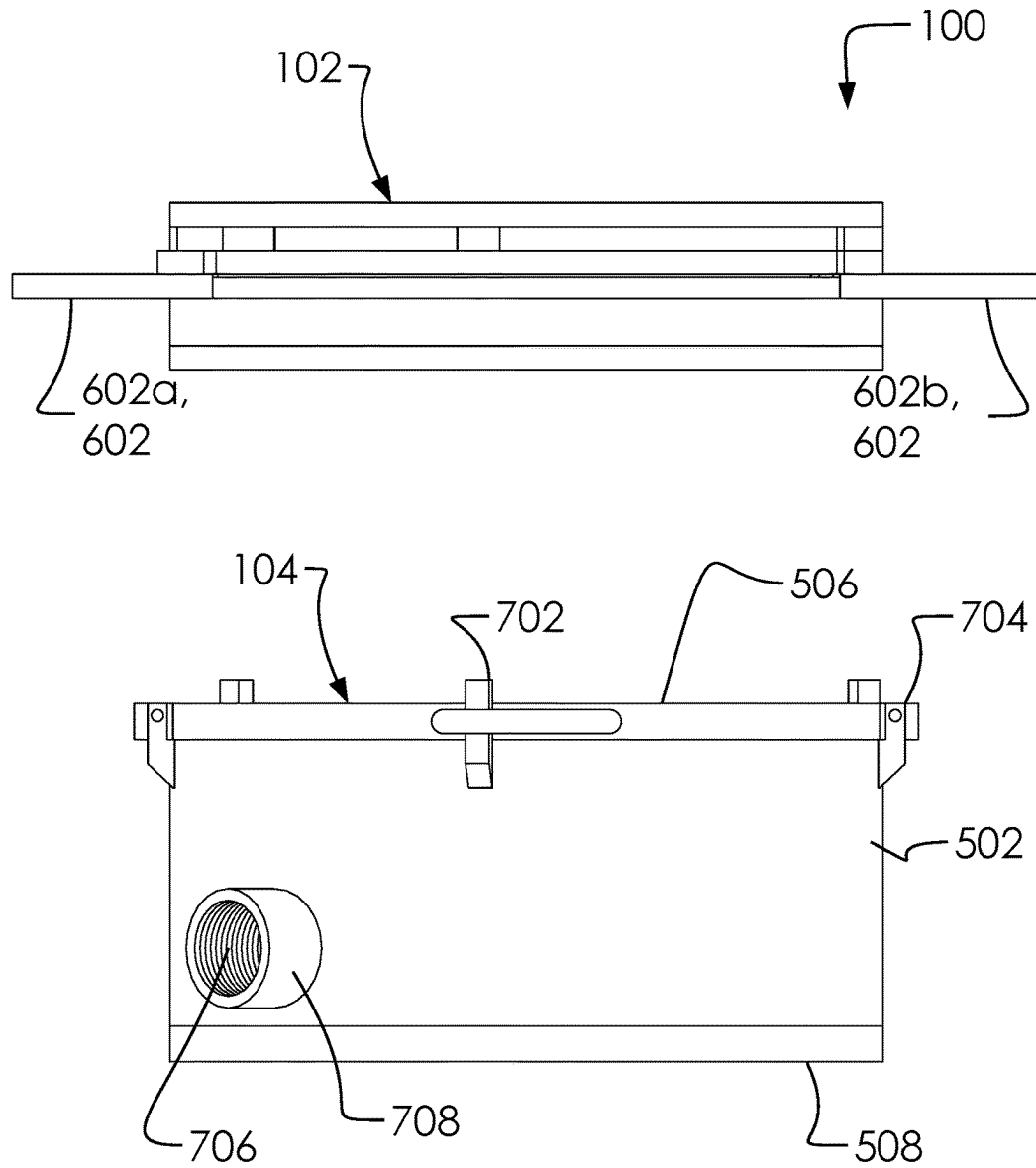


Fig. 7

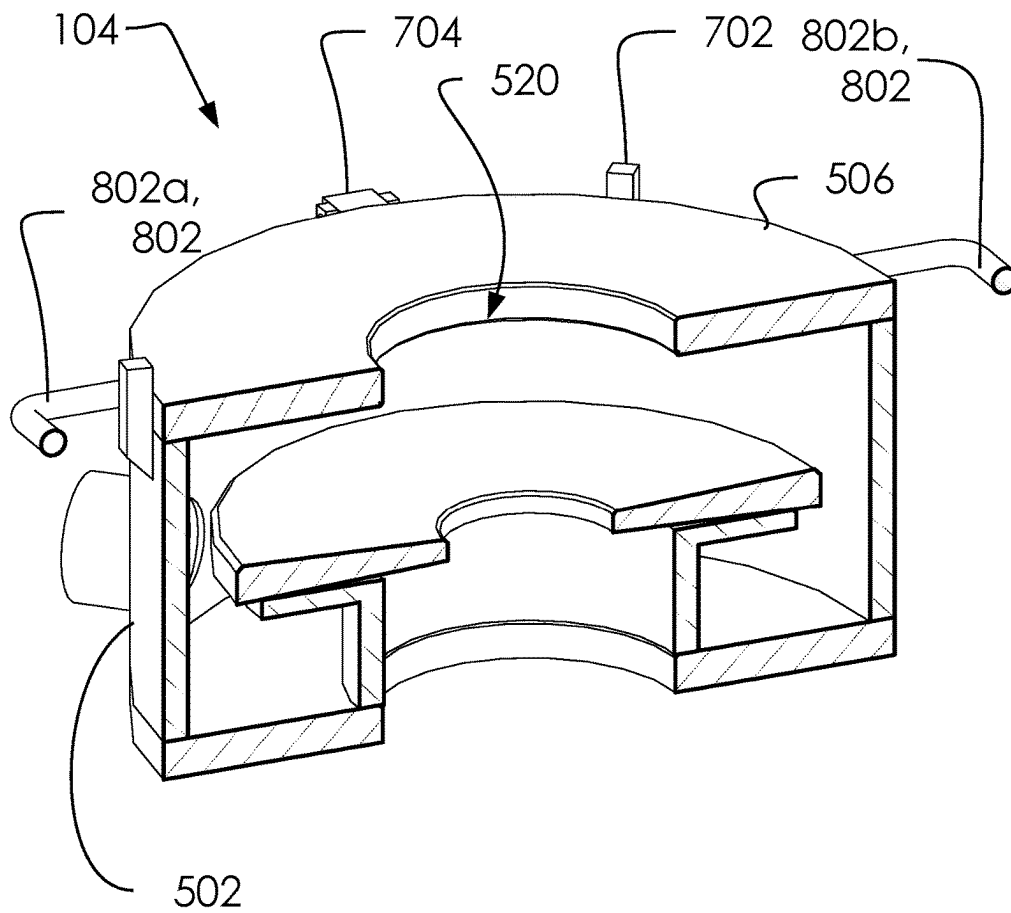


Fig. 8

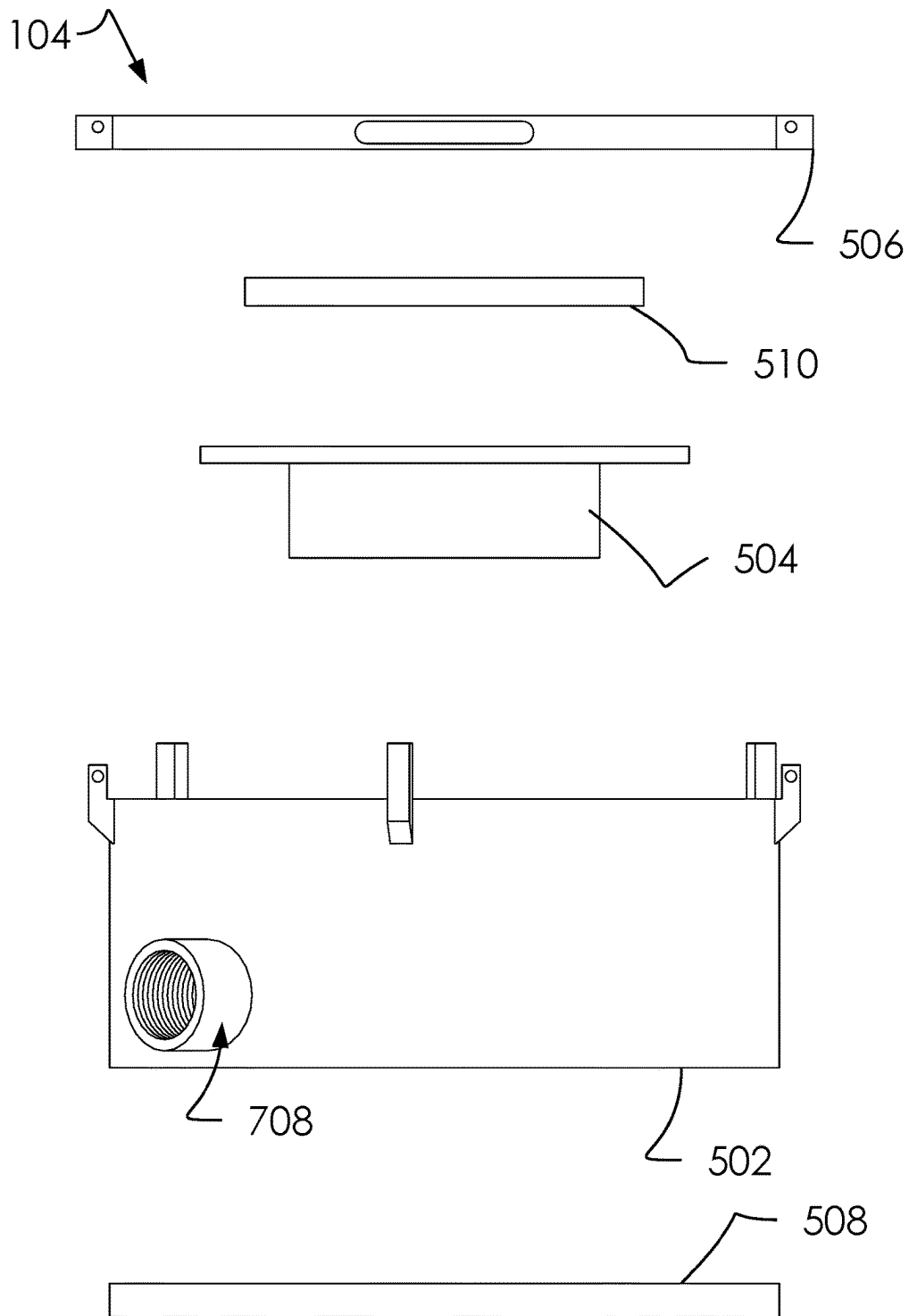


Fig. 9

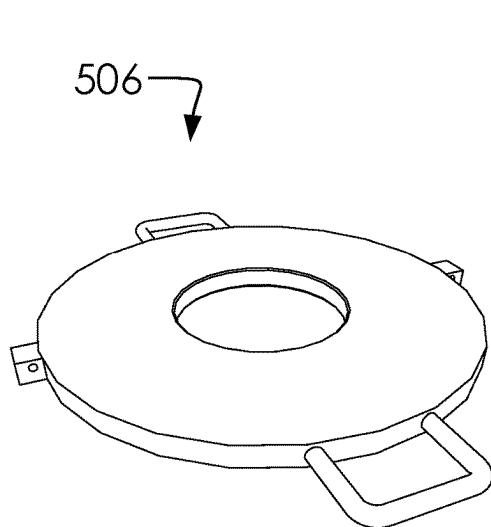


Fig. 10A

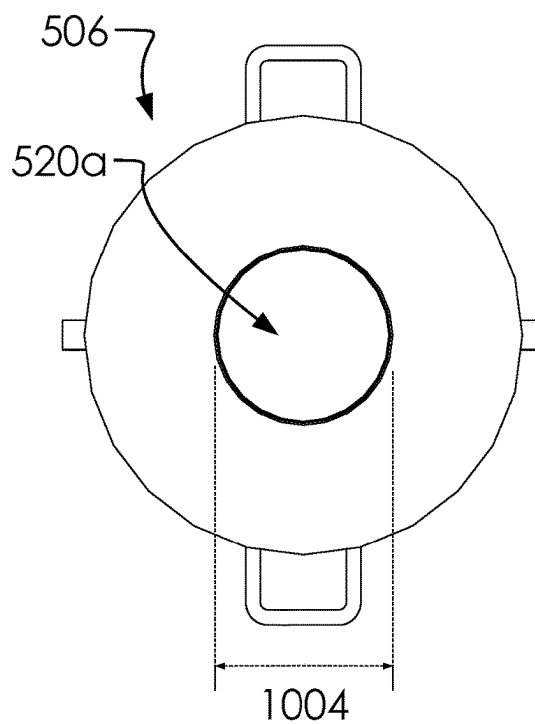


Fig. 10B

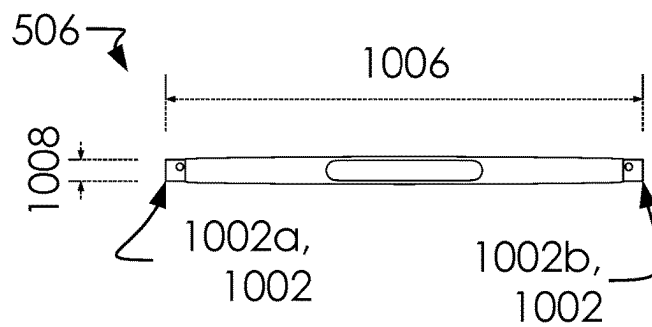


Fig. 10C

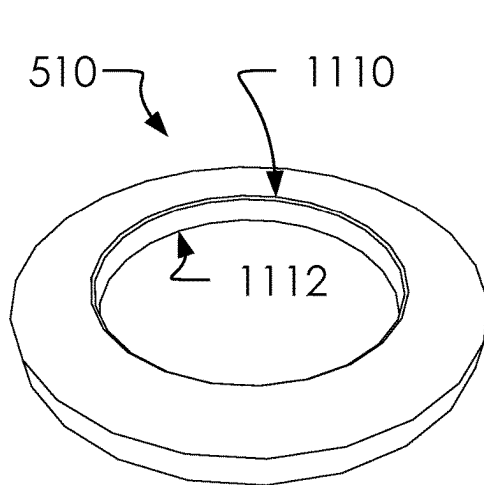


Fig. 11A

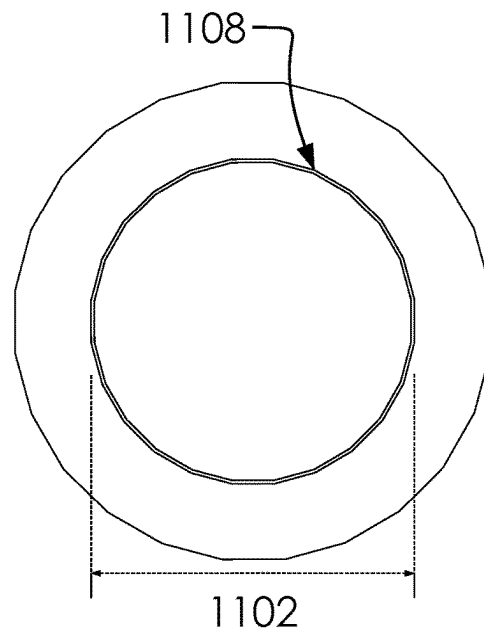


Fig. 11B

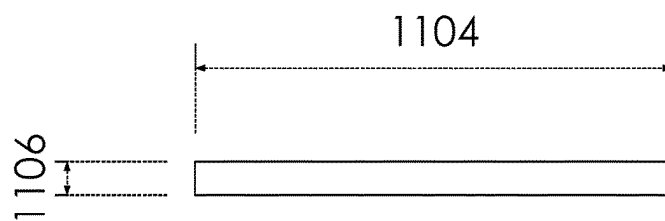


Fig. 11C

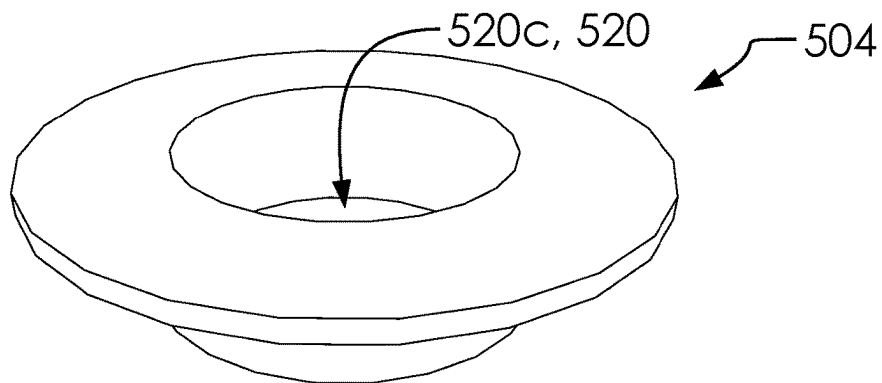


Fig. 12A

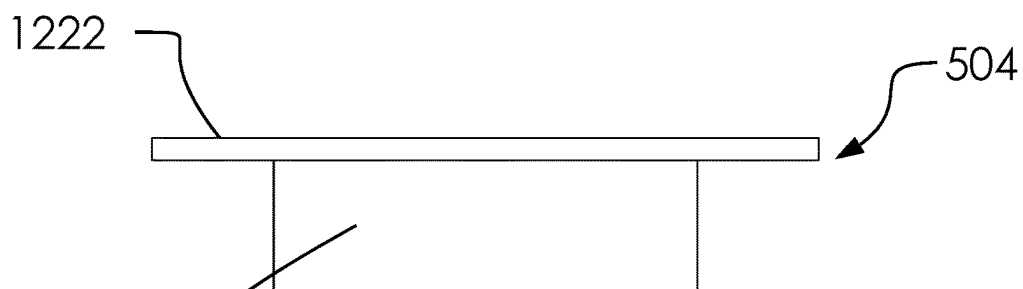


Fig. 12B

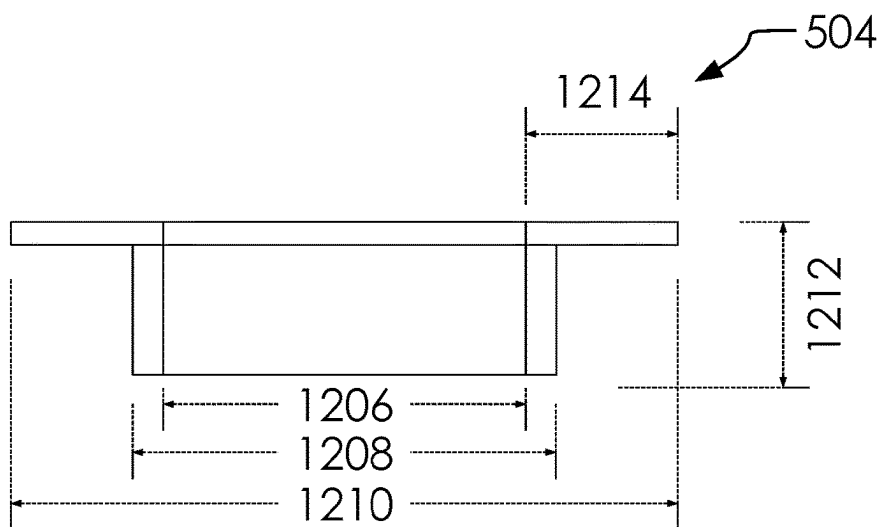


Fig. 12C

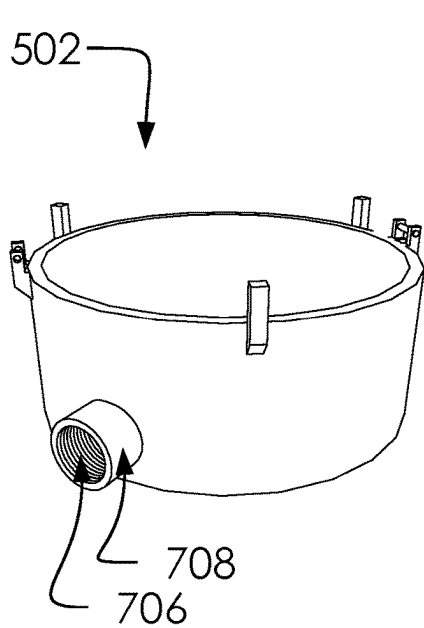


Fig. 13A

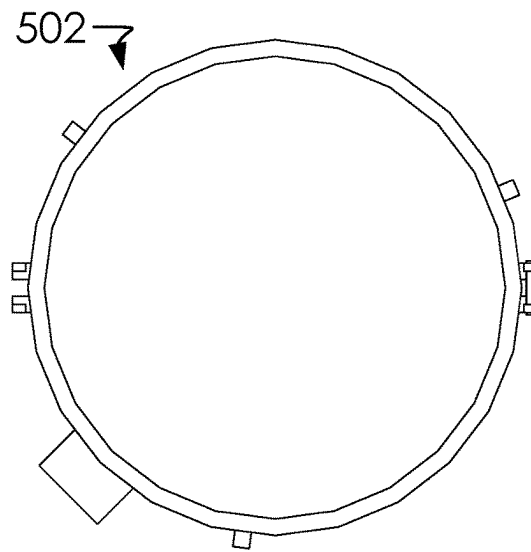


Fig. 13B

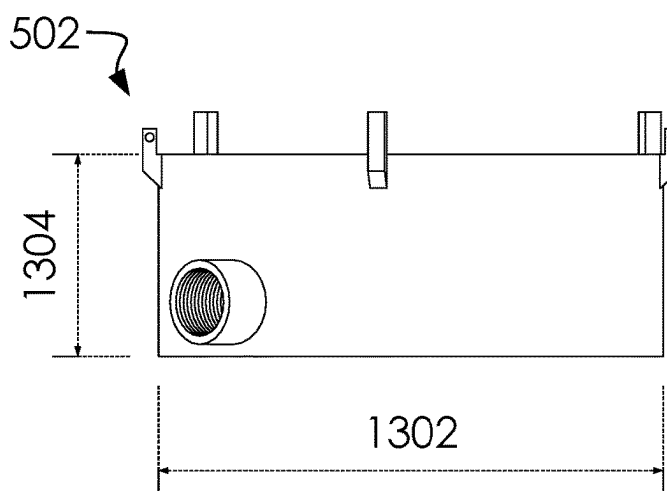


Fig. 13C

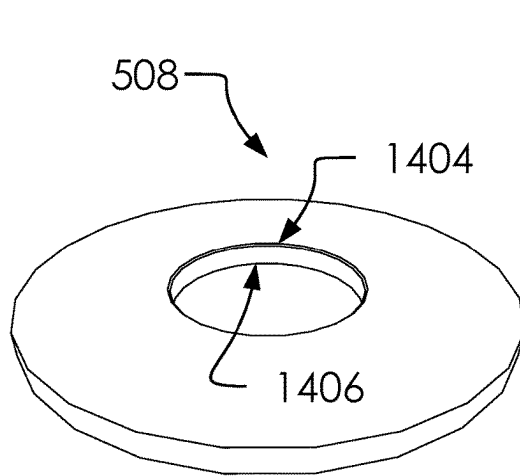


Fig. 14A

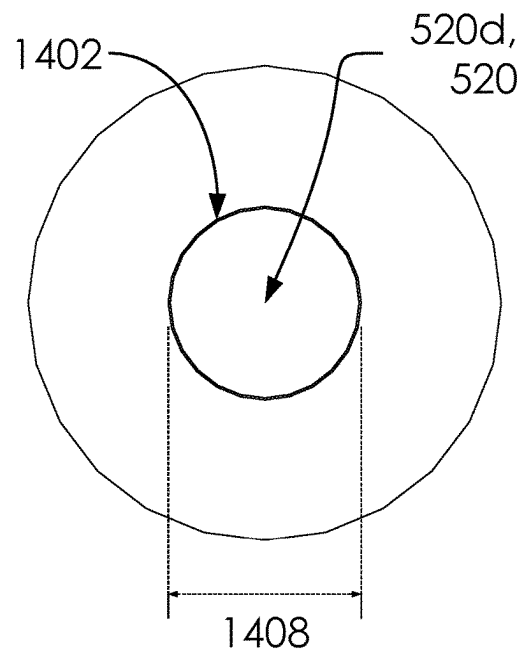


Fig. 14B

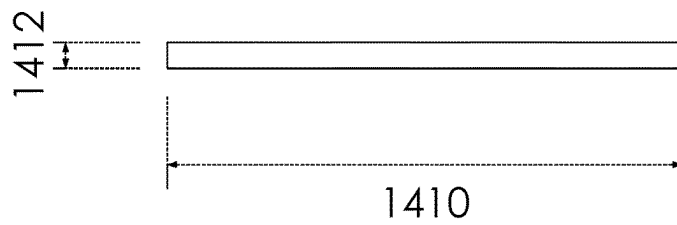


Fig. 14C

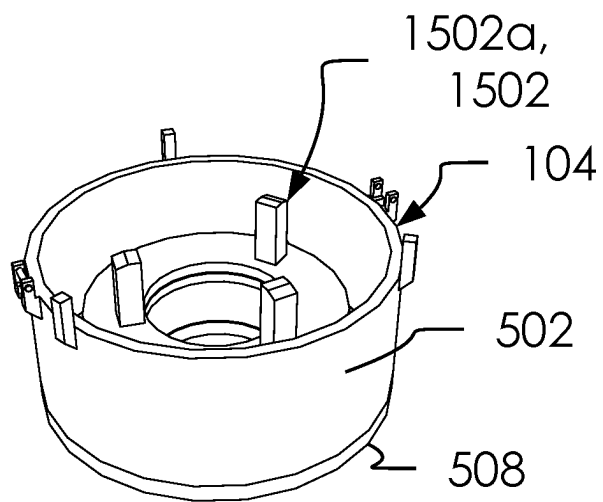


Fig. 15A

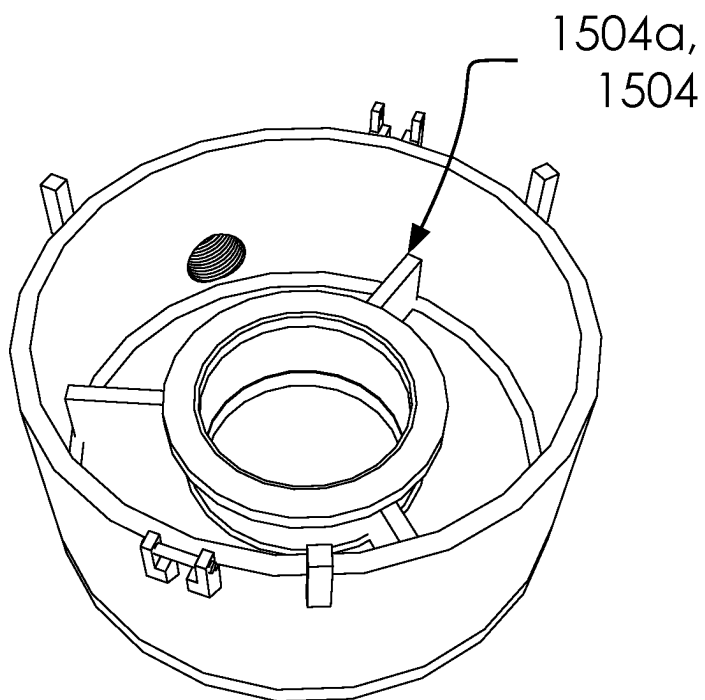


Fig. 15B

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PIPE CLEANING SYSTEM AND METHOD**CROSS-REFERENCE TO RELATED APPLICATIONS**

This US utility patent application claims benefit to and is a continuation in part of U.S. application Ser. No. 13/802,696 (filed Mar. 13, 2013). Both applications are filed by the same inventors.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT (IF APPLICABLE)

Not applicable.

REFERENCE TO SEQUENCE LISTING, A TABLE, OR A COMPUTER PROGRAM LISTING COMPACT DISC APPENDIX (IF APPLICABLE)

Not applicable.

BACKGROUND OF THE INVENTION

None of the known inventions and patents, taken either singularly or in combination, is seen to describe the instant disclosure as claimed.

BRIEF SUMMARY OF THE INVENTION

A containment head and a method of use are disclosed.

Said containment head comprises a center aperture, a reservoir, a wiping rubber, an outer body, a bottom plate and a support cylinder. The center aperture comprises a central portion of the containment head configured to pass around a tubing. The reservoir comprises a space within the outer body and above the bottom plate. The containment head is configured to selectively attach to a tubing cleaning assembly.

The method of using a containment head, comprising: selectively fitting a tubing cleaning assembly around a tubing, removing the tubing from a well bore, spraying a fluid at the tubing as it is extracted through the tubing cleaning assembly, cleaning a portion of the tubing, receiving a portion of a debris which is spilling from the spraying system as it is extracted from the well bore, and collecting the debris in a reservoir within the tubing cleaning assembly. The tubing cleaning assembly comprises a center aperture, the reservoir, a wiping rubber, an outer body, a bottom plate and a support cylinder. The center aperture comprises a central portion of the containment head configured to pass around a tubing. The reservoir comprises a space within the outer body and above the bottom plate. The containment head is configured to selectively attach to a tubing cleaning assembly.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

FIGS. 1A, 1B and 1C illustrate two perspective overviews and a cross section view of a tubing cleaning assembly.

FIG. 2 illustrates a perspective overview of said tubing with said tubing cleaning assembly in cross-section.

FIG. 3 illustrates an elevated side view of a tubing removal assembly with said tubing cleaning assembly.

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FIG. 4 illustrates an elevated side view of a tubing removal assembly with said tubing cleaning assembly and said containment head.

FIG. 5 illustrates a cross-section side view of said containment head with a reservoir.

FIGS. 6A and 6B illustrate a cross-section elevated side view of said tubing cleaning assembly with and without said top plate, respectively.

FIG. 7 illustrates an elevated front view of said tubing cleaning assembly with said spraying system and said containment head exploded from one another.

FIG. 8 illustrates a cross-section perspective overview of said containment head.

FIG. 9 illustrates an exploded side view of said containment head.

FIGS. 10A, 10B, and 10C illustrate a perspective overview, a top view, and a side view, respectively, of said top plate.

FIGS. 11A, 11B, and 11C illustrate a perspective overview, a top view, and a side view of said wiping rubber.

FIGS. 12A, 12B and 12C illustrate a perspective overview, a side view, and a wireframe view, respectively, of said support cylinder.

FIGS. 13A, 13B, and 13C illustrate a perspective overview, a top view, and a side view of said outer body.

FIGS. 14A, 14B, and 14C illustrate a perspective overview, a top view, and a side view of said bottom plate.

FIGS. 15A and 15B illustrate a perspective overview of two embodiments of said containment head without said top plate.

DETAILED DESCRIPTION OF THE INVENTION

Described herein is a tubing cleaning assembly containment head. The following description is presented to enable any person skilled in the art to make and use the invention as claimed and is provided in the context of the particular examples discussed below, variations of which will be readily apparent to those skilled in the art. In the interest of clarity, not all features of an actual implementation are described in this specification. It will be appreciated that in the development of any such actual implementation (as in any development project), design decisions must be made to achieve the designers' specific goals (e.g., compliance with system- and business-related constraints), and that these goals will vary from one implementation to another. It will also be appreciated that such development effort might be complex and time-consuming, but would nevertheless be a routine undertaking for those of ordinary skill in the field of the appropriate art having the benefit of this disclosure. Accordingly, the claims appended hereto are not intended to be limited by the disclosed embodiments, but are to be accorded their widest scope consistent with the principles and features disclosed herein.

FIGS. 1A, 1B and 1C illustrate two perspective overviews and a cross section view of a tubing cleaning assembly **100**.

In one embodiment, said tubing cleaning assembly **100** can comprise a spraying system **102** and a containment head **104**. In one embodiment, said tubing cleaning assembly **100** can be used to clean a central aperture **122**.

Here said spraying system **102** is introduced in summary but more on this topic can be found in the parent application to this continuation-in-part, namely U.S. patent application Ser. No. 13/802,696. Other examples of technologies similar to said spraying system **102** can be found at US Patent Application Number US20120305234.

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In one embodiment, said spraying system 102 can comprise a two or more plates 106, a one or more handles 602, a one or more pressure rings 110, and a spacer assembly 112. In one embodiment, said two or more plates 106 can comprise a first outer plate 102 and a second outer plate 104. In one embodiment, a handle plate 106 can comprise of said one or more handles 602. In one embodiment, said one or more pressure rings 110 can comprise a first outer plate 106a and a second outer plate 106b. In one embodiment, said spraying system 102 can comprise a spray heads 118 that are operable for dispensing a sprayed fluid 120. In one embodiment, said tubing cleaning assembly 100 can have a wiping rubber 114. In one embodiment, aforementioned components of said spraying system 102 can comprise a central aperture 122. In one embodiment, said central aperture 122 can accommodate a tubing 124.

In one embodiment, said wiping rubber 114 can comprise a central aperture 126 having an internal diameter being substantially the same as an external diameter of said tubing 124; accordingly, said wiping rubber 114 can be configured to permitting said tubing 124 to slide through said spraying system 102 while wiping material off of said tubing 124. That is, said tubing cleaning assembly 100 can cleanse said tubing 124 as said tubing 124 passes through said central aperture 122.

In one embodiment, said containment head 104 can be located below said spraying system 102 and can hold residue and waste generated by cleaning said tubing 124. In one embodiment, said containment head 104 can be attached to said spraying system 102. In one embodiment, said containment head 104 can be a separate component from said spraying system 102 wherein said spraying system 102 can be used with or without said containment head 104.

FIG. 2 illustrates a perspective overview of said tubing 124 with said tubing cleaning assembly 100 in cross-section.

In one embodiment, said tubing 124 can comprise a one or more collar portions 202 and a body portion 204. In one embodiment (but not in all embodiments), said body portion 204 can comprise a 2⅜" diameter and said one or more collar portions 202 can comprise a 3¼" diameter. In another embodiment, said body portion 204 can comprise 2⅞" and/or said tubing 124 can comprise J55 type tubing. In one embodiment, said tubing cleaning assembly 100 can clean said tubing 124 by: spraying a portion of said tubing 124 as it passes through said second outer plate 106b with said spray heads 118; and wiping a portion of said tubing 124 with said wiping rubber 114. In one embodiment, said tubing 124 can accumulate a residue 206 while in use. In one embodiment, removing said residue 206 can comprise a useful objective of said tubing cleaning assembly 100 so as to prepare said tubing 124 for future use, transport and/or other tasks known in the art. In one embodiment, removing a portion of said residue 206 from said tubing 124 with said tubing cleaning assembly 100 can comprise: spraying said residue 206 with said spray heads 118, wiping said tubing 124 with said wiping rubber 114, releasing a debris 208 below said tubing cleaning assembly 100, and collecting said debris 208 within said containment head 104. In one embodiment, said debris 208 can fall back down said tubing 124 without the use of said containment head 104. In one embodiment, said debris 208 can comprise a portion of said residue 206 and a portion of said sprayed fluid 120.

FIG. 3 illustrates an elevated side view of a tubing removal assembly 300 with said tubing cleaning assembly 100.

In one embodiment, said tubing removal assembly 300 can comprise a one or more blocks 302, a one or more

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elevators 304, said tubing 124, an air slips 308, a wellhead 310 having a cap 312, and a casing 314. In one embodiment, said tubing cleaning assembly 100 can comprise a hose 316. In one embodiment, said hose 316 is operable to delivering a fluid stream (not pictured) to said tubing cleaning assembly 100. In one embodiment, said hose 316 can attach to said fluid input 105. In one embodiment, using said tubing cleaning assembly 100 and said containment head 104 in said tubing removal assembly 300 can comprise withstanding a one or more forces such as a downward force 318 and an upward force 320. In one embodiment, using said tubing cleaning assembly 100 and said containment head 104 in line with said tubing removal assembly 300 and bearing said one or more forces can comprise a distinctive feature of said tubing cleaning assembly 100 and said containment head 104. In one embodiment, said two or more plates 106 are stacked on one another. In one embodiment, said one or more fluid channels in said two or more plates 106 are protected by said two or more plates 106. In one embodiment, each of said two or more plates 106 are individual and collectively operable for withstanding said downward force 318 and/or said upward force 320.

FIG. 4 illustrates an elevated side view of a tubing removal assembly 404 with said tubing cleaning assembly 100 and said containment head 104.

In one embodiment, said tubing cleaning assembly 100 and said containment head 104 can be used with said tubing removal assembly 404. In one embodiment, said tubing removal assembly 404 can comprise a system for removing said tubing 124 from said casing 314 with the added benefit of a blowout preventer 322 and a substructure 324; wherein, a portion of said downward force 318 can be isolated and held up by said substructure 324. In one embodiment, said containment head 104 can attach between said tubing cleaning assembly 100 and said blowout preventer 322 wherein the latter is attached on top of said wellhead 310. Thus, in one embodiment, said tubing cleaning assembly 100 can be used with or without said upward force 320 and downward force 318 pressed into itself.

FIG. 5 illustrates a cross-section side view of said containment head 104 with a reservoir 500.

In one embodiment, said containment head 104 can comprise a two or more plates 106, a center aperture 520, a one or more wiping rubbers, a one or more waste apertures, an outer body 502, and a support cylinder 504. In one embodiment, said support cylinder 504 can comprise a cylinder aperture 520c. In one embodiment, said two or more plates 106 can comprise a top plate 506 and a bottom plate 508. In one embodiment, said top plate 506 can have a top aperture 520a while said bottom plate 508 can have a lower aperture 520d. In one embodiment, said containment head 104 can be used without said top plate 506 if said containment head 104 is attached permanently to said tubing cleaning assembly 100 (embodiment not shown). In one embodiment, said one or more wiping rubbers can comprise a wiping rubber 510 similar to said wiping rubber 114. In one embodiment, said wiping rubber 510 can have an plate aperture 520b.

In one embodiment, the center of said top aperture 520a, said plate aperture 520b, said cylinder aperture 520c, and said lower aperture 520d can line up to accommodate said tubing 124. In one embodiment, said outer body 502, said support cylinder 504, and said bottom plate 508 can attach together via a one or more welding beads 514 to serve as said reservoir 500 for solids and liquids. Said one or more welding beads 514 can comprise of a first welding bead 514a to attach said support cylinder 504 to said bottom plate 508,

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and a second welding bead **514b** to attach said outer body **502** to said bottom plate **508**. In one embodiment, said waste aperture **706** can be threaded so that an external hose or tube can be connected to draw waste away from said reservoir **500**.

Said reservoir **500** within said containment head **104** primarily stores and removes said residue **206** and said debris **208** from said tubing **124** and said tubing cleaning assembly **100**. In one embodiment, while said reservoir **500** is formed from a sum of components including said top plate **506**, said outer body **502**, said bottom plate **508**, and said support cylinder **504**, all but said top plate **506** are not removable from said containment head **104**.

FIGS. **6A** and **6B** illustrate a cross-section elevated side view of said tubing cleaning assembly **100** with and without said top plate **506**, respectively.

As stated previously, said tubing cleaning assembly **100** can comprise a two or more plates **106**, a one or more handles **602**, a one or more pressure rings **110**, and a spacer assembly **112**. In one embodiment, said spraying system **102** can comprise a one or more handles **602** which can comprise a first handle **602a** and a second handle **602b**.

In one embodiment, said tubing cleaning assembly **100** can be used with or without said top plate **506**. In one embodiment, said top plate **506** can be used to seal off said containment head **104** and in another embodiment, said containment head **104** can be sealed off with a lower portion of said spraying system **102**, as illustrated in FIG. **6A**.

Said center aperture comprises an opening about a center axis **620** of said tubing cleaning assembly **100**.

FIG. **7** illustrates an elevated front view of said tubing cleaning assembly **100** with said spraying system **102** and said containment head **104** exploded from one another.

In one embodiment, said containment head **104** can further comprise a one or more top plate guide **702** and a one or more mechanical fastener **704**. Said one or more top plate guide **702** provides aligned placement of said top plate **506** on said outer body **502**; that is, said one or more top plate guide **702** is helpful in limiting movement of said top plate **506** when placed on said outer body **502**.

In one embodiment, said top plate **506** can be guided into place by said one or more top plate guide **702** and fastened onto said outer body **502** by said one or more mechanical fastener **704**. In one embodiment, where said containment head **104** is used without said top plate **506**, said one or more mechanical fastener **704** can attach to a portion of said spraying system **102**. In one embodiment, said support cylinder **504** can comprise of a one or more components held together by said first welding bead **514a** (see *infra*). In one embodiment, said support cylinder **504** and said bottom plate **508** can be held together by said second welding bead **514b**. In one embodiment, said bottom plate **508** and said outer body **502** can be held together by said third welding bead **514c**.

In one embodiment, said outer body **502** can comprise a waste aperture **706** with a waste collar **708**. In one embodiment, said reservoir **500** can be evacuated using said waste aperture **706** at said waste collar **708**.

FIG. **8** illustrates a cross-section perspective overview of said containment head **104**.

In one embodiment, said top plate **506** can comprise a one or more handles **802** which can comprise a first handle **802a** and a second handle **802b**.

FIG. **9** illustrates an exploded side view of said containment head **104**.

In one embodiment, said bottom plate **508** forms the base of said containment head **104** while said outer body **502**

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serves as the side. In one embodiment, said support cylinder **504** attaches to said bottom plate **508** within the center cavity of said outer body **502**. Said wiping rubber **510** rests on top of said support cylinder **504** and said top plate **506** can be fastened on said outer body **502** to complete said containment head **104** and form said reservoir **500**.

FIGS. **10A**, **10B**, and **10C** illustrate a perspective overview, a top view, and a side view, respectively, of said top plate **506**.

In one embodiment, said top plate **506** can comprise a $\frac{3}{4}$ inch thick steel plate having a substantially circular shape. In one embodiment, said top plate **506** can have said top aperture **520a**. In one embodiment, said top plate **506** can have an internal diameter **1004**, an external diameter **1006**, and a height **1008**; wherein said height **1008** can be $\frac{3}{4}$ inches. In one embodiment, said top plate **506** can comprise of said external diameter **1006** measuring 15 inches and said internal diameter **1004** measuring 6 inches. In one embodiment, said top plate **506** can comprise a one or more attachments along said external diameter **1006**. In one embodiment, said one or more attachments can comprise a one or more latch posts **1002** for moving said top plate **506**; wherein, said one or more latch posts **1002** can comprise a first latch post **1002a** and a second latch post **1002b**.

FIGS. **11A**, **11B**, and **11C** illustrate a perspective overview, a top view, and a side view of said wiping rubber **510**.

In one embodiment, said wiping rubber **510** can have a thickness **1106** of $\frac{1}{2}$ inch. In one embodiment, said thickness **1106** can vary. In one embodiment, said wiping rubber **510** can have an outer diameter **1104** and an inner diameter **1102**. In one embodiment, said outer diameter **1104** can be 8 inches and said inner diameter **1102** can be 6 inches. In one embodiment, said outer diameter **1104** and said inner diameter **1102** can vary.

In one embodiment, said wiping rubber **510** can comprise a beveled edge **1108** along said inner diameter **1102**. In one embodiment, said beveled edge **1108** can be on a top edge **1110** and/or a bottom edge **1112**.

FIGS. **12A**, **12B** and **12C** illustrate a perspective overview, a side view, and a wireframe view, respectively, of said support cylinder **504**.

In one embodiment, said support cylinder **504** can comprise an inner diameter **1206**, a lower outer diameter **1208**, an upper outer diameter **1210**, and a height **1212**, and have a plate width **1214** to support said wiping rubber **510**. In one embodiment, said inner diameter **1206** can be 6 inches and said height **1212** can be $2\frac{1}{2}$ inches. In one embodiment, said inner diameter **1206**, said lower outer diameter **1208**, said upper outer diameter **1210**, and said height **1212** can vary to accommodate different sized wiping rubbers and larger or smaller containment heads. In one embodiment, said support cylinder **504** provides a rigid structure for said wiping rubber **510** while said downward force **318** is applied.

In one embodiment, said support cylinder **504** can comprise a cylinder portion **1220** and a platform portion **1222**. In one embodiment, said cylinder portion **1220** and said platform portion **1222** can be welded together or otherwise constructed out of one piece of material. In one embodiment, said cylinder portion **1220** can comprise a cylindrical element configured to lift said platform portion **1222** above said bottom plate **508** and to create said reservoir **500**, as illustrated above.

FIGS. **13A**, **13B**, and **13C** illustrate a perspective overview, a top view, and a side view of said outer body **502**.

In one embodiment, said outer body **502** can have a diameter **1302** and a height **1304**. In one embodiment, said diameter **1302** can be 15 inches. In one embodiment, said

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waste collar **708** provides an extended outlet away from said outer body **502**. In one embodiment, said waste aperture **706** can comprise an inner threading. In one embodiment, said waste aperture **706** can be used to attach an external hose or pathway (not illustrated here).

FIGS. **14A**, **14B**, and **14C** illustrate a perspective over-view, a top view, and a side view of said bottom plate **508**.

In one embodiment, said bottom plate **508** can be welded onto the bottom of said outer body **502** to form the external portion of said containment head **104**. In one embodiment, said bottom plate **508** can comprise a beveled edge **1402** along a top edge **1404** and a bottom edge **1406**. In one embodiment, said bottom plate **508** can comprise an inner diameter **1408**, an outer diameter **1410**, and a height **1412**. In one embodiment, said inner diameter **1408** can be 6 inches and said outer diameter **1410** can be 15 inches. In one embodiment, said inner diameter **1408** and said outer diameter **1410** can vary to fit differing sizes of said outer body **502**.

FIGS. **15A** and **15B** illustrate a perspective overview of two embodiments of said containment head **104** without said top plate **506**.

In one embodiment, a one or more spacers **1502** can be used between said top plate **506** and said wiping rubber **510** to keep said wiping rubber **510** pressed against said support cylinder **504**. Said one or more spacers **1502** can comprise a first spacer **1502a**. In one embodiment, said one or more spacers **1502** can be attached to either said wiping rubber **510** or said top plate **506**. In one embodiment, said one or more spacers **1502** may be omitted if liquid pressure from said tubing cleaning assembly **100** is great enough to keep said wiping rubber **510** against said support cylinder **504**.

In one embodiment, a one or more braces **1504** can be attached to said outer body **502**, said bottom plate **508**, and said support cylinder **504**. Said one or more braces **1504** can comprise a first brace **1504a**. By utilizing said one or more braces **1504**, the weight of said residue **206** and said debris **208** can be distributed throughout said containment head **104** instead of said bottom plate **508** alone. In one embodiment, if weight of said residue **206** and said debris **208** is light enough to not compromise the integrity of said containment head **104**, then said one or more braces **1504** may be omitted.

Various changes in the details of the illustrated operational methods are possible without departing from the scope of the following claims. Some embodiments may combine the activities described herein as being separate steps. Similarly, one or more of the described steps may be omitted, depending upon the specific operational environment the method is being implemented in. It is to be understood that the above description is intended to be illustrative, and not restrictive. For example, the above-described embodiments may be used in combination with each other. Many other embodiments will be apparent to those of skill in the art upon reviewing the above description. The scope of the invention should, therefore, be determined with reference to the appended claims, along with the full scope of equivalents to which such claims are entitled. In the appended claims, the terms “including” and “in which” are used as the plain-English equivalents of the respective terms “comprising” and “wherein.”

The invention claimed is:

1. A tubing cleaning assembly, wherein, said tubing cleaning assembly comprises a containment head;

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said containment head comprises a center aperture, a reservoir, a wiping rubber, an outer body, a bottom plate and a support cylinder;

said center aperture comprises a central portion of said containment head configured to pass around a tubing; said reservoir comprises a space

within said outer body and above said bottom plate, and between said support cylinder, said bottom plate and said outer body;

said outer body comprises a substantially cylindrical shape;

said bottom plate is attached about a lower portion of said outer body;

said support cylinder comprises a substantially cylindrical shape;

said bottom plate comprises a lower aperture;

said lower aperture and said support cylinder comprise a similar internal diameter;

said support cylinder is centered around and attached above said lower aperture to create a water tight seal between one another;

external diameter of said bottom plate and an external diameter of said outer body are substantially similar;

said outer body is centered around and attached above said bottom plate to create a water tight seal between one another;

said plate aperture, said cylinder aperture and said lower aperture are aligned with one another to allow said tubing to pass through said containment head;

said outer body further comprises a waste aperture;

said waste aperture is configured for draining a debris from said reservoir;

said waste aperture is aligned with a lower portion of said reservoir and below a top portion of said support cylinder;

said tubing cleaning assembly is configured to remove said debris from said tubing,

collect a portion of said debris in said reservoir, and drain said portion of said debris from said reservoir through said waste aperture;

said wiping rubber rests above a portion of said support cylinder;

said wiping rubber comprises a plate aperture, said support cylinder comprises a cylinder aperture, and said bottom plate comprises said lower aperture;

said wiping rubber is positioned above said support cylinder and between said tubing and said outer body; said tubing cleaning assembly comprises a spraying system and said containment head;

said wiping rubber is configured for

allowing a portion of said tubing to pass through said plate aperture, receiving a portion of said debris from said spraying system, and

diverting said debris between said outer body and said support cylinder into said reservoir; wherein, said spraying system selectively attaches to said containment head;

said wiping rubber is enclosed inside the lower half of said outer body and is not directly coupled to a vertical wall of said outer body.

2. The tubing cleaning assembly of claim 1, wherein: said wiping rubber comprises an internal diameter approximately equal to an external diameter of said tubing.

3. The tubing cleaning assembly of claim 1, wherein: said containment head further comprises a top plate;

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said top plate comprises a top aperture in said top plate;
 said outer body comprises an external diameter;
 said top plate comprises an external diameter;
 said external diameter of said top plate is equal to or
 greater than said external diameter of said outer body; 5
 said top plate is selectively attached to said outer body;
 and
 said top aperture allows a portion of said tubing to pass
 through said top plate.

4. The tubing cleaning assembly of claim 3, wherein: 10
 said tubing cleaning assembly comprises said spraying
 system and said containment head; and
 said containment head selectively attaches to said spray-
 ing system with said top plate attached to a lower
 portion of said spraying system. 15

5. The tubing cleaning assembly of claim 1 further
 comprising:
 said waste aperture comprises a waste collar adapted to
 receive a threaded hose.

6. The tubing cleaning assembly of claim 1 further 20
 comprising:
 said waste aperture is arranged at said lower portion of
 said outer body proximate to said bottom plate.

7. The tubing cleaning assembly of claim 1 further
 comprising: 25
 said tubing cleaning assembly comprises said spraying
 system and said containment head;
 said spraying system is permanently attached to said
 containment head.

8. The tubing cleaning assembly of claim 1 further 30
 comprising:
 said tubing cleaning assembly comprises said spraying
 system and said containment head;
 said spraying system selectively attaches to said contain-
 ment head. 35

9. The tubing cleaning assembly of claim 1 further
 comprising:
 said outer body of said containment head further com-
 prises a mechanical fastener;
 said top plate comprises a latch post; and 40
 said top plate releaseably attaches to said outer body with
 said mechanical fastener and said latch post.

10. The tubing cleaning assembly of claim 1 further
 comprising: 45
 said top plate further comprises a one or more handles.

11. The tubing cleaning assembly of claim 1 further
 comprising:
 said containment head further comprises a brace arranged
 between said support cylinder and said outer body and
 said bottom plate. 50

12. A method of using a tubing cleaning assembly, com-
 prising:
 selectively fitting said tubing cleaning assembly around a
 tubing,
 removing said tubing from a well bore, 55
 spraying a fluid at said tubing with a spraying system as
 it is extracted through said tubing cleaning assembly,
 cleaning a portion of said tubing,
 receiving a portion of a debris which is spilling from said
 spraying system as it is extracted from said well bore, 60
 collecting said debris in a reservoir within a containment
 head,
 draining said debris from a waste aperture from said
 reservoir;
 wherein, 65
 said tubing cleaning assembly comprises said spraying
 system and said containment head;

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said containment head comprises a center aperture, said
 reservoir, a wiping rubber, an outer body, a bottom
 plate and a support cylinder;
 said center aperture comprises a central portion of said
 containment head configured to pass around said tub-
 ing;
 said reservoir comprises a space
 within said outer body and above said bottom plate, and
 between said support cylinder, said bottom plate and
 said outer body;
 said outer body comprises a substantially cylindrical
 shape;
 said bottom plate is attached about a lower portion of said
 outer body;
 said support cylinder comprises a substantially cylindrical
 shape;
 said bottom plate comprises a lower aperture;
 said lower aperture and said support cylinder comprise a
 similar internal diameter;
 said support cylinder is centered around and attached
 above said lower aperture to create a water tight seal
 between one another;
 external diameter of said bottom plate and an external
 diameter of said outer body are substantially similar;
 said outer body is centered around and attached above
 said bottom plate to create said water tight seal between
 one another;
 said plate aperture, said cylinder aperture and said lower
 aperture are aligned with one another to allow said
 tubing to pass through said containment head;
 said outer body further comprises said waste aperture;
 said waste aperture is configured for draining said debris
 from said reservoir;
 said waste aperture is aligned with a lower portion of said
 reservoir and below a top portion of said support
 cylinder;
 said tubing cleaning assembly is configured to
 remove said debris from said tubing,
 collect a portion of said debris in said reservoir, and
 drain said portion of said debris from said reservoir
 through said waste aperture;
 said wiping rubber rests above said portion of said support
 cylinder;
 said wiping rubber comprises a plate aperture, said sup-
 port cylinder comprises said cylinder aperture, and said
 bottom plate comprises said lower aperture;
 said wiping rubber is positioned above said support
 cylinder and between said tubing and said outer body;
 said tubing cleaning assembly comprises said spraying
 system and said containment head;
 said wiping rubber is configured for
 allowing said portion of said tubing to pass through
 said plate aperture,
 receiving said portion of said debris from said spraying
 system, and
 diverting said debris between said outer body and said
 support cylinder into said reservoir; wherein,
 said spraying system selectively attaches to said contain-
 ment head;
 said wiping rubber is enclosed inside the lower half of
 said outer body and is not directly coupled to a vertical
 wall of said outer body.

13. The tubing cleaning assembly of claim 12, wherein:
 said center aperture comprises an opening about a vertical
 axis of said containment head and is configured for:
 allowing said tubing to pass through a lower aperture of
 said bottom plate,

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allowing said tubing to pass through a cylinder aperture
of said support cylinder,
allowing said tubing to pass through said plate aperture
of said wiping rubber,
allowing said tubing to pass through said outer body 5
and into said spraying system,
receiving said debris from said tubing a portion of
which has been released by said spraying system,
preventing a majority portion of said debris from
passing through said bottom plate, and 10
collecting a portion of said debris into said reservoir.

14. The tubing cleaning assembly of claim **12**, wherein:
said outer body comprises said substantially cylindrical
shape;
said bottom plate is attached about said lower portion of 15
said outer body;
said support cylinder comprises said substantially cylin-
drical shape;
said bottom plate comprises said lower aperture;
said lower aperture and said support cylinder comprise 20
said similar internal diameter;
said support cylinder is centered around and attached
above said lower aperture to create said water tight seal
between one another;

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external diameter of said bottom plate and said external
diameter of said outer body are substantially similar;
said outer body is centered around and attached above
said bottom plate to create a water tight seal between
one another;
said wiping rubber rests above said portion of said support
cylinder;
said wiping rubber comprises said plate aperture, said
support cylinder comprises said cylinder aperture, and
said bottom plate comprises said lower aperture;
said plate aperture, said cylinder aperture and said lower
aperture are aligned with one another to allow said
tubing to pass through said containment head;
said wiping rubber is positioned above said support
cylinder and between said tubing and said outer body;
said wiping rubber is configured for
allowing said portion of said tubing to pass through
said plate aperture,
receiving said portion of said debris from said spraying
system, and
diverting said debris between said outer body and said
support cylinder into said reservoir.

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