



US00D860472S

(12) **United States Design Patent**
Blake et al.

(10) **Patent No.:** **US D860,472 S**
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(54) **LIBRARY TUBE**

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- (73) Assignee: **Illumina, Inc.**, San Diego, CA (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/589,038**
- (22) Filed: **Dec. 27, 2016**
- (51) **LOC (12) Cl.** **24-02**
- (52) **U.S. Cl.**
USPC **D24/224**
- (58) **Field of Classification Search**
USPC D24/107, 121, 133, 216, 222-230, 233;
D9/523, 547, 549, 550, 724, 732
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

- D243,705 S * 3/1977 Lyman D24/224
 - D311,681 S * 10/1990 Aggarwal D9/547
- (Continued)

OTHER PUBLICATIONS

Nextera DNA Library Prep Kit Illumina. [online] Published on Sep. 24, 2016. Retrieved Jul. 5, 2018 from URL: https://www.illumina.com/products/by-type/sequencin.*

(Continued)

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(57) **CLAIM**

We claim the ornamental design for a library tube, as shown and described.

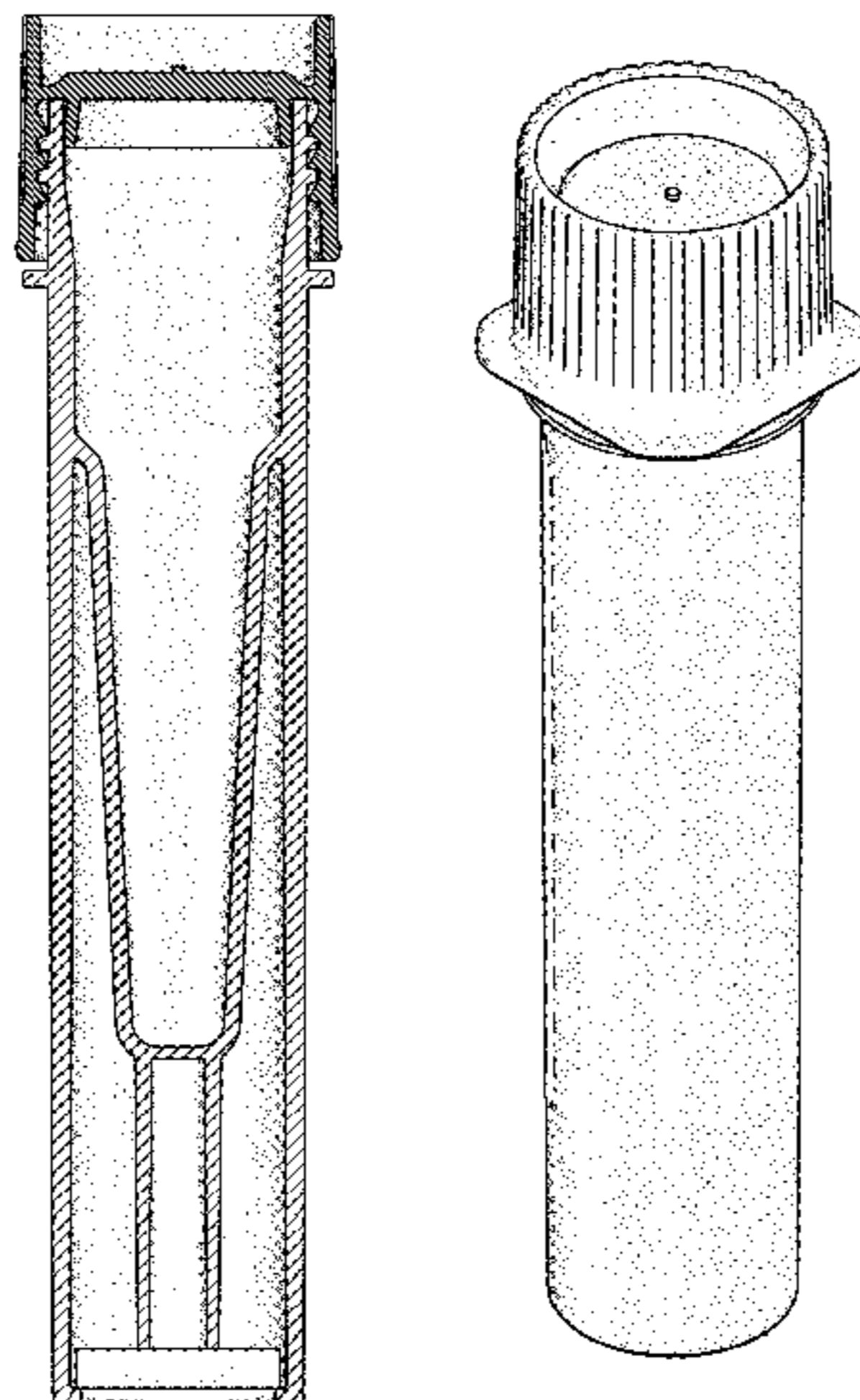
DESCRIPTION

FIG. 1 is a front view of a library tube.
 FIG. 2 is a right side view of the library tube of FIG. 1.
 FIG. 3 is a rear view of the library tube of FIG. 1.
 FIG. 4 is a left side view of the library tube of FIG. 1.
 FIG. 5 is a section view of the library tube of FIG. 1.
 FIG. 6 is a top view of the library tube of FIG. 1.
 FIG. 7 is a bottom view of the library tube of FIG. 1.
 FIG. 8 is a front view of the cap for the library tube of FIG. 1; the left side, right side, and rear views are the same.
 FIG. 9 is a section view of the cap for the library tube of FIG. 1.
 FIG. 10 is a bottom view of the cap for the library tube of FIG. 1.
 FIG. 11 is an isometric view of the cap for the library tube of FIG. 1.
 FIG. 12 is an isometric view of the library tube of FIG. 1.
 FIG. 13 is an isometric view of the library tube of FIG. 1 in which the cap has been removed.
 FIG. 14 is a front view of the library tube of FIG. 1 in which the cap has been removed.
 FIG. 15 is a right side view of the library tube of FIG. 1 in which the cap has been removed.
 FIG. 16 is a rear view of the library tube of FIG. 1 in which the cap has been removed.
 FIG. 17 is a left side view of the library tube of FIG. 1 in which the cap has been removed.
 FIG. 18 is a section view of the library tube of FIG. 1 in which the cap has been removed.
 FIG. 19 is a top view of the library tube of FIG. 1 in which the cap has been removed.
 FIG. 20 is a bottom view of the library tube of FIG. 1 in which the cap has been removed; and,
 FIG. 21 is an isometric view of the library tube of FIG. 1 in which the cap has been removed.

The tube body may be made be transparent, translucent, or opaque; the cap may be transparent, translucent, or opaque as well. The cap and tube body may have different appearances, e.g., the cap may be opaque and the tube body may be translucent.

Dash-dot-dash boundary lines are used herein to indicate a transition from claimed subject matter to unclaimed environmental structure, as evidenced by the absence of shading

(Continued)



within the boundary shape and the presence of shading outside of the boundary shape. See, for example, the dash-dot-dash boundary that defines the label that is applied to the tube body, thus indicating that the label (and the text printed on it) is unclaimed environmental structure.

Stipple shading is used in the accompanying Figures to convey surface contouring and is not indicative of any particular texture or coloring.

1 Claim, 9 Drawing Sheets

(58) **Field of Classification Search**

CPC B01F 13/0025; B01J 2219/00292; B01J 2220/64; B01L 3/14; B01L 3/021-0237; B01L 3/508-50825; B01L 3/52-523; G01F 11/02

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D372,090 S * 7/1996 MacCauley D24/118
 7,294,308 B2 * 11/2007 Kacian B01L 3/50825
 422/534

D564,100 S * 3/2008 O'Banion D24/216
 7,857,154 B2 * 12/2010 Pedlar B01L 3/508
 215/252
 D741,720 S * 10/2015 Anandani D9/560
 9,403,629 B2 * 8/2016 Accurso B65D 55/14
 D769,124 S * 10/2016 Wieland D9/560
 D776,544 S * 1/2017 Staab D9/520
 D796,964 S * 9/2017 Staab D9/520
 D799,325 S * 10/2017 Ozamiz D9/523
 D816,506 S * 5/2018 Jones D9/560
 D822,494 S * 7/2018 Terrasi D9/542
 2004/0007556 A1 * 1/2004 Manera B65D 41/06
 215/332
 2014/0243706 A1 * 8/2014 El-Fahmawi A61B 10/0045
 600/572

OTHER PUBLICATIONS

DNA Genotek's Blog. [online] Published on Oct. 17, 2011. Retrieved Jul. 5, 2018 from URL: <http://blog.dnagenotek.com/topic/dna-identification>.*

PD-BR-017. [online] Published on Dec. 9, 2017. Retrieved Jun. 21, 2018 from URL: <https://www.dnagenotek.com/ROW/pdf/PD-BR-017.pdf>.*

* cited by examiner

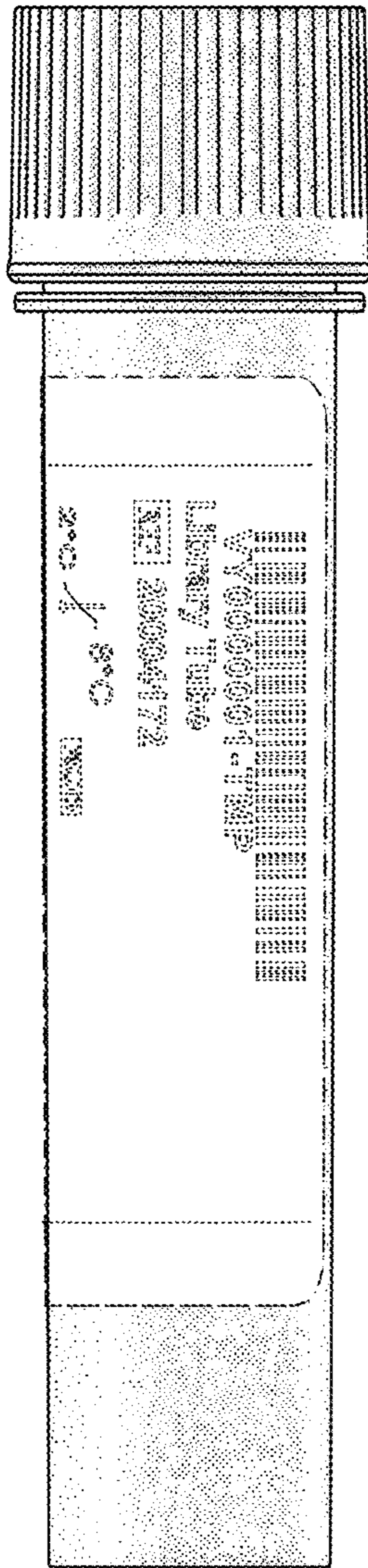


Figure 1

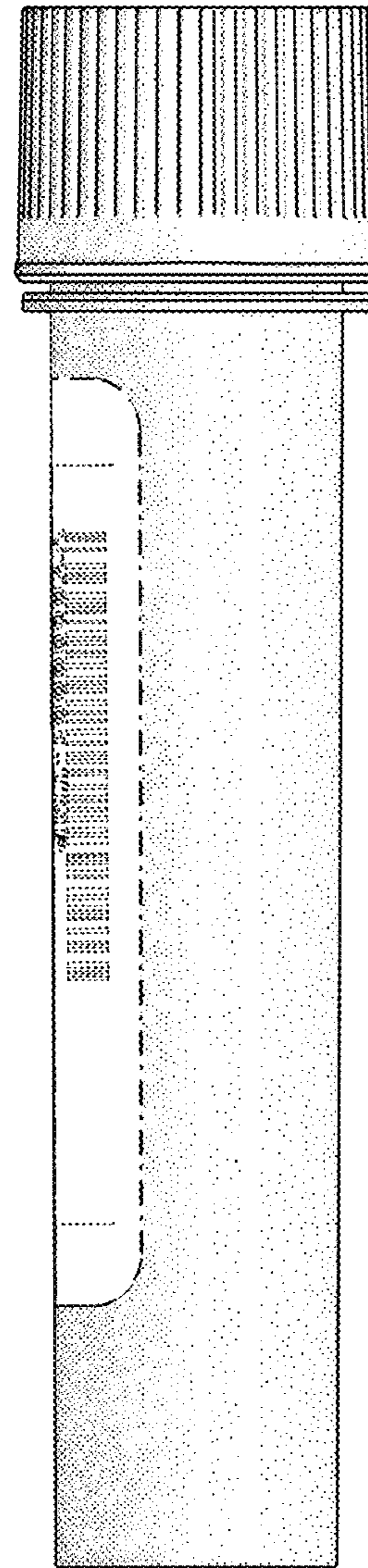


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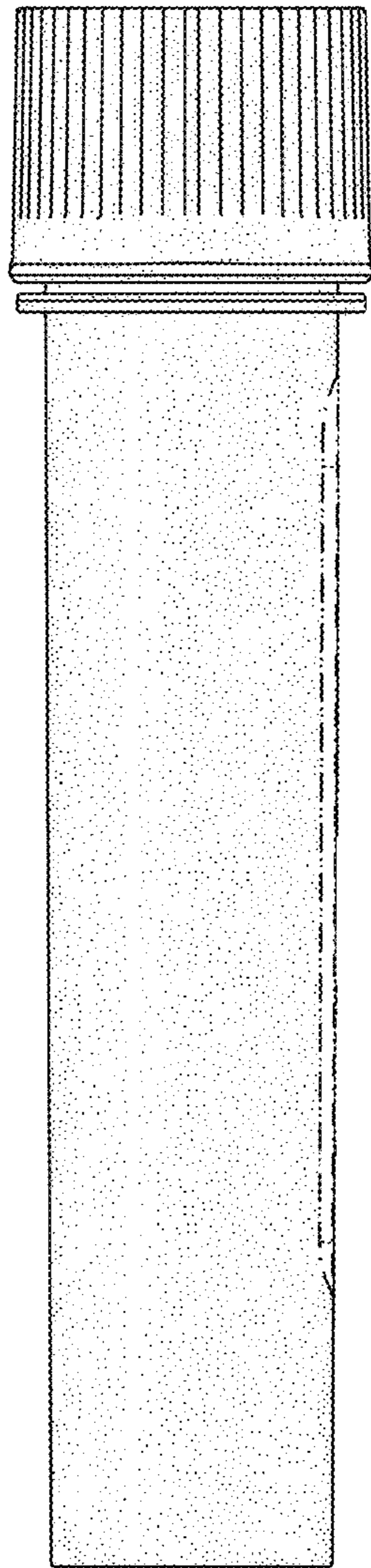


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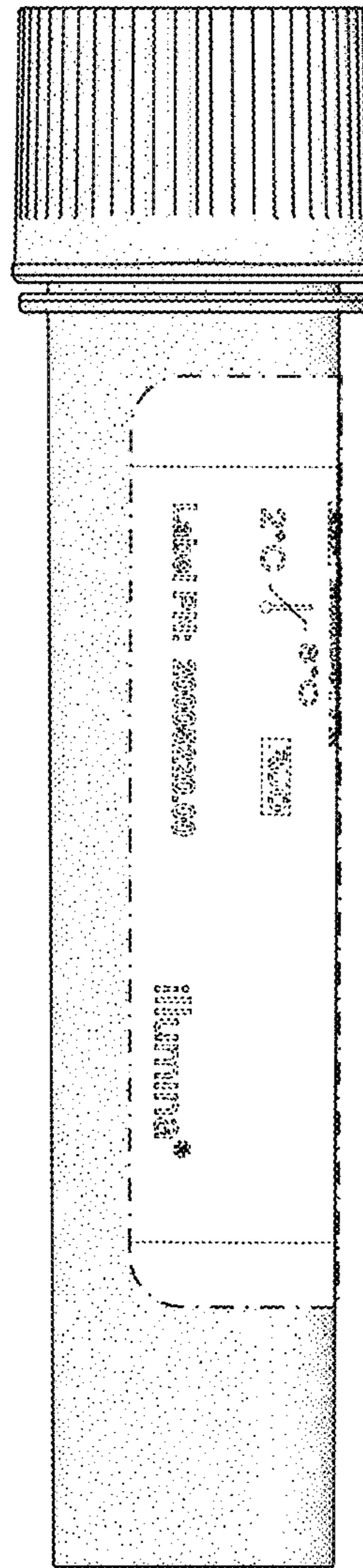


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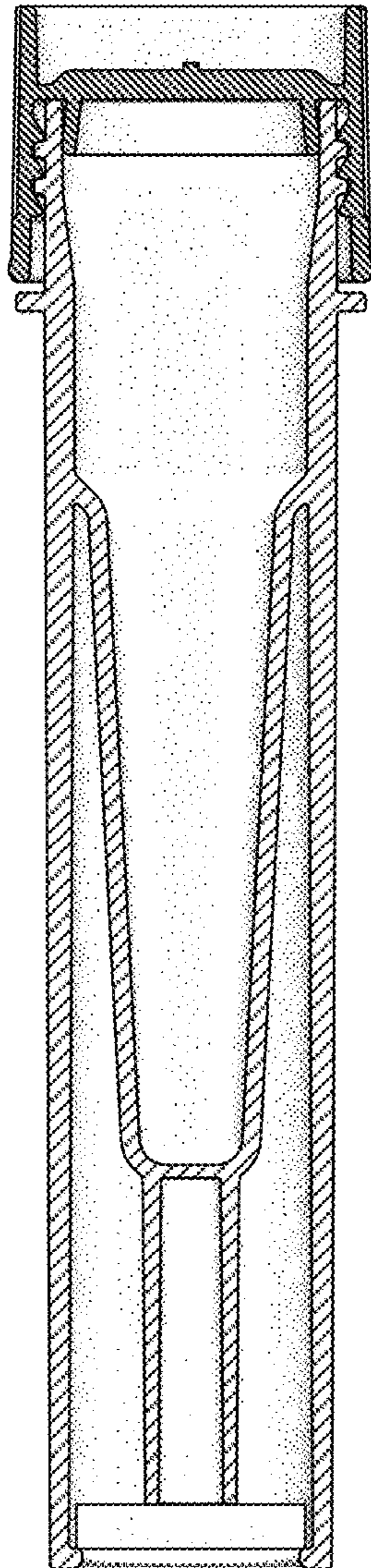


Figure 5

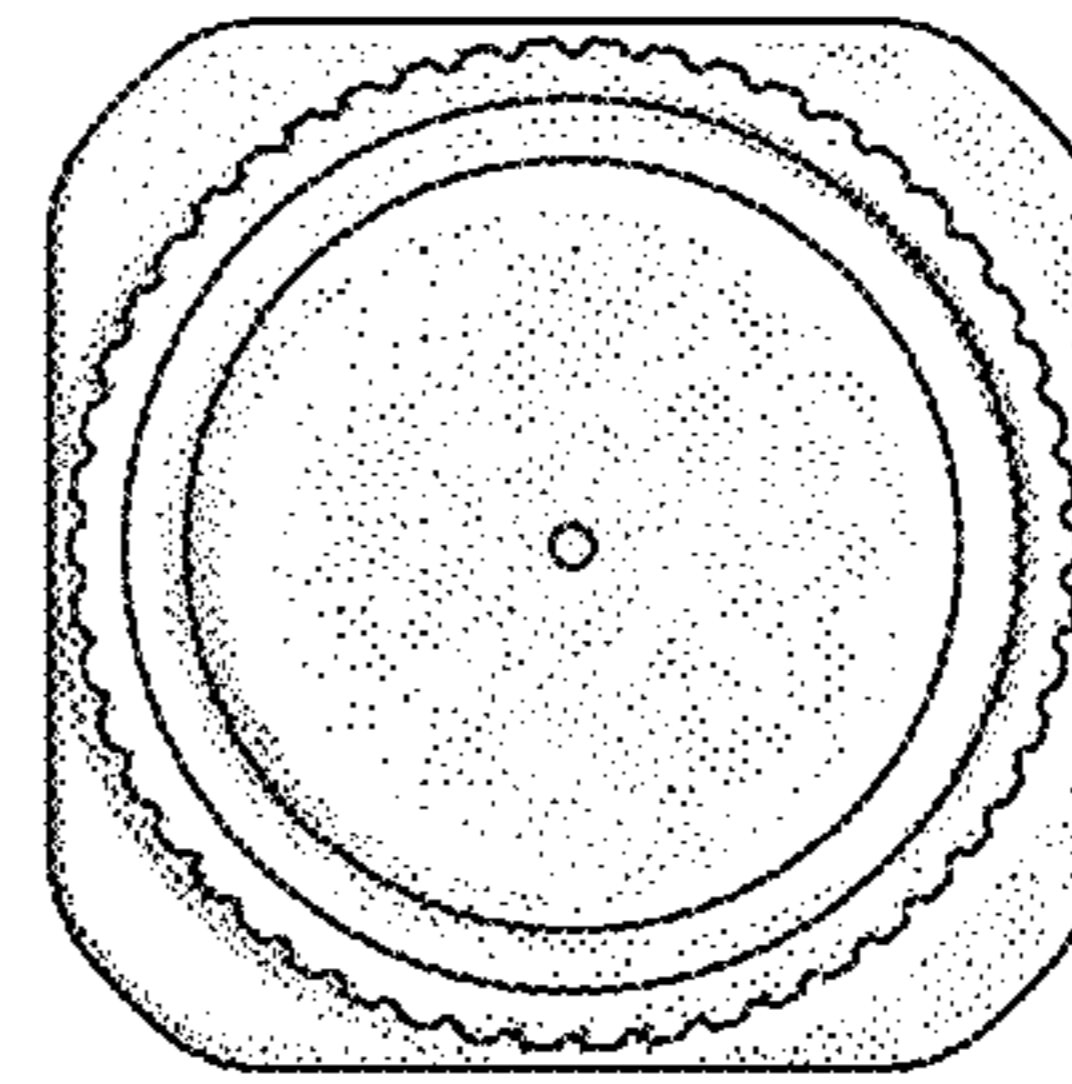


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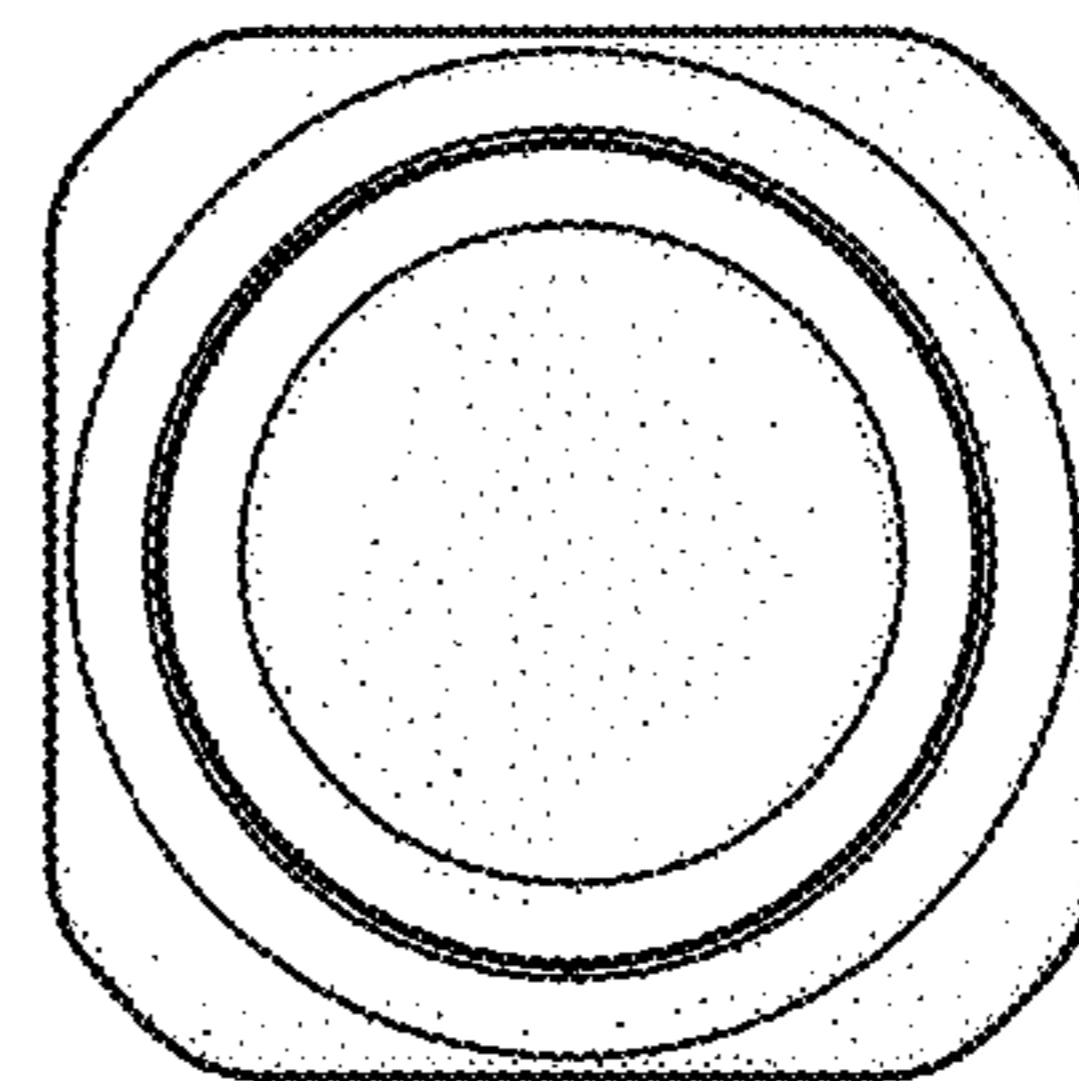


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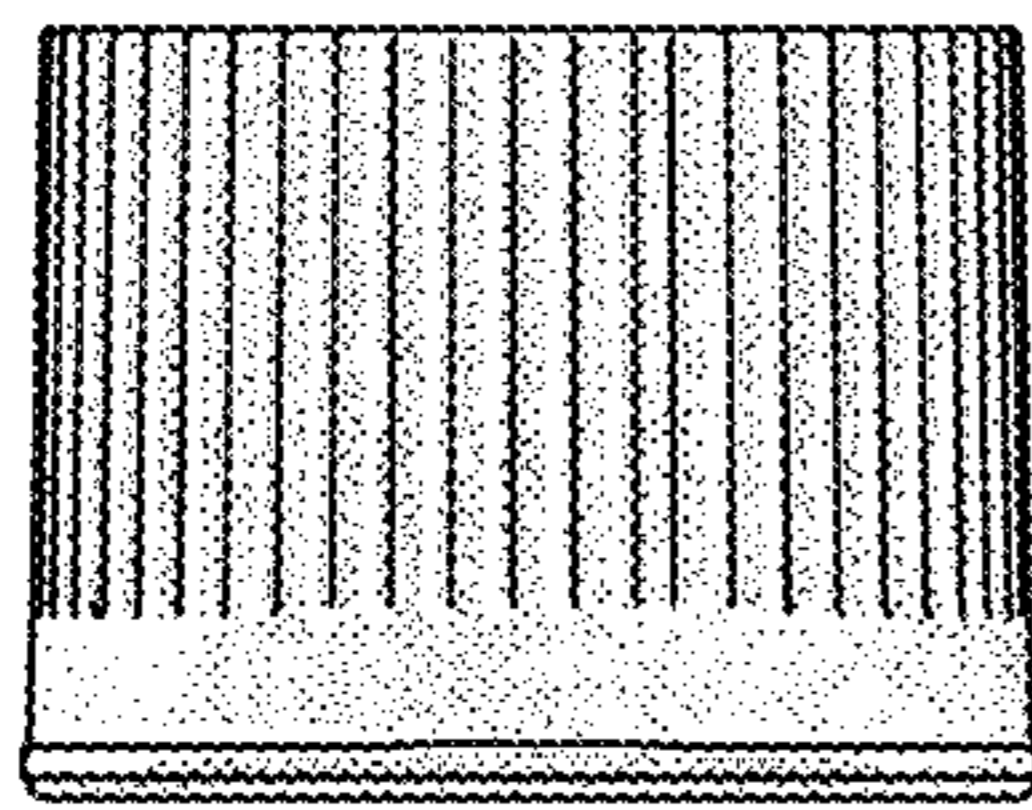


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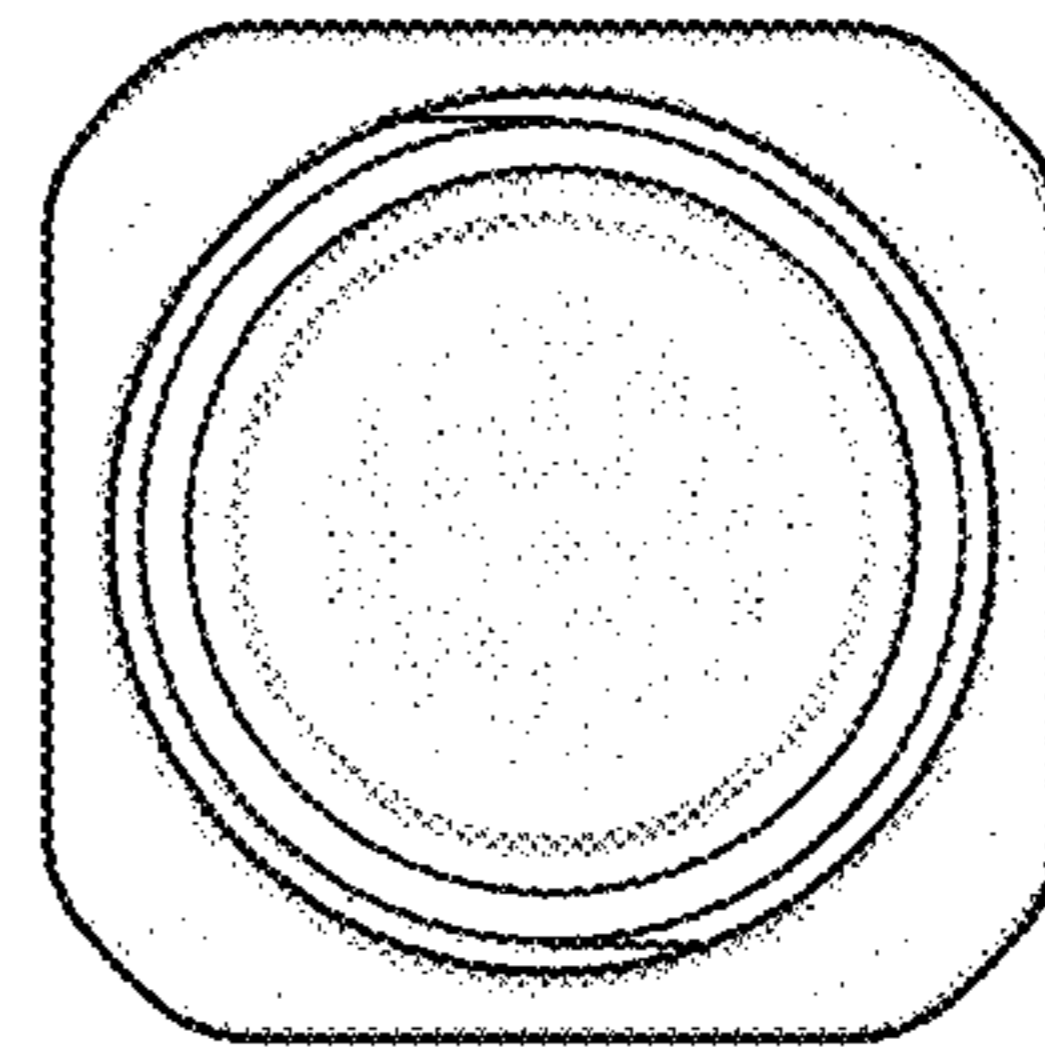


Figure 10

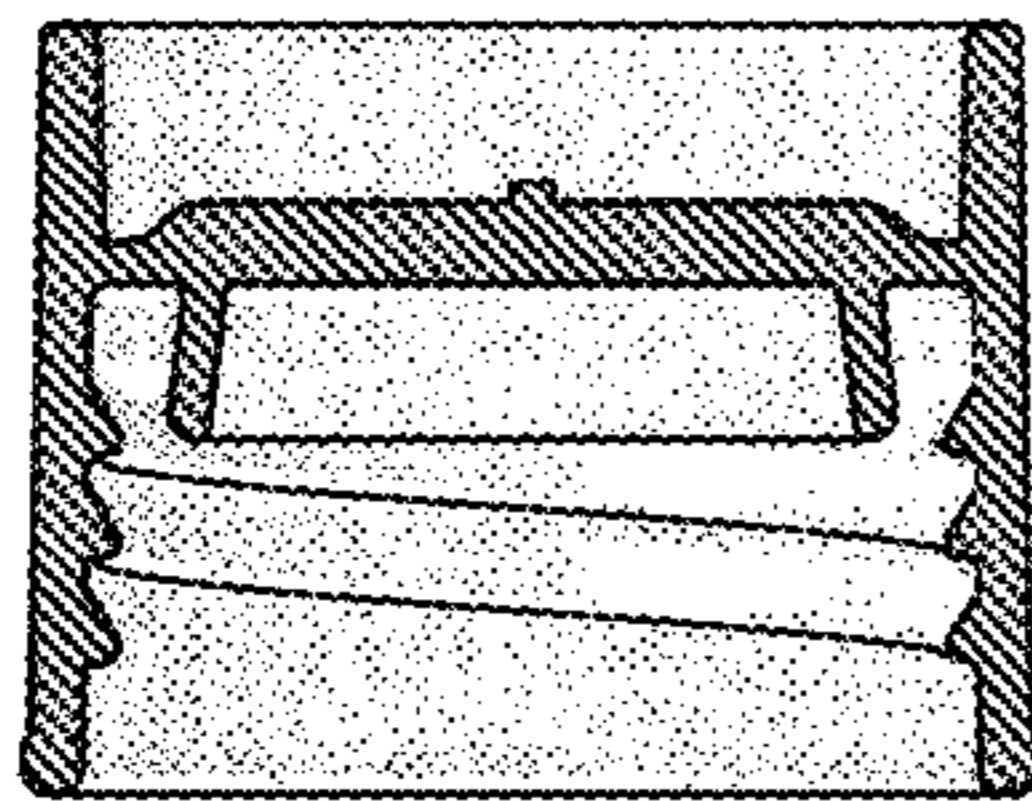


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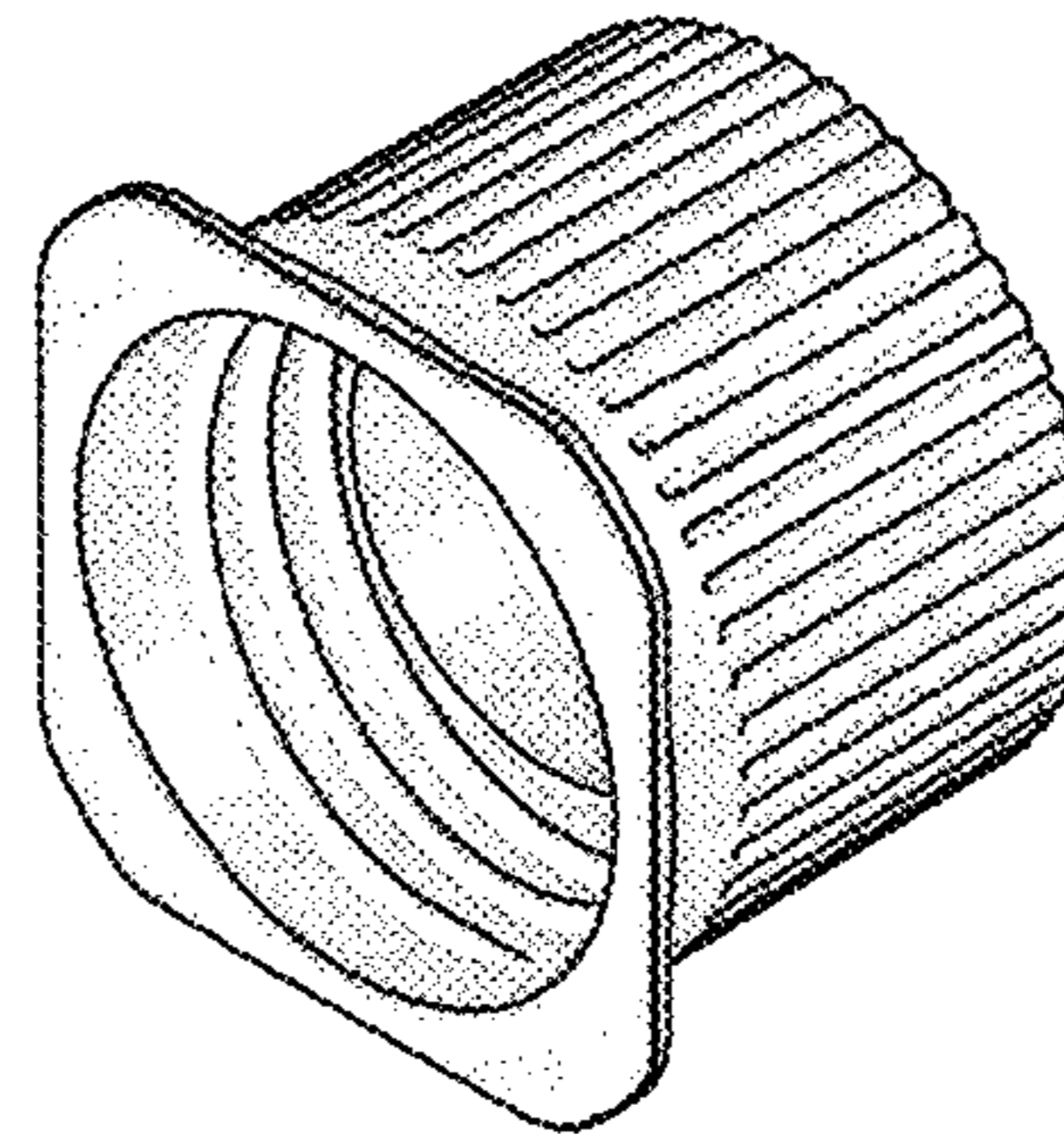


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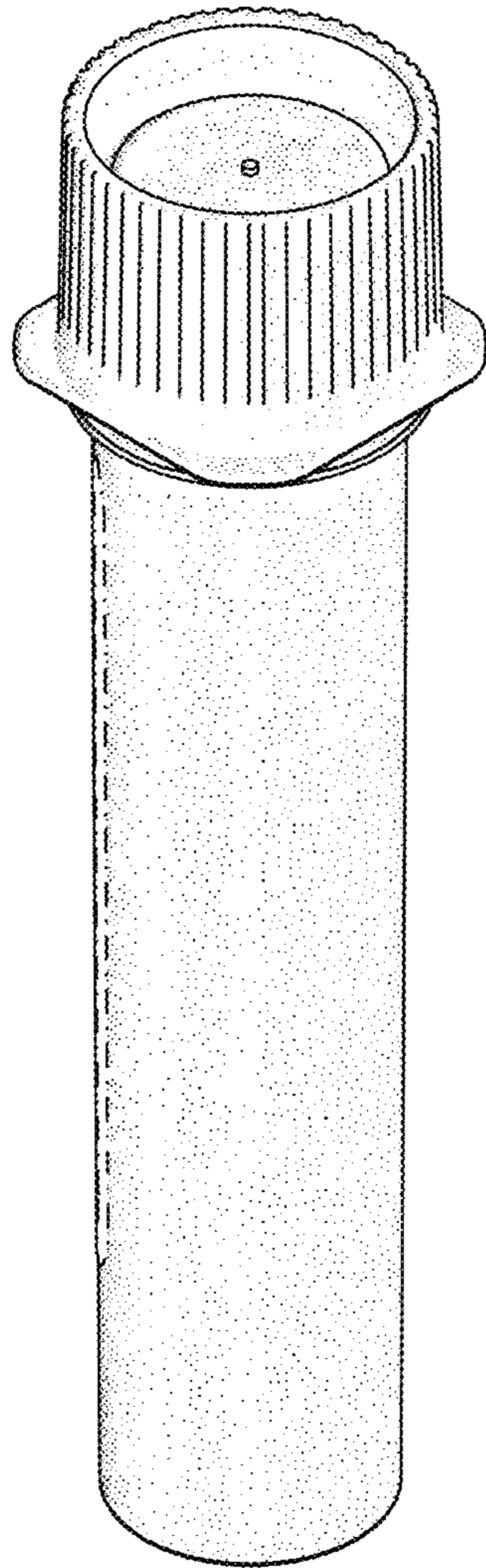


Figure 12

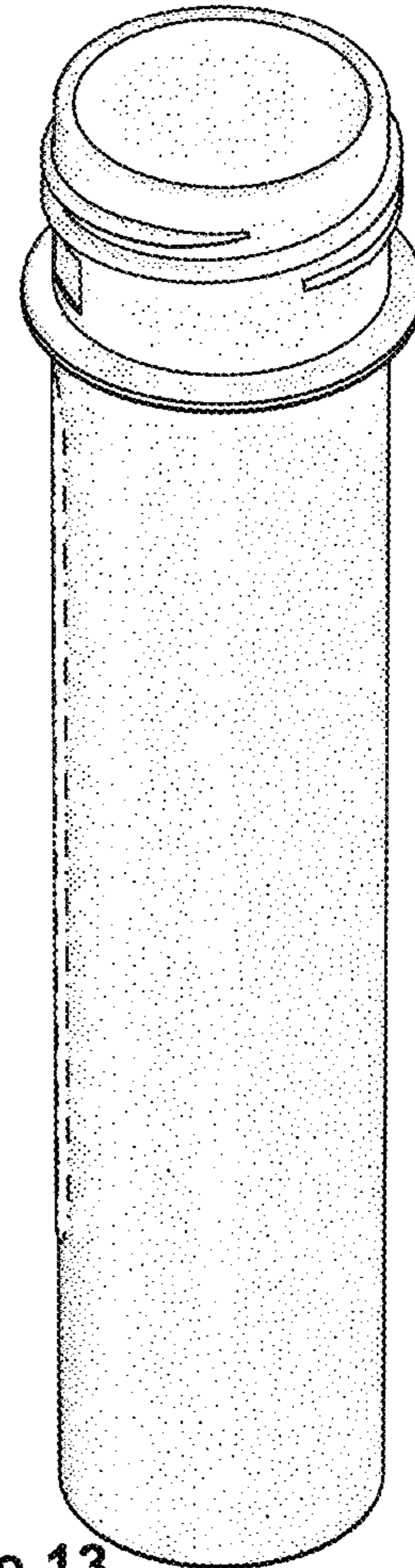
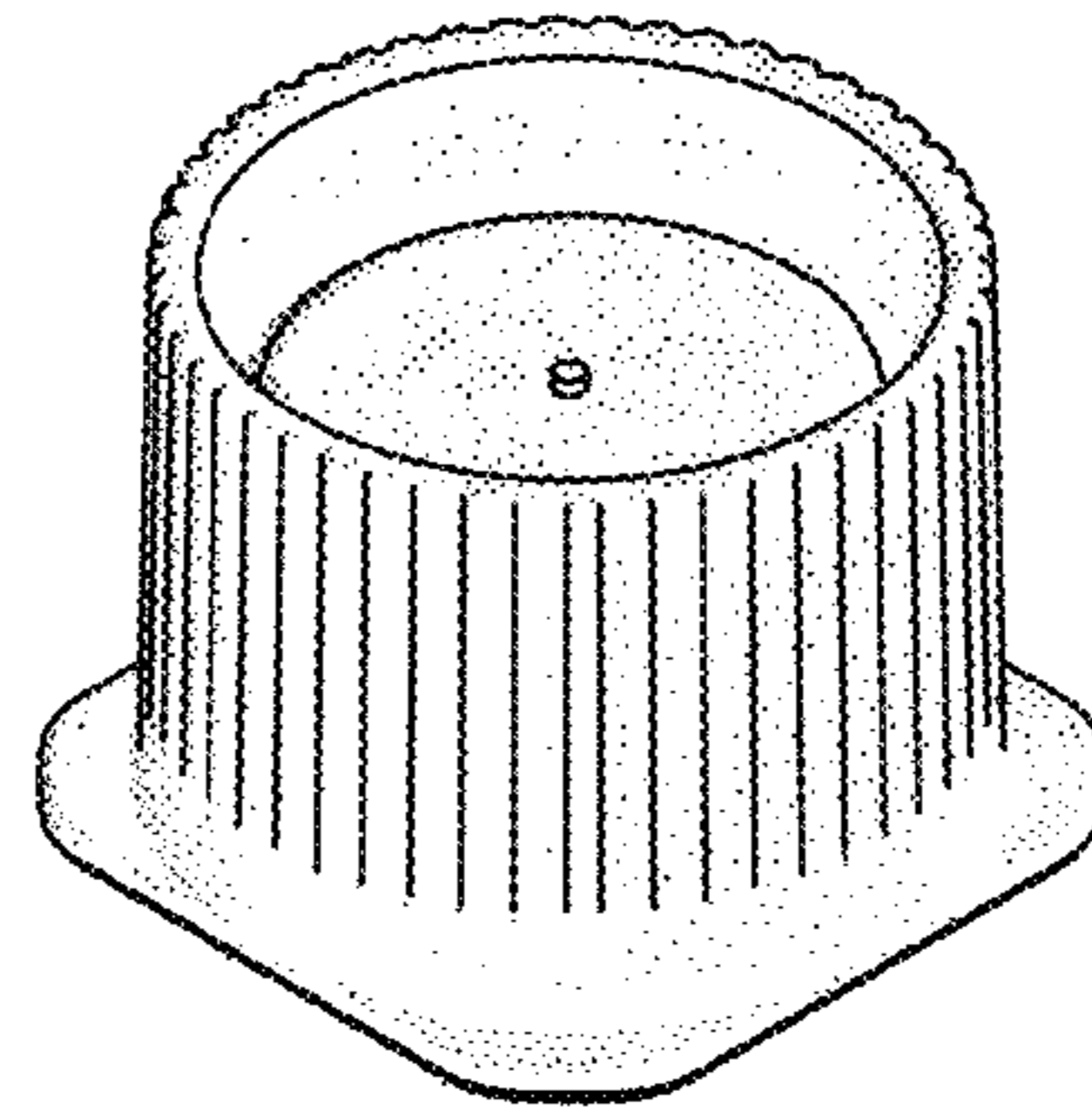


Figure 13

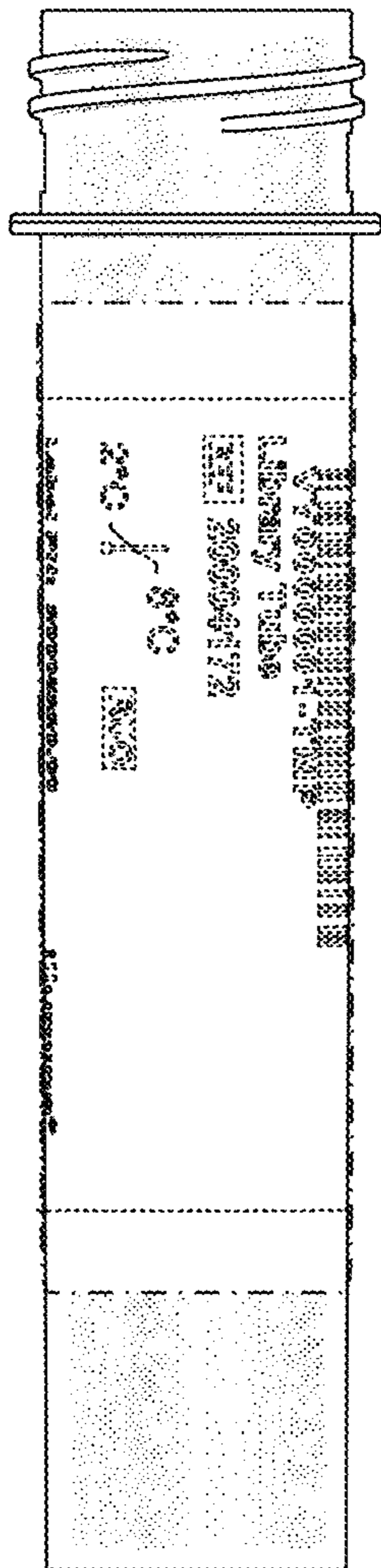


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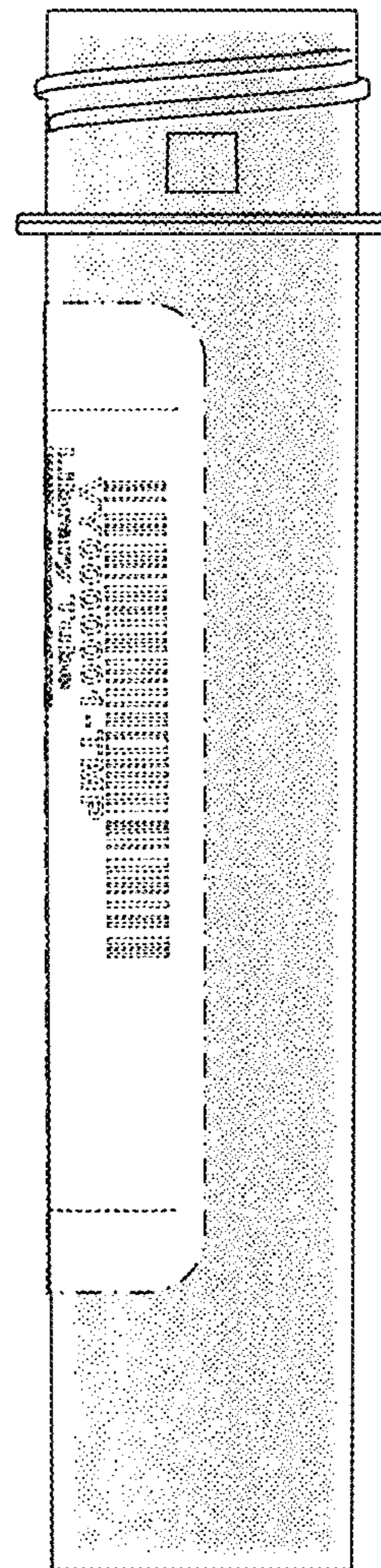


Figure 15

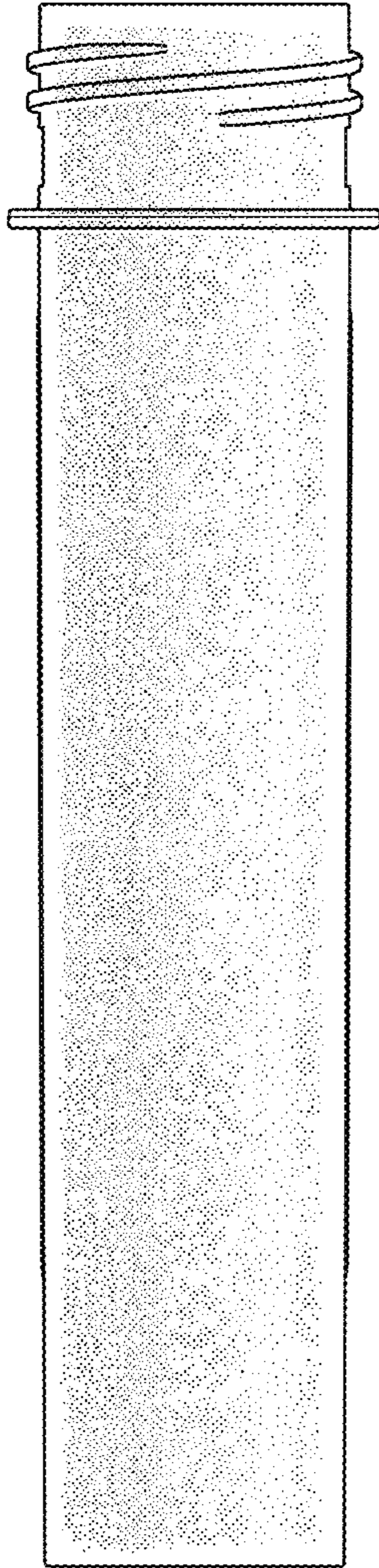


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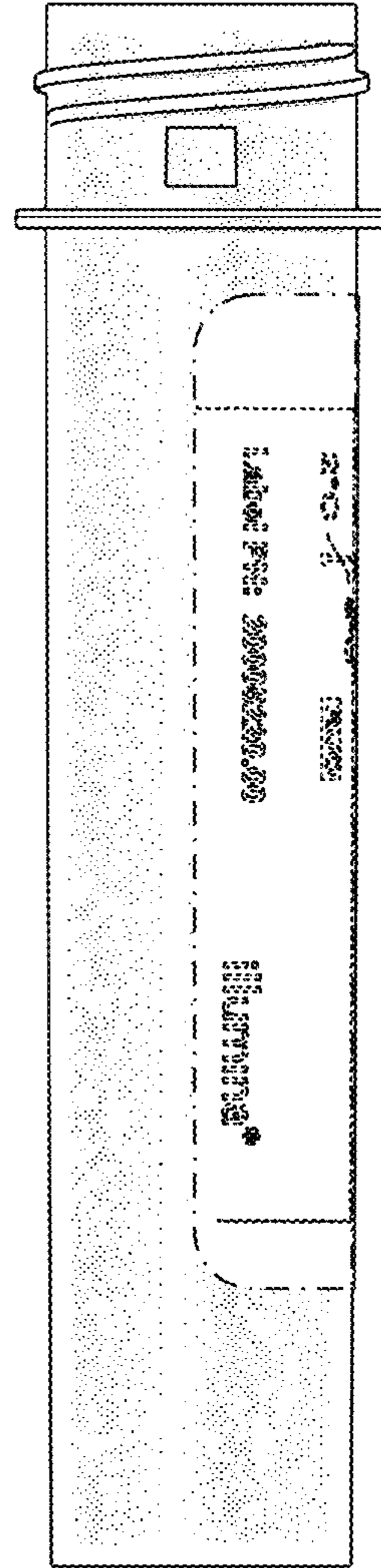


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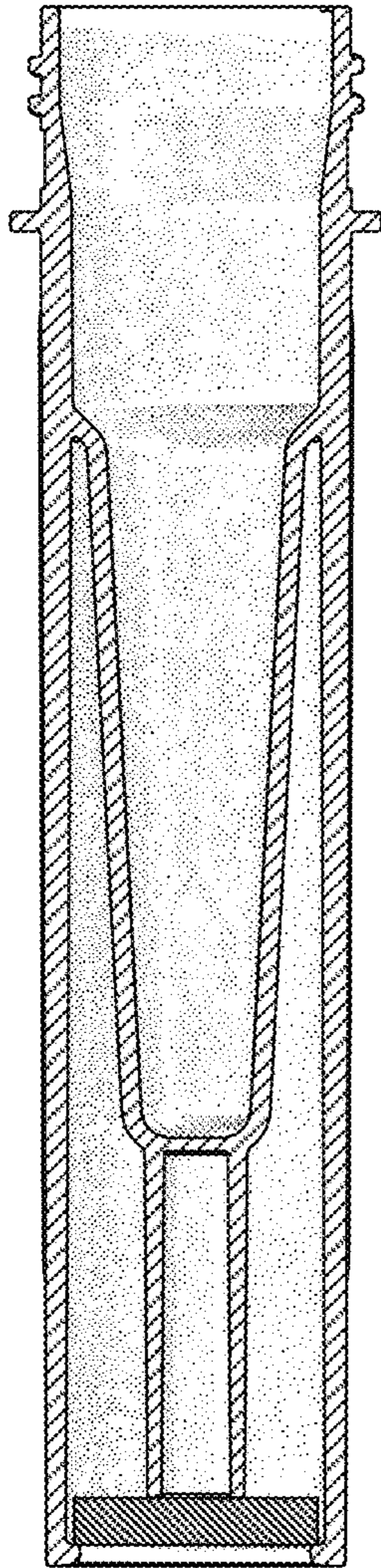


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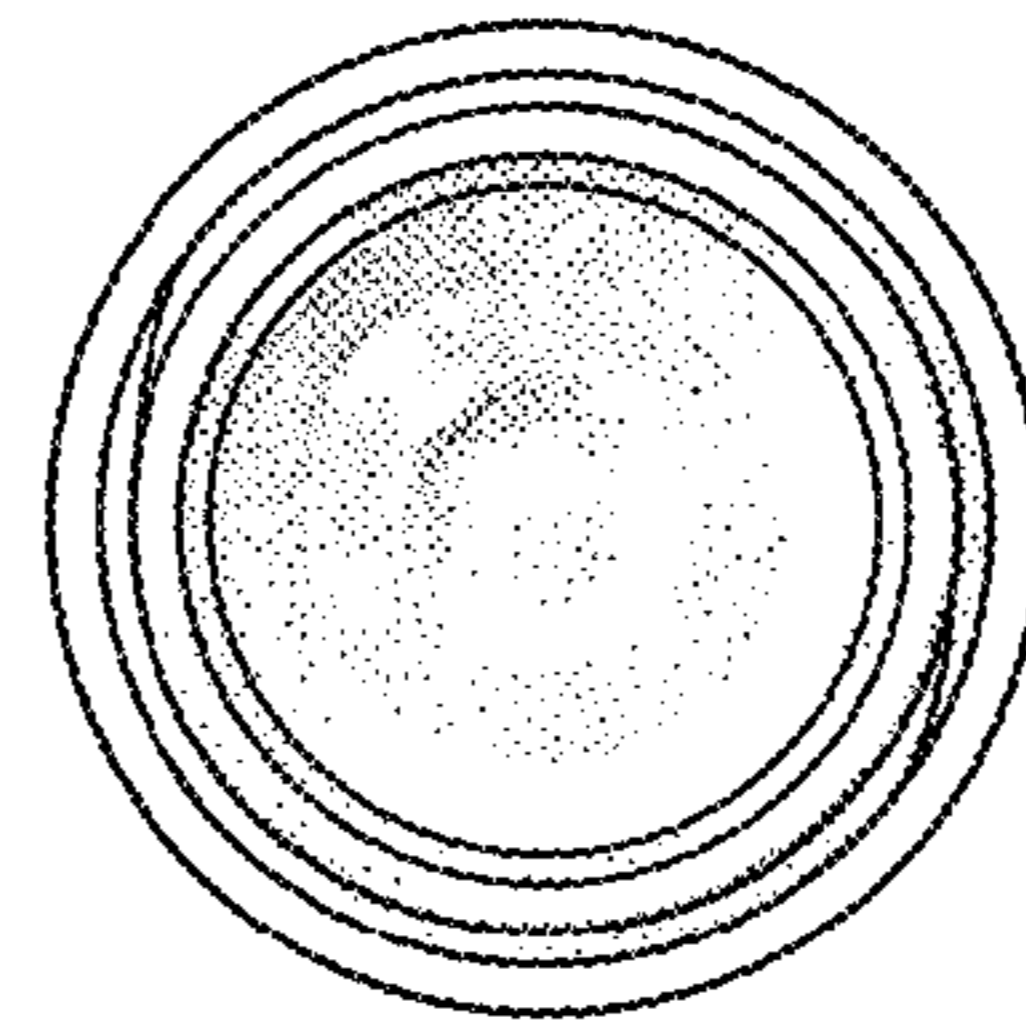


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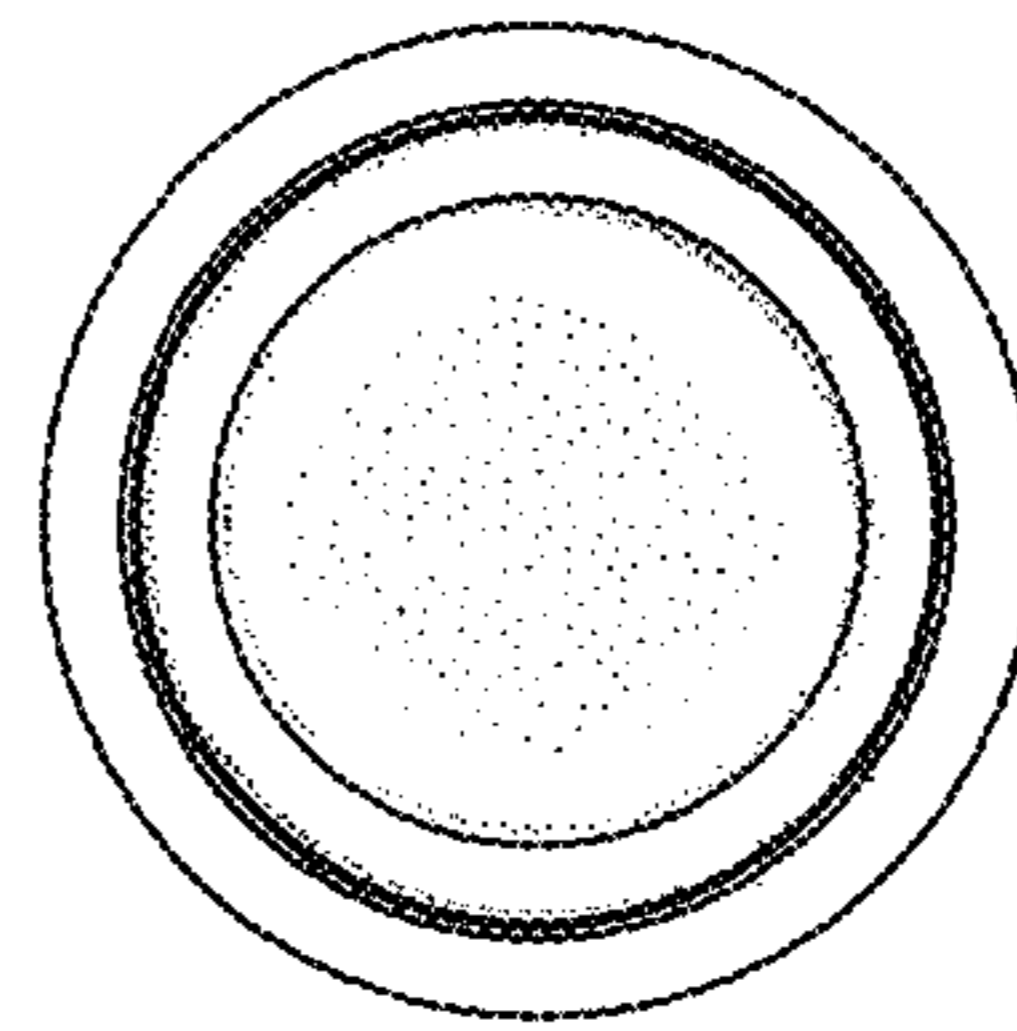


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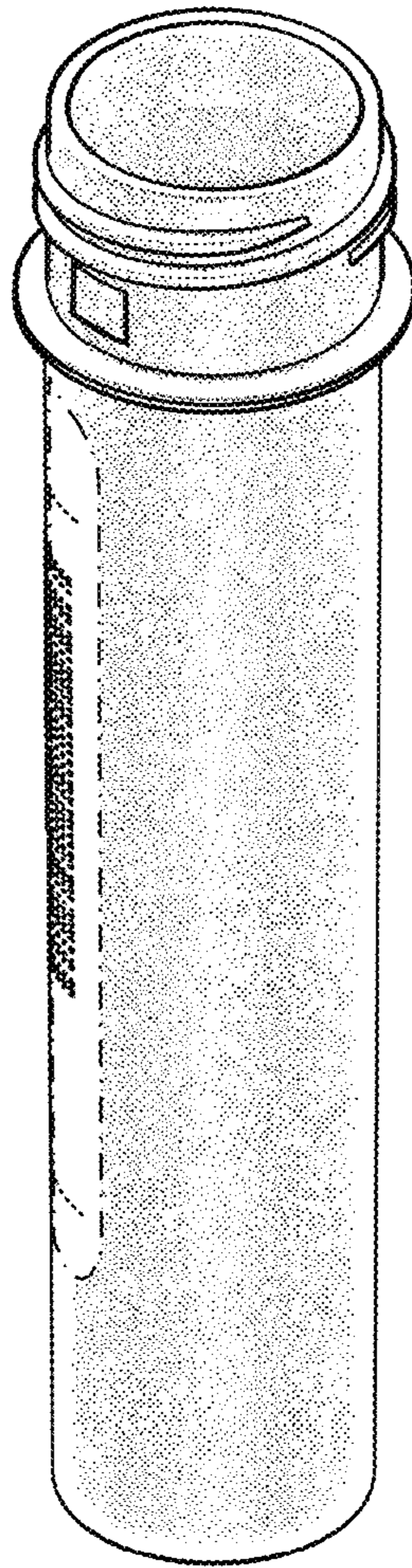


Figure 21